

UNIVERSAL
LIBRARY

OU_172560

UNIVERSAL
LIBRARY

Trade, Commerce, and Commercial Crises

Book Reviews

CONDLIFFE, <i>Reconstruction of World Trade</i> , by R. E. Freeman	151
BAUER, <i>National Welfare and Business Stability</i> , by C. Gill	153
BÜCHNER, <i>Einzelhandel und Mittelstandspolitik</i> , by J. V. Spielmans	154
Titles of New Books	154

Accounting, Business Methods, Investments and the Exchanges

Book Reviews

ALEXANDER, editor, <i>Marketing</i> , by H. H. Bakken	155
BARKER and ANSHEN, <i>Modern Marketing</i> , by J. S. Robinson	155
HATFIELD, SANDERS, BURTON, <i>Accounting Principles</i> , by W. P. Fiske	156
HAVEN, <i>Investment Banking under Securities and Exchange Commission</i> , by O. F. Traylor	156
HOAGLAND, <i>Real Estate Principles</i> , by H. Hoyt	157
LONG, <i>Building Cycles and Theory of Investment</i> , by E. C. Bratt	157
SATTGAST, <i>Administration of College and University Endowments</i> , by R. S. GORSKI	159
Titles of New Books	155

Capital and Capitalistic Organization

Book Reviews

ARNOLD, <i>Bottlenecks of Business</i> , by F. A. Fetter	160
HARDY, <i>Wartime Control of Prices</i> , by F. M. Surface	162
MENDERSHAUSEN, <i>Economics of War</i> , by H. W. Spiegel	164
<i>Structure of American Economy</i> , I, II, by R. E. Freeman	165
CARPENTER, <i>Private Enterprise and Democracy</i> , by P. M. O'Leary	167
HAMILTON, <i>Pattern of Competition</i> , by P. A. Samuelson	169
Titles of New Books	169

Labor and Labor Organizations

Book Reviews

WATKINS and DODD, <i>Labor Problems</i> , by M. Handsaker	170
HAWKINS, <i>Dismissal Compensation</i> , by J. M. O'Leary	172
Titles of New Books	172

Money, Prices, Credit, and Banking

Book Reviews

BROWN, <i>International Gold Standard Reinterpreted, 1914-1934</i> , by M. Nadler	174
ELLIS, <i>Exchange Control in Central Europe</i> , by H. K. Heuser	176
CRAWFORD, <i>Monetary Management under the New Deal</i> , by E. G. Keith	177
KEMMERER, <i>Inflation and Revolution: Mexico's Experience of 1912-1917</i> , by C. L. Jones	178
FOSTER and RODGERS, <i>Money and Banking</i> , by D. M. Marvin	180
HALES, <i>Baltimore Clearing House</i> , by K. L. Trefftz	180
HOLTHAUSEN, <i>Volume of Consumer Instalment Credit, 1929-38</i> , by C. O. Fisher ..	181
STOKES, <i>Bank of Canada</i> , by K. L. Trefftz	181
WALSH, <i>Early Banks in the District of Columbia, 1792-1818</i> , by V. J. Wyckoff ..	182
<i>Controllo dei Cambi nei Vari Paesi</i> , by C. T. Schmidt	182
<i>Money and Banking, 1939-40, I</i> , by J. C. Rocca	182
Titles of New Books	180

Public Finance, Taxation, and Tariff

Book Reviews

ALLEN, <i>Control of Expenditures in Local Governmental Units of Illinois</i> , by J. W. Martin	183
NEWCOMER, <i>Taxation and Fiscal Policy</i> , by H. M. Groves	184
SHATTUCK, <i>Municipal Indebtedness: Debt-to-Property Ratio</i> , by C. P. Huse	184
<i>Taxation of Intangibles</i> , by J. W. Martin	186
Titles of New Books	183

Population and Migration •

Titles of New Books 186

Social Problems and Reforms

Book Reviews

LANDIS, *Rural Life in Process*, by H. C. Filley 187
 SHALLCROSS, *Industrial Homework*, by F. Wunderlich 189
 TERESHTENKO, *Problem of Coöperative Medicine*, by E. E. Muntz 190

Titles of New Books 188

Insurance and Pensions

Book Reviews

FAULKNER, *Accident and Health Insurance*, by A. Manes 192
 FÉRAUD, *Actuarial Technique and Financial Organization of Social Insurance*, by
 W. Haber 192
 HOHMAN, *Old Age in Sweden*, by R. A. Lester 193

Titles of New Books 191

Pauperism, Charities, and Relief Measures

Book Reviews

BROWN, *Public Relief, 1929-1939*, by P. Klein 194

Socialism and Coöperative Enterprises

Book Reviews

OSTROLENK and TERESHTENKO, *Abstracts of Laws Pertaining to Coöperation in
 U.S.A., Possessions and Territories*, by E. E. Muntz 195
 TREHEY, *Foundations of Modern Guild System*, by T. C. Helmreich 196

Titles of New Books 195

Statistics and Its Methods

Book Reviews

ARKIN and COLTON, *Graphs: How to Make and Use Them*, by H. A. Freeman 197

Titles of New Books 197

Officers of the American Economic Association

President

SUMNER H. SLICHTER, Harvard University

Vice-Presidents

{ JAMES C. BONBRIGHT, Columbia University

{ WALTON H. HAMILTON, Yale University

Secretary-Treasurer

JAMES W. BELL, Northwestern University

Counsel

JOHN E. WALKER, Washington, D.C.

N. S. B. GRAS, Harvard University

RAY B. WESTERFIELD, Yale University

J. DOUGLAS BROWN, Princeton University

GEORGE W. STOCKING, University of Texas

STACY MAY, Rockefeller Foundation

Executive Committee

{ EDWIN E. WITTE, University of Wisconsin

Ex-Officio

The President, Vice-Presidents, Secretary-Treasurer, Managing
 Editor, and three ex-Presidents who have last held office
 (Alvin H. Hansen, Jacob Viner, Frederick C. Mills)

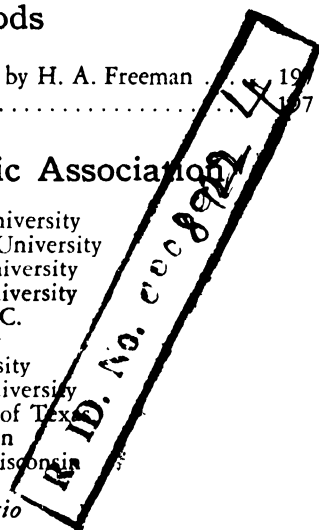
THE AMERICAN ECONOMIC REVIEW is published five times a year, in February, March, June,
 September, and December, at 450 Ahnaip St., Menasha, Wisconsin.

Correspondence in regard to contributions to the REVIEW should be sent to the Managing Editor, Professor
 Paul T. Homan, McGraw Hall, Cornell University, Ithaca, N.Y., or to members of the Board of
 Editors.

Books for review should be sent to the Managing Editor.

Publication offices of the AMERICAN ECONOMIC REVIEW, 450 Ahnaip St., Menasha, Wisconsin, and
 Evanston, Illinois. Office of the Secretary of the American Economic Association, Northwestern
 University, Evanston, Illinois. Membership dues are five dollars a year; life membership, two hundred
 dollars.

THE AMERICAN ECONOMIC REVIEW is sent to all members of the American Economic Association
 as one of the privileges of membership, \$4.00 of the annual membership dues being in payment
 of a year's subscription to the publication.



The American Economic Review

VOL. XXXI

MARCH, 1941

No. 1

ECONOMICS IN A TIME OF CHANGE

Presidential Address, Fifty-third Annual Meeting of the American Economic Association,
New Orleans, Louisiana, December 27, 1940

In periods of war and revolution scholarship is not immune to the forces that affect human events. There is a tradition—an honorable tradition—of scientific aloofness, of exclusive concern with the affairs of the mind and the spirit at such times, but it is a tradition difficult to keep alive in an era of total war. As individual human beings, of course, scholars feel the weight of conflict. Many are affected as disciples of arts that have important uses in the prosecution of war. Most immediate is the impact of revolutionary war on social scientists, for the very subject matter of their disciplines may be altered under the stress of profound civil disturbance. Not least is economics involved in such changes. The full violence of the present disorders has perhaps not yet been experienced by our science, but it needs no prophet to suggest that the effects will be far-reaching and enduring.

Some of these effects we have already felt. Abroad, in regions where freedom of economic thought has long prevailed, we have seen economics reduced to a subservient art. Our colleagues have been silenced. The great economic journals of continental Europe are dead. Throughout the world opportunity for objective study has been seriously impaired, at a time when it is sorely needed. But these are not the only reasons for disquiet. If we face the realities of economic life, and set against these realities our theories, our analytical tools, our ability to devise and direct instruments of control, we must confess to inadequacy. Our needs outrun our means of understanding. In his presidential address five years ago Maurice Clark said that the mood of our generation of economists is one of doubtful potency in the face of a great crisis. That mood has not been relieved, certainly, by any lessening of the crisis since he spoke.

This feeling stands in sharp contrast to that of our nineteenth-century predecessors. Except for a few troubled spirits, these economists felt at home in a mastered world. The institutional framework had been set. The essential nature of economic processes, tending eternally toward equilibrium in this enduring framework, had been established. The form and central substance of organized economic knowledge seemed to have been defined.

I do not imply that complacency dominated the thinking of these men.

Their belief was a reflection of the Victorian confidence that certain ultimate values in life had been grasped and cast into institutional molds that would endure. Indeed, it was expected that with the diffusion of western culture these institutions would spread, and that economic principles based on them would apply with increasing validity to a world economic order.

These hopes have not been realized. The institutions of whose enduring value men were so assured seventy-five years ago have been challenged, and have lost ground. The course of development that seemed so clearly delineated has been reversed. The world to which the principles of nineteenth-century economics seemed so appropriate has found its borders steadily restricted.

Today emotion, prejudice and narrow nationalism speak in the name of economics in centers we used to respect. An oppressing sense of inadequacy troubles us in the face of domestic emergencies. When we face these facts it is inevitable that we should be concerned as to where we stand and where we are going, as to the objectives, procedures, and prospects of our discipline. Tonight, exercising the freedom that goes with this occasion, I venture to indulge in some reflections on the present state of economics, to discuss some of the reasons for current difficulties, and to touch on certain of the responsibilities confronting us today.

I have suggested that we cannot today feel at home in an orderly world. The reasons for this are not to be found in the immediate crisis alone. A shift of attention, in economics, from systems and laws to facts and events antedates this crisis. In some degree our present disquiet is a result of this shift. There are times in every field of thought when system-building predominates. There have been periods in the social sciences when the working out of general laws was the chief concern of students, when men were content to sit on the heights of speculation with little regard to particulars, when the processes of social life were of primary interest as manifestations of moral principles or of a natural order of things. But intellectual climates change. The aesthetic urge that leads men to seek unity in mental constructs at the expense of conformity to reality ceases to dominate thought, and curious minds turn again to the observation and understanding of phenomena.

The causes of these swings, which are discernible in the history of economics as in the history of other disciplines, are in some degree obscure. Just why the pallid introspection of scholasticism gave place, in time, to the fresh, eager interest in life of the Elizabethans, I do not know. Great opportunities and emergent needs growing out of urgent pressures doubtless played a part.

Such opportunities and such needs, combined with a great advance in the power and scope of observation, have helped to direct economists of our generation to a more searching and more comprehensive scrutiny of

economic phenomena. Under this scrutiny there has been revealed, not an economic universe of simple and relatively unchanging attributes, but a world bristling with variation and pulsing with change. This revelation makes, I think, for health in our discipline, and is promising for the ultimate future. But it does not make for a sense of complete adequacy, when we set our tools of thought against the tangled confusions of economic reality.

Shifts over time are a phase of the complexity we face when we center attention on phenomena. Such shifts are always occurring. Our present troubles in seeking to understand and interpret economic life are intensified by revolutionary alterations in economic institutions and processes. After a long century of relative order, comparative security and slow secular modification of the ways of social life, these ways are now being swiftly altered. Social habits and political systems which to the preceding generation seemed virtually immutable are, for millions, subject to over-night transformation. The slow tempo of evolution, in terms of which our fathers thought of social change, appears to have given way to short-order reconstruction of the systems by which men live. Of course, this sense of rapid change is in some degree illusory. Staggered by the dizzy pace of life in the world of headlines and radios we lose sight of the more enduring features of the real world. When time brings a truer perspective, the actual modifications of institutions and ways of living will perhaps appear less revolutionary. But with due allowance for illusion, we may expect the events of recent months and years to affect us profoundly.

Economic change, striking national and world economies with uneven incidence, produces a welter of discrepant forms. This is true even in our own relatively sheltered state. Domestically we have a complex mixture of elements in our economy, with units of private enterprise, partially regulated enterprise, closely controlled enterprise and publicly administered enterprise struggling toward mutual adjustment and harmonious interworking. The competitive elements of contemporary economic life have not been effectively integrated with the regulated and controlled elements. There result diversity in administrative forms and friction in the relations among economic elements. These make more difficult the task of understanding.

In the international sphere disturbances have been more pronounced. Even before the most recent breakdown, international economic relations were sharply at variance with the ideal of a free world economy. Today there is no world order. The laws of trade in a free world market have little meaning in an era of economic autarchy, with such trade as is not on a barter basis hedged about by a host of restrictions. The body of economic doctrine dealing with the international movements of goods and means of payment when commerce is unfettered—one of the truly impressive crea-

tions of economic thought—has slight relevance to these conditions. It is true, of course, that a world economic order built on other bases than the law of comparative costs is possible. The hand of totalitarian control can dig new trade channels and bring orderliness of a kind into international relations. But while we wait upon the restoration of the old order, or the contrivance of a new one, we face a disorganized world economy and a great impairment of productive power.

Alteration of the conditions of economic life may go further than structural modification. Continuity that is manifest in the persistence of patterns of change is as necessary to organized economic knowledge as is orderliness of structure. Patterns of secular development and of cyclical movements are examples of orderliness in change, even though they be overlaid with a screen of variation. Here, as elsewhere, continuity is impressed on economic activities by enduring institutions, by technological necessities, by the persistence of consumption habits among large populations, and by many other factors. But continuity in human affairs is always imperfect. Time brings changes in institutions, in technologies, even in the behavior of consumers. The profound and rapid shifts of recent years have intensified such disruptions. They have broken the chain of secular evolution, heightened variation in patterns of cyclical change, and altered many of the established modes of economic life. This accentuation of discontinuities is a chief cause of the uncertainties that trouble us today.

But it is not alone the external facts of change and discontinuity that induce this feeling. These are but one side of the shield. The other side is the conceptual, for understanding involves the fitting of observations into an ordered body of thought. The full story is that these manifold disturbances have made much harder our central task of harmonizing objective facts and systems of economic thought. Perhaps the best example of this, and one that lies close to the heart of our present problem, is found in the concept of the free market, and in the existing cleavage, in this field, between facts and traditional concepts.

The free market, as the battleground of competitive forces, has been, of course, a central element in the economic organization of the western world. In the realm of ideas, too, the sovereign market has been an essential component of systematic economics. The forms into which economic thought has been cast for one hundred and fifty years have been shaped by it. Today this free market, and the automatic attainment of economic harmony through the market, seem much farther from reality than they did a generation ago. The system of ideas built on the concept of the free market is correspondingly weakened, as an aid to understanding and an instrument for the organization of knowledge.

It is a familiar fact, but one with clear relevance to present issues, that antecedents of this body of ideas are found in Newtonian mechanics. That

system, with its balance of forces in a stable and unchanging universe, was a major element in the intellectual environment of the men who created formal economics. It provided the concept of law as a ruling force, the notion of a fixed order in Nature, and a variety of analogies suggestive of ways in which the data of economics might be organized.

A particular conjuncture served to give this approach prestige, historical timeliness and no small degree of validity. Just when the mechanistic pattern was becoming the model of scientific perfection, the move for a free market was given impetus from other quarters and on other grounds. Adam Smith's protests against the fettering restrictions of mercantilism were rooted in the needs of rising English industrialism. But it was precisely to the economy of a free market that mechanical conceptions were relevant. In the sovereign market, characterized by competitive individualism, free contract and complete mobility of factors, and subject to no important changes over time, the physical concepts of force, equilibrium, action and reaction had their analogues. Orderliness was generated through the "nicely adjusted mechanism of nature," without design or conscious control, precisely as it seemed to be in the cosmos. It was, then, at a time when the practical requirements of British industrialism, and the ideas of economic liberalism were leading to the removal of market restrictions, that the architecture of a science appropriate to the free market was suggested by Newtonian mechanics. Out of this conjuncture came a dominant tradition in our discipline.

The body of economic thought defining the play of forces in a free market, and illuminating the extraordinary order-creating qualities of such a market, is one of the great constructs of the human mind. It enabled men to perceive, beneath the apparent chaos and bewildering complexity of observable economic activities, the working of a vast coöperative scheme by which the diverse needs of millions of individuals were satisfied. The analogy that lay behind this construct was never perfect, it is true. There was never complete concordance between the thought systems of classical economics and the real world—a fact of which the framers of these systems were fully aware. For the completely free market was never achieved; the world of economic events was always marked by a diversity of frictions and retardations. The equilibrium, in Edgeworth's phrase, was that of the surface of the sea, a sluggish sea with viscous wave. The laws of formal theory represented conditions at the limit, not those open to actual observation. Change over time, too, lay outside the realm of a mechanistically conceived economics with its static models, but if it could be believed that the institutional development had found its terminus, that the framework would, in its essentials, change no more, this was not a serious limitation.

Of course, mechanistic concepts have not prevailed in unsullied form, or to the exclusion of other ideas. A literary and humanistic tradition has

persisted. Ideas of organic growth and evolutionary change influenced the thinking of Ricardo, Malthus and many later economists. Marshall stressed continuity of development, explicitly recognized the rôle of time in economic adjustments, and made much use of biological analogies. John R. Commons, examining the legal foundations of capitalism, and J. M. Clark, studying the instrumentalities of social control, depart widely from simple mechanism. With the passing years a variety of elements has been incorporated into what was once a simple and elegant body of doctrine. But at the foundation of formal economic theory, today, there still stand concepts of static equilibrium, of a universe of balanced forces, of a fixed and essentially unchanging order.

The general acceptance of the concepts we have been discussing rested in part on faith in the expected progressive removal of vestigial frictions. A nineteenth-century observer could well believe that the nations of the world were on the way to closer economic resemblance and greater international unity. The free market was spreading. Coupled with an international gold standard it promised to dominate economic activities throughout the world. The actual movement, however, has been in the other direction. For economics, perhaps the outstanding fact of the fifty years that have elapsed since the publication of Marshall's *Principles* is that observed discrepancies between objective reality and conceptual schemes based on the assumption of market freedom have been intensified, not lessened. There may be grounds for doubting this if we look at our own country alone. There can be none if we take a world view. Less and less does the sovereign market of economic theory accord with the actual market in which goods and services are exchanged. Today, faith in the free market as the mechanism through which economic activities may be regulated and economic order achieved in a world of conflicting needs and aims has been sorely shaken. Neither at home nor in our international relations do we rely upon the uncontrolled market to allocate resources or to effect other necessary economic adjustments.

It is a decisive fact for our generation, and one that is crucial for economic thought, that we may not look to the arbitrament of the market for the full adjustment of means to ends, and for the unplanned solution of the economic problem. This is not to say that automatism has been completely replaced, or that we have today either the knowledge or the administrative power which would provide us with substitutes capable of performing all its innumerable and intricate functions. Vast numbers of adjustments are still effected through the operations of free or only partially regulated forces. But over large areas of the western world the major adaptations of economic means to conflicting possible ends, the major decisions concerning uses to be made of limited resources, are not made through the free inter-play of market forces. And even in our own economy, control and

regulation have in recent years trenched deeply upon the areas of free action. There may be a return, but he would be a rash man who would set a time for it.

In stressing the mechanistic background of certain of the concepts that have been employed in the study of the market, I have not meant to imply that sheer mechanism plays an important rôle in contemporary theory. In its obvious form it does not. We have been slow, however, to shake off elements that derive from the static character of these antecedents. The notion of a fixed order of things is still deeply imbedded in formal economics. But the outstanding fact of economic life is change, change in the institutional framework and change in the working elements of our economic system. To recognize this is one thing. To take adequate account of it in seeking to interpret economic events, to incorporate the contingent and the uncertain into our concepts, is yet another. This is one of the tasks that confront our generation of economists.

This brief summary has dealt with facts that are largely familiar, but they are facts that cannot be ignored in any review of the problems before economists today. It must be a matter of major concern to us that there exists a cleavage between the observed facts of economic life and the formal systems of thought wherewith we seek to interpret and unify these observations. Descriptive, piecemeal accounts of institutions and activities and their shifting forms we have, in number. Perhaps the distinctive contribution of our time has been the development of specialized bodies of knowledge and specialized instruments of economic intelligence. We know far more about national income, the structure of credit, industrial productivity, the formation of capital, the earnings of labor, than we did fifty years ago. But the circle completes itself. Variety in detail cries again for simplifying principles. Conceptual systems that would interrelate these diverse facts and their changes over time, systems with the sweep, generality and apparent unifying power that were the impressive features of classical economics in the heyday of its acceptance we have not. Which is another way of saying that understanding has not kept pace with observation. Intellectual discomfort is a natural result.

I would not suggest that in a universe of variation and discontinuous change we may hope to create theoretical systems that are at once all-embracing and completely consistent with the perceptual world. In limited areas and for limited times agreement between concepts and apparent reality may be close, but disturbing discrepancies will persist. Driven to seek understanding of complex phenomena, we shall continue to construct simplifying and unifying systems; driven to make these constructs accord with shifting and diverse reality, and unable to do so, we shall continue to damn our systems as formalistic figments. That better analytical tools will be forged and that fuller understanding will emerge from this troubled

state is not to be doubted. But we can be equally sure that the gap between objective and attainment will remain, to exasperate, torment and stimulate us and our successors. Our reach will continue to exceed our grasp, and economists will still have need of Heaven.

There is yet another factor in our current discomfort. Economics deals, of course, with human needs. But in a very special sense the things that men desire—amelioration of present troubles, social and economic reconstruction—touch the everyday work of the economist as they do not touch the laboratory of the physical scientist. Influences of this sort, relating to ends and ultimate values, are always felt in our discipline, but they are made to press more insistently upon us by the difficulties of the day, and by our present fearful concern with political and social emergencies. Looking abroad, we have seen the purposes and values of special groups imposed on scholars, and the resources of science used to buttress party dogmas. At home, the ideal of objective research has been questioned. With freedom of thought forcibly denied to our co-workers abroad, with doubt expressed in our own circles as to the possibility and the desirability of scientific detachment, and with the urgencies of the day beating upon us, we may not put these issues aside.

The ideal of an objective science of economics, built on steadily expanding knowledge of human nature, of social institutions and of industrial organization, and divorced from personal judgments of the desirable and the undesirable, has made its way slowly. For economics was long tied to ethical creeds and conditioned by moral judgments. The escape to objectivity was difficult, more difficult than for the physical sciences. The subject matter of economics is the behavior of human beings; its laws deal with human wants, and the pains of effort. It is not easy to disentangle these intimately human affairs from personal judgments and individual scales of value.

It has seemed obvious to men of many generations that the ends of human existence and the objectives of social action are simple and inevitable truths. Whether the end so clear to men was to glorify a deity, to achieve the simple and natural order of liberty, to maximize the good of the greatest number, to aggrandize a nation, or to establish a dictatorship of the proletariat, norms for judgment of the "rightness" or "wrongness" of conditions or policies were ready to hand. The notion that one could thus simply and finally judge ends and appraise means sharply limited the scope of social thinking. Confidence in a fixed system of ultimate values restricted the hypotheses open to study, and cramped the investigator in the exploration of social forms.

I do not attempt to trace the growth of the ideal of an objective science of economics, independent of ethical creeds and moral philosophy. There are elements of it in eighteenth-century thought, entangled with Physio-

cratic doctrine and ideas of natural law. The *Wealth of Nations*, though written as a powerful and purposeful tract, contains an account of a national economy as an ordered system of mass coöperation. There was an attempt here to find correspondence between the chaotic diversity of sense-experience and a logically uniform system of thought—and this, it has been said, is the essence of science. With ebbs and flows the ideal and the practice of objective economic study gained ground in the nineteenth century. The vitality of economic thought in England and the United States in the last quarter of that century, after a depressing decline in the sixties and seventies must be credited at least in part to the stimulus of this ideal.

It was natural to assume that the twentieth century would see a continuation of this movement and a confirmation of this ideal. The improvement of quantitative methods, the elaboration of techniques of impersonal analysis, seemed to promise greater objectivity, a more rapid building of a factual basis for economics. In academic, business, and governmental centers more men were grappling with economic problems. Research funds undreamed of by the economists of the nineteenth century could be drawn upon.

The contributions resulting from this expansion of personnel and of resources have been substantial. The problems we face may be more acute than those of an earlier day, our confidence in sweeping systems of thought may be weaker, we may be more keenly aware of the lack of generality and prediction value in our conclusions. But we do possess, I believe, sharper analytical tools and knowledge of the details of economic life that is at once more comprehensive and more accurate. The technical and factual foundations of systematic economic knowledge are being extended and made stronger every day. Despite these gains the ideal of objectivity in economics is disputed today. Faced with the pressing problems of a world in turmoil, many have lost confidence in the possibility of our building an objective science, divorced from the predilections and emotions of individual investigators.

It is to be expected that the dominant attitude in totalitarian states would be in conflict with the ideal of a science of economics not bound up with the ends of the state. Sombart, who typifies this attitude, rejects, for our discipline, the reasoning processes of the natural sciences and the concept of law prevailing in those sciences. He insists that the laws of economics have *a priori* validity, and are derived directly and intuitively. To him economic laws stand at the beginning, not at the end of research. The laws and values thus intuitively derived have the attributes of necessity. They shape and direct the material subject matter of economics.¹ This particular formulation is new, but the design was outlined in the last century.

¹ Werner Sombart, *Welianschauung, Science and Economy*, New York, 1939.

Not first among its architects, but a dominant figure, was Adolf Wagner. Seventy years ago Wagner set a pattern for economic thought completely subordinated to the ends of national power. (I note, in passing, Wagner's term for the attitude of those who were not guided by sound national egoism. It was no mean achievement in the coupling of words to define this reprehensible state of mind as "fanatical objectivity.")

If criticism of objectivity in the social sciences were confined to Sombart, Wagner, and other advocates of the supreme state, it would perhaps carry little weight with us. But men who speak with authority for the social sciences and for scientific method, and whose interests and motives are not open to question, have recently challenged social scientists on this fundamental issue. Charles A. Beard cites "the state of uncertainty and perplexity reigning in the very midst of the so-called objective school" as proof that "the old assumptions of absolute neutrality no longer satisfy the human spirit." He believes that the idea of a value-free, objective social science is an illusion. Julian Huxley notes "the entanglement of social science with problems of value" and concludes that "to understand and describe a system involving values is impossible without some judgment of values, and still more impossible without such value-judgments is the other scientific function, that of control." And Robert Lynd in his provocative book *Knowledge for What?* deprecates the fact that the young social sciences, "hiding behind their precocious beards of 'dispassionate research' and 'scientific objectivity' are reluctant to accept full partnership with man in the adventure of living."

There is an issue here that we may not lightly dismiss. The two extreme positions may be briefly suggested. At one limit stands an "objectivity" that is oblivious to ends, purposes, relative values, that puts all observations on the same dead level of importance, or unimportance, that conceives the work of the scientist to be done when he has investigated something, anything, by tidily arranging all data that might bear on it. It is bloodless, cold, dispassionate, and utterly meaningless. At the other limit, every scholar uses his own yardstick of relative values. These values lie beyond all testing and questioning, but they furnish, for the individual to whom they have been revealed, the ultimate touchstone. All judgments of means are based on these values. Research is an individual adventure.

Of course, neither of these extreme alternatives is acceptable. One means, for the economist, a withdrawal from life, acquiescence in whatever is, complete indifference to the meaning of the forms he is studying, or of alternative forms of economic organization. The other means the loss of a hard-won heritage, renunciation of the hope of cumulative growth of economic knowledge, surrender to rudderless whims and the unpredictable diversities of individual taste. Our problem as economists is the difficult one of serving our generation in meeting its urgent present needs and of pre-

serving all our rights to objective, detailed appraisal, with nothing, whether end or means, exempt from critical judgment.

The key to this apparent dilemma is to be found, I think, in the manner in which values are to be treated. The moralist, the reformer, the protagonist of causes, usually derives his values from without the system of facts and events to which the values are to be applied, and for which they provide ends. For Adolf Wagner values were set by national honor and national interest. For Sombart values and judgments about values derive from the individual's *Weltanschauung*. They lie outside the realm of science; they are not subject to testing, to critical judgment. Values thus derived have, I think, no place in the work of the economist. In this direction lie emotionalism, partisanship, conflict, and the loss of that impartiality toward facts, in the realm of knowledge, that is the richest heritage of our scientific tradition. If the revolt against detachment and objectivity means the subordination of the quest for knowledge to values and objectives that are beyond testing, it threatens the very essentials of our discipline.

I do not believe that a science can assume responsibility for choosing among ends, and for setting up scales of preference in its discussion of the objectives of social action, without introducing into systems of thought the support of given ends. This is not to deprecate the maintenance of rights to personal choice or the espousal of causes by individuals, be they poets, politicians, pedagogues or political economists. The human spirit is at its finest in the selfless support of great causes. But the heart of science, as a method of observation, a means to understanding, and an attitude toward the universe, is lost when science itself becomes a protagonist of ends. This assertion has, I believe, a timeless validity. It is not conditioned by the affairs of the moment. There is today, however, more reason than in normal times for a jealous preservation by economists of the independence and objectivity that are the heart of the scientific tradition. To forsake that tradition is to invite political control. It is to make of economics a discipline subservient to the dominant political powers of the day.

In thus repudiating protagonism and partisanship I am far from proposing that we close our eyes to values and value judgments. We need not and must not be blind accumulators of knowledge irrelevant to social needs and aims. Values and ends concern us mightily. Our attitude toward them, however, is not that of the preacher of ethics or the social reformer. They are part of the subject matter of inquiry, open to criticism, appraisal, provisional acceptance or rejection.² For any value judgment, any setting up of an objective of social action, is a hypothesis. Like all hypotheses it suggests modes of organization, ways of utilizing things, methods of handling the means that are open to manipulation. We should be both blind and

² For a discussion of the logical bases of this approach to problems of value judgment in scientific investigation see John Dewey, *Logic, the Theory of Inquiry* (New York, 1938).

remiss if we failed to explore leads to various forms of organization alternative to the one that may exist at a given time, to use alternative models as aids in the examination of existing institutions. It is the function of ideas concerning ends and ultimate values to suggest the nature of such alternative methods of utilizing resources and satisfying wants. These alternatives are then subject to examination in which all the interrelations of means to ends and of ends to means are explored. And this exploration is a task in which complete detachment and full objectivity are essential elements. It is not a task for the impassioned protagonist. Anguish and art, says Irwin Edman, are not identical. Neither, I may add (and my jagged meters perhaps accord with my subject), neither are emotional perturbation and political economy identical.

In defending the necessity of objectivity in economic research, I have spoken in abstract terms. Yet here, too, means and ends may not be dissociated. Impartiality and independence have a further sanction in that they contribute directly to the fruitfulness of research and the extension of knowledge. The data of economic research today are in many repositories—the files of industrial corporations, the books of banks and public utilities, the records of organized labor, the documents of accountants, the archives of government. Economics can be given life and substance if it can draw on all these sources for the facts on which it must build. These sources are open to us only when there is mutual confidence in the possibility of disinterested study. We have before us today many examples of coöperation, in research, of individuals of diverse economic interests and, indeed, of widely differing opinions as to what is desirable in economic organization. Make research a tool of special interests, make the driving motive the attainment of my particular Utopia, or yours, reject objectivity and impartial workmanship as the means to advance knowledge, and the possibility of such coöperation is lost.

My talk tonight has been shop talk. I have discussed some of the elements of uncertainty in our discipline today, some of the difficulties we face in seeking a better understanding of the means by which men live. The mere variation of experience creates some of these difficulties. The confusions and needs of a troubled time have put phenomena, in all their diversity, at the center of economic attention. Satisfaction with the unity and logical coherence of systems of economic thought is to some extent impaired when the bewildering variety of things and events is set against these conceptual systems.

Difficulties growing out of a keener appreciation of the complexities of economic reality have been intensified by profound and accelerated change. I mean, now, not changes on the intellectual level, such as those that revolutionized biological thought eighty years ago, or those that recast the foundations of the physical sciences in the early years of this century. These

changes germinated and spread in the realm of ideas. They altered the intellectual climate, but the basic phenomena of biology and physics were unaffected. The revolutions of our generation fall on another front. The tides of change that have flowed during the last twenty-five years, and that have reached flood proportions in the past decade, strike deeply at social institutions. The ordinary affairs of life are affected for men everywhere, as they have not been for centuries. Economics and the other social sciences lie in the direct track of the cyclonic disturbances of our time. Not only are conditions of inquiry and systems of ideas affected. The structure of social life is being modified; the patterns of temporal change in social life, to which we have in some degree adapted ourselves, have been altered. Profound changes have occurred in the subject matter of research itself. It is not surprising that understanding has lagged.

One aspect of these changes has special significance for us. The concept of a free market occupies a central place in economic thought. Complete freedom has never been achieved, it is true; but a system of thought based on the assumption that such freedom exists had strong claims when it could be believed that obstacles to freedom were being steadily reduced. From a world view this is clearly not so today, nor are there reasons to believe that it will be so in the proximate future. With decline in the free market and the persistence of other fundamental changes, mechanistically based concepts lose much in relevance. We are struggling toward alternative concepts adapted to our needs in seeking to understand the complex of free, controlled and regulated elements in contemporary economies as they change over time, but our constructs still fall short of our needs.

I have touched, finally, on the possibility of impartial and unbiased research under the conditions of social disturbance and conflict that prevail today. Economists may have erred at times in the naïve belief that description of an existing system is the whole of their scientific task. The counter-swing that leads to rejection of objectivity and deliberate advocacy of particular ends is, I have suggested, equally dangerous. Neither promises most effectively to promote the accumulation of a body of knowledge relevant to the urgent needs of the day. I believe that we can deal objectively with both means and ends, that we can bring into our inquiries value judgments and opinions as to the ends of social action—even widely differing judgments and opinions—without becoming partisans and protagonists. Promise for our science lies in this direction.

Under the conditions prevailing in the world today American economists face heavy responsibilities. The task of keeping a body of knowledge alive, of maintaining the right of economists to deal objectively with facts, means and ends is primary among these, as a continuing duty. This task cannot be performed by our colleagues on the continent of Europe. Here, where inquiry can still be free, free of class, race or nationalistic bias, free of

ends imposed from without, the obligation to maintain conditions of free research and to harvest the fruits of free research is a grave and sobering one.

Immediately pressing is a responsibility to help meet the urgent needs of our day and our country. For this we require systematized knowledge of the operating characteristics of the economic system we now possess, with its puzzling and varying combination of free and restricted elements. When the resources, the mechanisms, the potentialities of both the human and material elements of this system are known, with a detail and accuracy far exceeding that which we possess today, we shall have information about means that will make us better able intelligently to appraise ends, and to hold ends and means in just balance. The achievement of understanding of our present economic system is our most pressing and most immediate obligation.

In speaking of the appraisal of ends I point to a second requirement. This is complete open-mindedness in the study of our existing economic organization and of alternative economic arrangements. Out of this world crisis will come further change. We cannot now define the course of this change, or the design of the economic life that is to follow. If we may not, as economists, support this or that proposal for reconstruction, we should be ready to test any hypothesis, to appraise any proposal for modes of organization and methods of operation alternative to those we now possess, whether these proposals involve major or minor changes in economic life as we know it. No hypothesis can be ruled out, *per se*. And no hypothesis can be exempt from the most rigorous testing against our given economic means.

The two great responsibilities with which each of us is charged today—to our continuing discipline and to the urgencies of time and place—can best be met by the economist who serves as economist, not as defender, advocate, disciple, or special pleader. Such impartial service is the greatest contribution he can make to the needs of an age in crisis. I believe that he may best hope to make that contribution if he continues to live and work in the great tradition of western science, a tradition that means honesty of endeavor, integrity and dignity of spirit, and the ideal of objectivity in research.

FREDERICK C. MILLS

Columbia University

THE TRANSPORTATION ACT OF 1940

With the passage of the Transportation act of 1940 Congress has added water carriers to the growing list of major domestic commercial transportation agencies subject to regulation by the Interstate Commerce Commission. Only air lines now remain under separate authority. The regulation of railroads, pipe lines, motor carriers, and water lines is also unified and centralized on a pattern largely derived from the earlier rail statutes. In particular, maximum, minimum, and exact rates and charges of each of these agencies are subject to Commission control. Entry into service is also rigidly subject to regulation by means of permits and certificates of public convenience and necessity. For the first time a national transportation policy governing all agencies subject to the Interstate Commerce act has been enacted. Another major feature of the Act is provision for the creation of a temporary Board of Investigation and Research to study the relative economy and fitness of each mode of transportation, the extent government has subsidized or otherwise aided transportation, the amount of taxes levied upon transportation by all governmental units, and any other matter likely to lead to improvement of transportation conditions. The Act also makes numerous changes in the Interstate Commerce act, many of technical interest only, and modifies legislation governing land-grant rate reductions and loans by the Reconstruction Finance Corporation to railroads.

Upon its passage last September, the Transportation act of 1940¹ became the latest in a long series of important federal statutes dealing with transportation problems. The Act is divided into three main divisions, each with a separate title. Title I deals with amendments to the existing law and promulgates a new declaration of national transportation policy; Title II is devoted to the regulation of water carriers in interstate and foreign commerce; and Title III includes a miscellaneous group consisting of Part 1 on investigation of the various modes of transportation, Part 2 on rates on government traffic, and Part 3 on amendments to the Reconstruction Finance Corporation act.

Regulation of Water Carriers

The section which adds domestic common and contract water carriers to the already impressive list of agencies subject to regulation by the Interstate Commerce Commission as Part III of the Interstate Commerce act, is perhaps of greatest public interest. Only air carriers among the five types of transportation of national concern now remain under other control, the railways having been brought under the Commission in 1887, the oil pipe lines in 1906, and the motor carriers in 1935.²

¹ Public no. 785, 76th Cong., 3d sess., approved September 18, 1940. This was known as the Wheeler-Lea bill, S. 2009. The legislative history of S. 2009 was as follows: Introduced in Senate by Senators Wheeler and Truman, March 30, 1939; hearings held by Senate Committee on Interstate Commerce, April 3-14, 1939; reported by Senator Wheeler with amendments, May 16, 1939 (Sen. Rep. no. 433); passed Senate, May 25, 1939; referred to House Committee on Interstate and Foreign Commerce, which reported bill to House with amendments, July 14, 1939; passed House with further amendments, July 26, 1939; bills sent to Conference Committee, which filed report on April 26, 1940 (House Doc. no. 2016); recommitted to Conference Committee by House, May 9, 1940; Conference Committee filed second report on August 7, 1940 (House Doc. no. 2832); House agreed to conference report on August 12, 1940, and Senate on September 9, 1940; approved by President, September 18, 1940.

² Several proposals have been made to shift the air carriers to Commission supervision,

The chief feature of the Transportation act of 1940, therefore, is the further extension of unified and centralized control of domestic transportation. It is a process that has been going on at an accelerated rate since 1933, although its roots reach farther back in the past. While the Commission was essentially a steam railroad regulatory body prior to 1935, it also had jurisdiction over oil pipe lines, interstate electric railways, joint rail-water routes and railroad dominated water lines, and until 1934 interstate telephone and telegraph systems.³ The control of these agencies lacked commensurate importance, however, first, because their problems were of far less significance to the public welfare than those of the railroads and, second, because the powers of the Commission over them were accordingly less extensive than over railroads.

This situation was drastically changed for the first time when motor carriers were placed in the hands of the Commission for regulation. Except for a brief period of code authority control instituted by the National Recovery Administration in 1934, the motor carriers had not previously been under any form of federal regulation. Then they were made subject to a degree of control which, for rates, discriminations, and service, exceeded that prescribed for railroads until 1920.

Varying degrees of control over domestic water carriers had been practised by several federal agencies prior to 1940. The control was very limited in scope, however, being practically non-existent for river, lake, and canal operators. The only important water regulation was applied to coastwise and intercoastal carriers, which were subject to the jurisdiction of the United States Maritime Commission. Even this control did not approach in extent or detail the kind of regulation which Congress had long prescribed for railroads. The recent Act has done for water carriers what the Motor Carrier act did for trucks and busses.

The fact of salient importance is that the traditional policies applied to the railroads in the Transportation act of 1920, with some modification, are now applied to common and contract motor and water carriers.⁴ For example, the Commission may fix maximum, minimum, or exact rates or scales of rates for railroads, motor carriers, and water carriers. It may also rigorously determine entry into service of each of the three types of carrier and withdrawal from service of railroads by use of permits and certificates

including one by Commissioner J. B. Eastman when he was Federal Coördinator of Transportation, but Congress has not seen fit thus far to adopt the policy.

³ These utilities were transferred to the Federal Communications Commission at its creation in 1934.

⁴ The Act exempts transportation by common and contract water carriers of commodities in bulk if the cargo space is not used for the movement of more than three commodities at any given time. This exemption in effect removes large-scale contract bulk carriers on the Great Lakes and in the coastal service from Commission regulation. As most common carriers ordinarily transport more than three commodities at one time, the exemption will not generally apply to them. Contract water carriers not competing with common carriers covered by the Interstate Commerce act are also exempted from its provisions.

of public convenience and necessity. Accounts, reports, security issues, discriminations, tariffs, publication of rates, notice of rate changes, suspension of tariffs, unifications and consolidations, and the like, are subject to detailed supervision for water lines as for railroads.

A study of the legislative history of S. 2009 discloses the unmistakable fear on the part of some water carriers and shippers that the "inherent" advantages of water transportation would be destroyed or severely curtailed by the new legislation. The House conferees, led by Chairman Lea of the Committee on Interstate and Foreign Commerce, were at considerable pains to insist that the bill amply protect water transportation. The view was supported by reference to the declaration of policy, the rate-making rule, and the right of water carriers to continue rates, classifications, rules, etc., different from those of the railroads. They insisted that the Act was intended to foster and not to cripple water carriers.⁵

The National Transportation Policy

In the new Act Congress for the first time has promulgated a national transportation policy for all carriers under the Commission's authority. Lawyers assert that such a general legislative declaration of policy, like the preamble to a constitution, lacks the binding force of law. Perhaps this is true, but to a layman it seems evident that Congress voted this statement on policy because it wished the regulatory agency and the courts to face up their interpretations of the segments of the Act to a broader, over-all expression of objectives.

The provisions of the policy are as follows:

It is hereby declared to be the national transportation policy of the Congress to provide for fair and impartial regulation of all modes of transportation subject to the provisions of this Act, so administered as to recognize and preserve the inherent advantages of each; to promote safe, adequate, economical, and efficient service and foster sound economic conditions in transportation and among the several carriers; to encourage the establishment and maintenance of reasonable charges for transportation services, without unjust discriminations, undue preferences or advantages, or unfair or destructive competitive practices; to cooperate with the several States and the duly authorized officials thereof; and to encourage fair wages and equitable working conditions;—all to the end of developing, coordinating, and preserving a national transportation system by water, highway, and rail, as well as other means, adequate to meet the needs of the commerce of the United States, of the Postal Service, and of the national defense. All of the provisions of this Act shall be administered and enforced with a view to carrying out the above declaration of policy.

This is, indeed, a very large order for the Commission to fulfill, and it imposes a burden of statesmanship upon it far greater than that recognized previously by Congress or assumed by the regulatory body.

⁵ Conference Report on S. 2009, H.R. Report no. 2832, 76th Cong., 3d sess., August 7, 1940, pp. 88-89.

Since this is a new and comprehensive policy, the various parts may be profitably examined in some detail. There is first of all the question of fair and impartial regulation of all modes of transportation. Most advocates of this point of view seem to identify fair and impartial regulation with centralized, unified, and even identical control of each form. Presumably this approach is based upon the assumption that regulation is not fair or impartial unless it subjects all carriers to one pattern of control—in this case to the rail pattern. And this view must in turn rest upon the assumption that the economic characteristics of the regulated forms are in fact substantially alike. Otherwise to treat one industry in which effective competition prevails in the same manner as another industry typified by monopolistic and highly discriminatory practices, would plainly not be consistent with the stated objectives of the policy.

The practical question is whether or not rail, motor, and water carriers do in fact exhibit like economic characteristics. Evidence available on this issue is not wholly conclusive, but what there is points to a negative answer. The rails, for example, exhibit economies of scale and jointness of cost to a substantially greater degree than water and especially motor carriers. Moreover, the railways had a considerable amount of excess capacity for a decade because of the industrial depression, their high rate policy toward high-class commodities and short-haul traffic, and the rise of new vigorous competitors since World War I. Unless restrained by the government or able to exercise a monopolistic control over their erstwhile competitors, the rails accordingly have a powerful incentive to cut their competitive rates to low levels, almost to short-run out-of-pocket costs if necessary, in order to increase net profits. In addition, because of their size and financial strength founded on a backlog of non-competitive traffic largely tied to their lines, the railroads have the power to engage in destructive competition against one another and against other kinds of carriers for considerable periods of time. Without such measures as the long-and-short-haul clause and minimum-rate regulation, they could again destroy or absorb their smaller and weaker rivals, as they once drove the independent water carriers from the rivers, canals, and lakes of the United States.⁶

⁶ This is not a defense of a policy of preferential treatment of water carriers. The railways in most instances deserved to win the competitive struggles of a century ago. Their service was faster, safer, more flexible, and cheaper than that on the canals and rivers. Only on the Great Lakes and in the coastal service was water carriage equal or superior to rail transport, and this was because of lower costs and not superior quality. However, even on the Great Lakes and in the coastwise and intercoastal trade, the railroads were able to destroy legitimate independent shipping by use of the very potent weapon of long-and-short-haul discrimination. This practice also undoubtedly hastened the demise of shipping on the rivers and canals by the turn of the century. The trend was arrested and eventually reversed by three important public policies: The strengthening of the long-and-short-haul section in 1910; the passage of the Panama Canal act in 1912 and Section 500 of the Transportation act of 1920; and the vigorous promotion of water transportation by government, especially during and since World War I.

In contrast, the economic characteristics of the motor and water carriers appear to be quite different from those of the rails. The rights-of-way upon which they operate are publicly owned, and overhead and maintenance costs are borne by government rather than by individual carriers. Moreover, the investment in motor equipment, and frequently in ships and barges, is relatively small. The costs of these carriers also vary more directly with fluctuations in the volume of traffic available to them than do rail costs. Taxes paid for the right to use the highways are largely assessed on a use basis. The commercial water carriers are permitted to use their rights-of-way toll free and their taxes are not heavy. In the case of trucks, depreciation is frequently computed on a mileage basis, which reflects changes in the volume of traffic hauled. The rise or decline of motor and water traffic can be taken care of more readily by appropriate additions to or reductions of equipment, since each vehicle or boat or small combination is typically a complete carrying unit.

Moreover, the rates charged by carriers of a given type rendering a similar service, water or motor, tend to converge at a common level, because the operations are essentially small scale, performed by a multiplicity of operators, and, therefore, are truly competitive in nature. The proof of this observation is that little complaint has been registered to date by users against water and motor carriers for practising unjust discriminations or charging extortionate rates. The new legislation has been enacted at the behest of established carriers and their employees and allied groups.⁷ The absence of serious dissatisfaction on the part of users against water and motor carriers is not surprising, because, in competitive enterprises, the opportunity to discriminate unjustly and for an extended period is curtailed by the injured shipper's ability to transfer his custom to another operator or to provide his own service. Obviously, the chances of a typical

⁷ When the hearings were being held by committees of Congress on the motor carrier bills some years ago, few shippers or travelers appeared to offer evidence against the carriers. The same situation prevailed in 1939 and 1940 when the Wheeler-Lea bill was under consideration. The truth is that these statutes were not created in response to widespread shipper complaints which had forced government to take action against the railroads in 1887, but rather they came into being because vested interests—railroads, their employees, and certain motor and water lines—wanted to reduce and if possible suppress price (rate) competition in the entire field of inland transportation. Speaking of the trend of transport legislation during the past decade, Commissioner Eastman said in an address before the American Economic Association in December 1939: "The five most important transportation statutes of recent years (the Emergency Railroad Transportation act, 1933, the Inter-coastal Shipping act, 1933, the Motor Carrier act, 1935, the Merchant Marine act, 1936, and the Civil Aeronautics act, 1938) were all acts whose primary purpose was, in one way or another, to improve carrier financial conditions; and the same motive dominates the transportation legislation which Congress now has under consideration [S. 2009, the Wheeler-Lea bill]. *The shipper and traveler have not been the direct objects of concern in the more recent regulatory acts.*" (Emphasis supplied.) "The Adjustment of Rates between Competing Forms of Transportation," *Am. Econ. Rev.*, Suppl. vol. xxx, March, 1940, pp. 124-125.

motor or water operator to duplicate the character and extent of discriminations which developed on the railroads in their unrestrained competitive era are small indeed.

In this discussion, it is important to bear in mind that motor and water carriers should not be allowed to practise competition free of any public control. Both modes serve the public, use public property, and receive public assistance. Reasonable safeguards are necessary to insure public safety and responsibility of operation. The government, having voted enormous sums for the construction and maintenance of waterways and highways, very properly should take steps to protect its investment. But doubt may be expressed that identical or similar regulation of all agencies of for-hire transportation on the rail model will promote the public interest. Failure to draw proper economic distinctions between these industries will merely postpone socially desirable solutions of the transportation problem.⁸

The declaration of policy also expresses condemnation of "unfair or destructive competitive practices." These practices are nowhere defined in the Act, nor are criteria for measuring them set forth for the guidance of the Commission. Doubtless Congress expects the Commission to use its discretion in reaching a decision in any given case of carrier or inter-agency competition, and has placed at its disposal several important tools with which to implement the stated objectives. The methods of outstanding importance are two: the power to fix exact or minimum rates for all common and contract carriers subject to the Act; and the right to control entry into or withdrawal from operation by use of permits and certificates of public convenience and necessity. How shall the Commission use these great powers over prices and production? It is commonly believed that regulation must under this mandate turn increasingly to the substitution of cost for demand and competitive criteria as a basis of establishing rates to eliminate so-called destructive competition. If each carrier or agency is to be required to maintain its rates at least at cost levels, there is the very

⁸ It is frequently asserted, especially in rail circles, that the competition of water and motor carriers with railroads is unfair and uneconomic because of subsidies and other public aids to the former. But this raises a different problem, one about which regulation as such is not concerned, *viz.*, whether or not government promotion policies are wise and just. As to the justice or wisdom of past and current promotional policies, it is difficult to judge because the railroads have also been the recipients of free lands, labor service, cash grants, and other public assistance. However, if government largess on analysis is deemed to be distributed unwisely or unfairly, the sensible action would seem to be to make appropriate changes in promotional policies and not to add uneconomic regulation to uneconomic subsidies in the vain hope that the two indefensible policies will promote the public welfare by checkmating one another. The most authoritative study of the subject of public assistance to transportation is *Public Aids to Transportation*, Federal Coördinator of Transportation, vol. i, "General Comparative Analysis, and Public Aids to Scheduled Air Transportation," 1940; vol. ii, "Aids to Railroads and Related Subjects," 1938; vol. iii, "Public Aids to Transportation by Water," 1939; and vol. iv, "Public Aids to Motor Vehicle Transportation," 1940.

difficult question of choice of concept of cost to employ for the purpose. Average unit costs at the least-cost stage of operation might be used; or average actual unit costs. Should either of these be selected, historical costs—obsolescence and over-building as well as valid economic costs—would be assessed against users whether justified or not. Another possibility would be the short-run out-of-pocket or marginal costs. This would avoid the dangers of using average unit costs and give much greater weight to demand and competitive considerations. Yet in the event of general inter-agency competition it would not solve the problem of establishing rates for the simple reason that privately owned and operated carriers could not survive if the bulk of their traffic moved on rates at or little above short-run marginal costs. Moreover, both average unit costs and marginal costs are a function of the degree of utilization of capacity; hence they offer at best a rather uncertain measure of rates in a highly dynamic society.

Beyond all this, however, it would be theoretically invalid as well as practically unwise to establish particular rates or scales of rates on the basis of average unit costs however carefully determined. In the railway industry, with its large proportion of common and joint costs which are largely independent of variations in the volume of traffic short of capacity operation, demand or competitive factors must have chief weight in rate making. Otherwise, the transport plant will not be utilized to the extent that would be desirable and feasible. Moreover, price and service standards would not be forged in the hard, impartial market place, and traffic would not be allocated impersonally to the carrier or agency best suited to perform the service. It is necessary in the public interest to forestall and eradicate from the transport field unreasonable rates and undue preferences and discriminations against persons, places, and commodities and classes of traffic. It is also necessary to make carriers meet reasonable safety, public liability, and other service requirements and to keep proper records for public inspection. But it is doubtful whether the large use of costs contemplated by many advocates of unified and centralized control of rates and coördination can be made successfully to promote the public interest. If demand and competitive factors are little recognized in the future regulation of railroads, motor carriers, and water lines, it seems safe to predict that the legislative program will eventually disintegrate.

Consolidations and Unifications

Some changes were made in the portions of the fifth section of the Interstate Commerce act dealing with consolidations, mergers, unifications, and acquisitions of control. The new law makes the provisions apply to all types of carrier subject to the Act, and as a necessary incident repeals the section which covered unifications of motor carriers. The statute also relieves the Commission of the duty, first set out in 1920, of providing a

plan for the consolidation of the railroads into a limited number of systems. The law is liberalized somewhat to facilitate the making of unifications on a voluntary basis, subject of course to Commission approval.

Perhaps the outstanding feature of the unification provisions of the new Act was the adoption after much debate of the so-called Harrington amendment which was designed to protect the employment and wages of rail labor. In its original form, the amendment prohibited approval of any transaction which would have resulted in unemployment or in the impairment of employment rights. There was no similar proviso in the Senate bill.

The Conference Committee was unwilling to accept the amendment in this form, first, because it made all employees of affected carriers equal beneficiaries regardless of length of service prior to a consolidation, and second, because it required the carrier to maintain employee benefits indefinitely or until by attrition the employee was separated from the payroll. Accordingly, the amendment was qualified by confining its operation in any given consolidation to a maximum period of four years and in the event of service of less than four years the guarantee was commensurately reduced. In this way it was hoped that the adverse effects of a consolidation upon labor would be cushioned without, however, placing undue obstacles in the way of desirable combinations.

The significant question is whether the new provisions will materially aid or hinder further consolidations or unifications in the public interest. Prophecy is dangerous, but it seems reasonably certain that the trend will go on very much as it has since 1920. And this is because the Act has not got at the salient defects of earlier legislation, which all grow out of the fact that Congress has tried to promote consolidation on a voluntary and competitive basis and yet achieve objectives contrary to the conflicting hopes and aspirations of the persons and interests which alone have the power to initiate the projects, *viz.*, rail executives and investors.

Promotion, Coördination, and Research

In this Act, Congress accords unusual recognition to the problem of government promotion of transport facilities and services, including the coördination of carrier and inter-agency activities. The policy of the Interstate Commerce act is now oriented "to the end of developing, coördinating, and preserving a national transportation system of water, highway, and rail." It is with this purpose in mind that the duty is laid upon common carriers subject to Part I (railroads, pipe lines and rail-water lines) not merely to establish through routes among themselves but "to establish reasonable through routes . . . with common carriers by water." In addition, all common carriers under Part I "shall . . . afford all reasonable, proper, and equal facilities for the interchange of traffic between their

respective lines and connecting lines," and a connecting line is defined as "the connecting line of any carrier subject to the provisions of this part or any common carrier by water subject to Part III." Finally, the Commission is empowered to establish through routes between common carriers subject to Part I and common carriers by water. Common carriers by water are not, however, required to establish reasonable through routes with motor common carriers.⁹

Beyond this, however, the need for reexamining the whole federal program of promotion is given statutory recognition for the first time. All too often taxes have been levied or remitted, as the case may be, and public aids in the form of construction and maintenance of facilities, gifts of land, money, services, and in many other ways, have been given without consideration of needs of the public, the relative economy and efficiency of the new facilities, or the probable effects upon established carriers. On many occasions promotion has been undertaken at the behest of purely local, special interests which wanted a handout from the public treasury perhaps to develop an otherwise uneconomic enterprise or perhaps to stimulate rising real estate values for their own profit. The time was long over-due for government to undertake a comprehensive, disinterested examination of national promotional policy.

The Act provides for the appointment of a temporary three-member Board of Investigation and Research by the President. This Board has a statutory life of two years with an extension of two more years optional with the President. The Board is required to make an interim report of its studies, findings, and recommendations by May 1, 1941. Annual reports and a final report are also stipulated.

The Board is required to study: (1) the relative economy and fitness of railroads, motor carriers, and water carriers with a view to determining the service for which each type of carrier is especially fitted or unfitted, and methods by which each type could be developed to provide an adequate national transportation system to meet commercial, postal, and national defense needs; (2) the extent of public aid to the three modes of transportation; and (3) the extent to which taxes are levied on each type by federal, state, county, and local governments. In addition to these specific duties, the Board is granted the very significant discretionary power to investigate or consider any other matter relating to these agencies of

⁹ The provisions dealing with the establishment of through routes between motor and rail, and between motor and water carriers have not been altered. Section 216 of Part II provides that every common carrier of passengers by motor vehicle has the duty "to establish reasonable through routes with other such carriers." This requirement does not extend to common carriers of property by motor vehicles; however, they "may establish reasonable through routes . . . with other such carriers or with common carriers by railroad, express, or water." Similarly, common carriers of passengers by motor vehicle "may establish reasonable through routes" with common carriers by railroad or water.

transportation which it may regard as likely to improve "transportation conditions and to effectuate the national transportation policy declared in the Interstate Commerce act."

This part of the Act represents a step in the right direction. After a lapse of more than four years, the unfinished work of the Office of the Federal Coördinator of Transportation, which was abolished in 1936 because of the opposition of rail management and labor, can be resumed and new projects can be inaugurated. Students of transportation hope that the Board will complete studies and produce recommendations on policy of such merit that they will command the respect and support of users, carriers, employees, and government alike. The time for this work is at best very limited; the problems are complex and no easy solutions are in sight. Issues of public interest are likely to exist for an indefinite period of time, and it would have been preferable, therefore, to have provided for a permanent agency—a Board, Authority, or perhaps Department of Transportation of cabinet rank—continuously to engage in studying and reporting on these problems.

Additional Amendments of the Interstate Commerce Act; Miscellaneous

The amendments of the Interstate Commerce act in Title I were numerous and for the most part inconsequential or highly technical in terms of the public interest or understanding. Several of these changes, however, in addition to those already discussed, merit mention because of their importance. Section 3 of the Interstate Commerce act forbidding undue railroad preferences and prejudices to "any person, locality, port, port district, gateway, or transit point, or to any particular description of traffic," was amended by the addition of "region, district, territory" to the list of places and areas. A similar addition was made in the sections dealing with motor and water carriers. These changes reflect the influence of interests in the South and Southwest which have been complaining for some years about the alleged discriminations against their sections in favor of the East.¹⁰

¹⁰ The Tennessee Valley Authority report entitled *The Interterritorial Freight Rate Problem of the United States*, House Doc. no. 264, 75th Cong., 1st sess., 1937, exerted prime influence in crystallizing sentiment in opposition to the existing interterritorial freight rate structure, particularly class and industrial commodity rates. (See also a supplementary report by the same agency, House Doc. no. 271, 76th Cong., 1st sess., 1939.) In 1939, bills were introduced into both Houses of Congress for the purpose of prohibiting higher interterritorial freight rates than destination territory rates, distance considered (H.R. 188 and S. 158). These efforts failed, but the legislative objectives of the proponents were partially realized in the new Act. The southern group has also carried its case before the Commission in what is known as the Southern Governors' case. In this case, the eight states of Alabama, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, and Tennessee, sought favorable rate reductions on about two dozen industrial commodity descriptions which moved to eastern markets by rail. The charge was that these rates were unduly discriminatory as compared to similar rates within the East (Official Rate Territory). The Commission found that unlawful discriminations existed in about

The Act made another change in Section 3 by adding a paragraph directing the Commission to carry out a policy of granting rates to shippers of wheat, cotton, and all other farm products for export on the "same principles as are applicable in the case of rates on industrial products for export." This was a modification of the Jones amendment previously adopted by the House which provided that shippers of agricultural exports should have "substantially the same advantage of reduced rates" as compared to shippers of farm products for domestic use, that shippers of industrial products for export have as compared with shippers of industrial products in the domestic trade. This provision also represents a concession, how important it is difficult to know without administrative interpretation, to farm interests in the Southwest which pay the full domestic rates on wheat and other agricultural products moving in the export trade.

A further change of great interest to users of service and to consumers places the burden of proof upon a commercial carrier by rail, water, or highway to show that *any* proposed change by it of a rate, fare, charge, classification, rule, regulation, or practice is just and reasonable. The previous law had laid this burden upon a carrier only when it proposed to *increase* a rate, fare, or charge. It is apparent that a deterrent to entrepreneur initiative in making rate reductions is added to the law, and it is problematical whether the benefits of science, management, and invention will henceforth be made available to users at lower rates as rapidly as would otherwise be possible.

Considerable debate developed over the wording of an amended rule of rate-making. The carriers wished to have restored to the law something akin to the "fair rate of return on a fair value" rule, which had been dropped from the Interstate Commerce act in 1933 after a trial of 13 years. Stress was laid by them upon the "revenues" approach which would require the Commission to adjust the rate level more or less automatically in line with the financial needs of the carriers. Congress rejected this view, but ran into difficulty in trying to broaden the rule to cover the movement of traffic by water and motor carriers as well as by railroads. Fears were expressed by some that the Commission might attempt to establish water

one-half of the cases alleged. *State of Alabama et al. v. New York Central R.R. Co. et al.*, 235 I.C.C. 255 (1939); 237 I.C.C. 515 (1940). Additional publicity has been given to this issue by the publication of the *Report to the President on the Economic Conditions of the South*, July 25, 1938, by the National Emergency Council, which used the findings of the T.V.A. report as the basis of the charge that one fundamental factor in retarding the proper economic development of the South has been the unduly discriminatory interterritorial freight rate structure (see pp. 58-59 of the *Report*). A comprehensive investigation of class rates, consolidated freight classifications, and motor freight classifications in all parts of the country was announced on July 29, 1939 by the Commission on its own motion (Dockets 28,300, 28,310, and MC-C 150). At this writing, December 11, 1940, no hearings have been held, although it is understood that preliminary plans for the investigation have been formulated.

or motor carrier rates at a high level in order to protect rail traffic and revenues. As a result, Congress decided to require the Commission to consider, in prescribing just and reasonable rates, among other factors, the "effect of rates on the movement of traffic by the carrier or carriers for which the rates are prescribed." Thus rates are presumably to be fixed with an eye to the effects on traffic *only* of the agency directly concerned, and not of competitors.

The long-and-short-haul section was changed in two important respects. First, the equidistant clause¹¹ was repealed, and, second, the provisions of the section were extended to include water carriers subject to Part III. However, motor carriers regulated under Part II continue to be exempted from the clause.

After much discussion the decision was reached to require the federal government to pay full commercial rates for the transportation of passengers and property, provided the carriers would release their claims against the United States to lands granted under the land-grant statutes. An exception was made in the case of transportation of military or naval property and of members of the military and naval forces and their property when traveling on official duty. Thus on a *quid pro quo* basis the government expressed willingness to cancel the reduced rate agreements (usually 50 per cent) with the land-grant carriers. It is estimated that this provision if accepted by the railroads will add about \$7,000,000 to their revenues annually.

The Reconstruction Finance Corporation act was amended in several particulars. The previous act was retained, but liberalized to include authorization of loans to receivers or trustees as well as to railroads, to remove the requirement that Commission approval be given in case of purchases or guarantees of railroad obligations made for the maintenance or purchase of equipment for carriers not in receivership or trusteeship, and to increase the limit on the total amount of loans and commitments to carriers from \$350,000,000 to \$500,000,000.

RALPH L. DEWEY

Washington, D.C.

¹¹ The equidistant rule reads: "If a circuitous rail line or route is, because of such circuitry, granted authority to meet the charges of a more direct line or route to or from competitive points and to maintain higher charges to or from intermediate points on its line, the authority shall not include intermediate points as to which the haul of the petitioning line or route is not longer than that of the direct line or route between the competitive points."

REARMAMENT, RECOVERY AND MONETARY POLICY¹

We are at present faced with the triple problem of rearmament, recovery, and avoidance of price inflation. An acceptable monetary policy needs to be calculated to achieve all three objectives, plus the maintenance of full employment once obtained. With the present rapid surge toward full employment and the special pressures for arms production, conflicts of interest appear likely, especially over wage increases. Adoption of a stable policy "rule" (such as price stabilization) as the basis for monetary and fiscal policy might provide the basis for a workable "truce" between labor, monetary authorities, and those in charge of rearmament.

Other primary advantages of monetary stabilization around a stated "rule" are (1) the basis it provides for "equity," (2) its stabilizing effect on business conditions, and (3) its elimination of the necessity for further centralization of power in the hands of discretionary monetary "authorities." The arguments that adoption of such a stable policy would involve loss of desirable flexibility have been much overstated.

The choice between alternative "stable money" policies is largely a matter of expediency. Present institutional conditions, especially in regard to labor, point toward price stabilization as the most expedient choice.

Our country is at present faced with three major "economic" problems—rearmament, restoration of a higher level of employment and income, and avoidance of unwanted price inflation. Apparently the second is now well on the road to solution, temporarily at least, but the other two are still very much in the "unsolved" stage. We need, then, to make every effort to assure (1) that the upward surge in employment and income is not cut short, (2) that the "recovery" surge is prevented from leading to the excesses of price inflation, (3) that the rearmament program is expedited, and (4) that the "prosperity" now being attained is made a "permanent" one, if at all possible. It is the purpose of this note to consider briefly the part monetary policy can play in obtaining this four-fold objective.

I

Today we are inclined to assume that the arms boom will lead to absorption of most involuntarily unemployed persons within the next year or so, and probably this assumption is well founded. But in spite of the fact that the "recovery" problem now commands much less of our attention than it did a few short months ago, it is advantageous to restate certain observations on the connections between monetary policy and recovery as an introduction to the suggestions advanced in regard to the other points.

The recovery effort, insofar as it has been wisely conceived, has been an effort to stimulate private investment. For several reasons this effort has

¹ Obviously such a brief note as this makes no pretense of a complete statement of the issues involved in the problem under discussion. The purpose is only to present certain considerations which seem to the writer to have been too commonly overlooked or under-emphasized. This note was drafted in the early autumn of 1940.

I am indebted to conversations with Professors L. W. Mints and Henry C. Simons of the University of Chicago, and my colleagues, Dr. A. G. Hart, Dr. Charles Shohan, Dr. Gerhard Tintner and Miss Isabelle Kelley for suggestions on several points included in this note.

so far been only partially successful. One of the most prominent criticisms of the New Deal has been that its monetary and fiscal policies have created so much uncertainty as to retard seriously private investment which would have taken place in the absence of such uncertainty.

It is obvious that to the extent business-men fear "inflation" or "government bankruptcy" or any other such bogey, be the fear rational or irrational, it does act as a restraint upon their undertaking large-scale, long-period investments. To large numbers of business-men (investors), the most imminent potential cause of topsy-turviness is the financial policies of the government, especially now that the supposed security of the gold standard has vanished and its place been taken by a group of discretionary authorities who are profoundly disliked and distrusted by many of the business fraternity.²

Persons advancing this criticism often argue or imply that if power were to be removed from the hands of New Deal "authorities," much of the uncertainty would be removed and recovery would take place. Some suggest that to restore confidence (certainty) we need a stringent statutory limit to the amount of money which can be issued, others that we need a strict statutory debt limit, some that we need a guarantee that the price level will be held stable, and so on. The firm believer in democratic government welcomes this emphasis on government by laws (rules) rather than by men (authorities); but the claim that the way to get recovery from low levels of employment and income is to adopt a "rule" for monetary policy is a palpable overstatement.

The introduction of greater monetary certainty would surely be of considerable importance (other things equal) in leading toward greater private investment; but the real virtues of monetary certainty ("rules") lie in its powers as a long-run "preventive," not as a short-run "cure," for business depressions and booms. To wait until the economic system has gone through spectacular gyrations and ended up prostrate in a depression, and then to expect the elimination of monetary uncertainty to act as a stimulus to recovery, is completely to misread the arguments of those favoring such monetary steps and badly to underrate the virtues of their proposals. Yet it is in this light that most of the proposals for monetary "rules" have been judged.³ Intelligent proponents of such monetary "rules" as price stabiliza-

² It is true, of course, that the "protection" given by the gold standard was largely illusory, and that there has been a large element of discretionary management of monetary policy under the so-called gold standard ever since it came into existence, especially in recent years. But the important thing was that people believed in it—felt that it guaranteed real certainty and protection against financial debacle.

It should be obvious that any such argument that uncertainty is detrimental to business prosperity is applicable to all types of uncertainty, not only to monetary and fiscal uncertainty. The differences are of degree, not of kind.

³ The controversy as to whether or not the recent Swedish experience "proves" that price stabilization is adequate to check business recession and promote recovery is a case

tion and stable income per capita do not claim they would bring revival from depressed levels of investment and employment. What they do claim is that inauguration and maintenance of such a monetary rule at a time of relatively full employment would be a fundamental step toward the preservation of such employment, since this monetary policy would minimize tendencies toward cumulative business expansion or contraction and would act to check such cumulative movements in their early stages if they did develop.⁴

Although arguments in favor of such monetary rules as price stabilization may well have been premature during the past few years, they may not be now. The picture is rapidly changing, especially since the tremendous boost given domestic investment and employment by the domestic rearmament program and international conditions. In such an "emergency" program as we are now undertaking there is great danger that strains and stresses will develop among the various group interests involved, especially between organized labor and the rearmament authorities and between both of these and the monetary authorities. There is every reason to suppose that there will soon be demands for higher wage rates, especially where bottlenecks become evident in industries connected with rearmament; and surely

in point. The common assumption is that, if it is shown that price stabilization did not bring about recovery, then price stabilization deserves no further consideration. No recognition is made of the fact that the real case for any monetary rule lies in its power to maintain prosperity, not to obtain it. Thus, even if it could be shown that monetary stabilization (certainty) should not receive much credit for the Swedish recovery, this would be largely irrelevant to the real case for a monetary rule, adopted in a time of "prosperity."

⁴This confusion between "long-run" and "short-run" considerations is particularly prevalent in monetary discussions today, but it is also painfully evident elsewhere. (See Professor Jacob Viner's presidential address, "Short and Long View in Economic Policy," *Am. Econ. Rev.*, xxx (1940), 1-15, for an emphasis on the need for more attention to the "long run.") It is not difficult to understand the preoccupation with short-run problems shown by monetary theorists during the past decade. But unfortunately this interest seems completely to have turned attention away from a more fundamental problem—that of formulating a set of rules or basic principles for a framework within which the monetary system can act as a stabilizer, rather than an aggravator, of business fluctuations and can function without continuous tinkering and "managing." When there has been a vague recognition of this long-run problem it has usually been badly confused with the short-run, "recovery" problem. Even among the really good recent works on monetary theory, almost all are open to the criticism that they either fail to specify adequately the institutional framework within which the discussion proceeds or fail to set forth the type of framework within which we might expect the system to work satisfactorily, or both. (See Henry C. Simons' "Review of A. H. Hansen's *Full Employment or Stagnation?*" *Jour. of Pol. Econ.*, xlvii (1939), 272-76, for an excellent criticism along this line.) This methodological confusion in monetary theory between short-run and long-run means and ends has had serious unfortunate results: (1) in leading to a great disparity of conclusions for policy; (2) in leading to proposals for policies self-defeating in the long run—e.g., a policy which aims simply at keeping monetary expansion just great enough to maintain full employment; and (3) in leading to confusion as to the applicability of conclusions to existing problems. Surely it is desirable to face the problem of formulating a good set of rules, or framework, for the monetary system, both for its clarifying effect on theorizing and for the effect it might have on current policy proposals.

labor will resist suggestions that regular hours of work be lengthened, *i.e.*, will insist that the higher overtime wage rates become the marginal labor costs. With the sharp increase in industrial production and in construction, and with the tremendous excess reserves in the banking system, it is uncomfortably possible that a considerable rise in the price level may be in store. This is made somewhat more likely by the "Keynesian" leanings of some of the present monetary authorities. Bluntly, the danger is that we may get into a sort of race between (1) labor leaders forcing up wages with the increased demand for particular types of labor, (2) monetary authorities continuing monetary expansion to ease unemployment, and (3) rearmament officials and industrialists intent on the most rapid production possible without too much care for the absolute level of costs and selling prices of their products so long as the relationship of the two remains satisfactory. A brief recollection of the events during the similar circumstances of the last World War should serve to demonstrate that the danger is not pure fancy.

Throughout the entire period since 1933, this same problem has been evident, with organized labor, increasingly powerful, forcing up wages while monetary authorities carried out expansionary, price-raising policies in an effort to increase employment. At the extreme this sort of process tends to degenerate into a simple race between the two, each endeavoring to anticipate the moves of the other, with organized labor no better off in terms of real wages and the monetary authority likewise no better off in the attempt to decrease unemployment, whilst society in general bears the burden of a changing value of money.

Avoidance of this sort of race can be assured only by some sort of truce between the different interests involved. Perhaps the strongest argument in favor of such a monetary rule as price stabilization⁵ at present is just this—that it would provide a tangible basis for such a truce. No one can blame labor for upholding its own interests in striving for higher wages, especially in the face of rising prices where stable money wages mean declining real incomes. At the same time it must be apparent that, given no increase in productivity, higher money wages with a constant price level mean unemployment. In the face of such upward pressure on wage rates, the expected resort would be to higher prices to maintain real wages and employment constant in the face of higher money wages. This sets the stage for further increases in wage rates, thus putting under way the upward spiral of wages and prices. Acceptance of a stable price level by all parties would introduce a "stabilizer" in this sensitive relationship.

The likelihood is that actually production will face tight bottlenecks in the rearmament program, and that wages will be forced up most sharply in

⁵ Say of wholesale commodity prices. The problem of what price index might be stabilized is definitely secondary. See *infra* for further discussion.

particular areas, while there may remain considerable unemployment elsewhere. In this event, higher prices are apt to result largely in a quasi-rent to these scarce factors (skilled laborers), without appreciably helping even to expedite production of armaments. The important fact is that monetary policy is impotent here either to increase employment or to expedite production of armaments. Correction of this malallocation of resources and reform of its causes must come directly through an attack on the restrictionist labor policies which have led to and maintain shortages in crucial occupations, and by positive steps to increase the mobility of labor. We simply must decide whether the interests of particular union groups (as contrasted to the interests of labor as a whole) are more important than expediting production and than the supposed American ideal that any person is free to learn the trade he likes. Equally important is the establishment of adequate governmental employment exchanges. But we are interested here only in the fact that, given the present occupational restrictions in industry, a higher price level is likely to mean not an increase in total real income but simply a different distribution of the total in favor of those groups using restrictionist methods.

An "unreasonable" attitude on the part of organized labor in forcing wage increases can make it impossible for *any* monetary policy to maintain full employment. Apparently, the adoption of some definite rule of policy, which labor can understand and on which it can be "sold," provides the only real hope for a lasting compromise between labor, monetary authorities, and those responsible for rearmament. A truce built on a stable price level would mean that labor would be safe against diminution of real wages through decreases in the value of money, and it would permit labor to claim the benefits of increased productivity through higher money (and real) wages in any particular occupation. Perhaps to suppose that "labor" could be persuaded to accept such a truce—that it could be persuaded that its own best interests (*as a group*) lie in wage rates rising no faster than warranted by productivity—is merely to dream. *But if this persuasion is impossible, economists may as well stop discussing monetary policy except in terms of keeping one jump ahead of wage increases*, and give over their time to a study of pressure groups. It is of secondary importance what rule is used; the important consideration is that *some* rule be adopted as a "stabilizer" in this triple group relationship. Price stabilization appears most feasible at first glance simply because of its greater popular appeal.⁶

The importance of price stabilization in eliminating wage disputes must not be overrated, however. Individual wages are determined in large part by present and anticipated prices of the individual products. Price level stabilization would of course not stabilize individual prices. Workers, in bargaining, would surely take cognizance of these movements within the

⁶ For further discussion of the best type of "rule" or truce, see *infra*.

average. To be successful in maintaining full employment, monetary stabilization must be supplemented by a labor policy which assures that particular wages will not rise while there exists an "excess supply" of that grade of labor, and that wages will rise when a "shortage" of that grade of labor exists. That is, there must be a labor policy which eliminates present union practices restricting entrance into certain trades and also eliminates employers' monopoly power to hold down wages in the face of rising marginal revenue productivity (*i.e.*, marginal product times marginal revenue).⁷ With such a labor policy a stable price level policy could go far toward maintaining full employment and providing a truce for the various groups involved. Without such a labor policy, a stable price level policy is at least a step in the right direction.

II

There is, of course, much to be said in favor of monetary stabilization on the basis of a "rule" of policy in addition to its usefulness as a basis for a truce. But these arguments have been stated many times,⁸ and need be mentioned here only very briefly. There is the obvious advantage of having a stable value for the monetary unit to promote "equity." More important is the central part monetary stabilization, adopted at a time of relatively full employment, can play in preventing the occurrence of cumulative depressions and booms. Monetary stabilization would be a "preventive" in at least two important senses. First, by providing a stable monetary basis for expectations, it would tend to minimize tendencies toward business fluctuations. "If the future were perfectly foreseen by all, the price level announced as the programme of the Central Bank would automatically become effective, through the anticipations of the public."⁹ To be sure, the future is not perfectly foreseen, nor will it be. Moreover, entrepreneurs and consumers are ordinarily much more interested in particular prices and price relationships than in that much maligned average, the price level. But the importance of influencing consumers' and entrepreneurs' anticipations, so that the influence of anticipations on economic behavior will be in the desired direction, has been grossly underrated.

⁷ See *infra* for a further discussion.

⁸ The most pointed, yet well-rounded statements are Simons, "Rules *versus* Authorities in Monetary Policy," *Jour. of Pol. Econ.*, xlv (1936), 1-30; his *A Positive Program for Laissez Faire* (University of Chicago Public Policy Pamphlet no. 15); and Frank D. Graham, "The Primary Functions of Money and Their Consummation in Monetary Policy," *Am. Econ. Rev.*, xxx (1940), 1-16. The Swedish literature has placed considerable emphasis on this aspect of monetary policy. Cf., e.g., Gunnar Myrdal, *Monetary Equilibrium* (London, 1939), especially chap. 8; and Erik Lindahl, *Studies in the Theory of Money and Capital* (New York, 1939), pp. 199 ff. Lindahl's *Penningspolitikens Mal och Medel* (Malmo, 1930, in Swedish), the foundation-stone of many of the more recent Swedish works, takes as its central premise the proposition that the main aim of monetary policy should be the minimization of monetary uncertainty.

⁹ Lindahl, *Studies in the Theory of Money and Capital*, p. 200.

But even should business expansion or contraction be set under way by changed anticipations, monetary stabilization, if maintained, guarantees that the tendencies will not result in the great cumulative waves of expansion and contraction we know as serious booms and depressions. Whether monetary factors are considered causes or reinforcing factors they are surely the *sine qua non* of really severe booms and depressions. This is not, of course, to say that price stabilization alone would be a guarantee of business stability. Such a view would be naïve. Price-level stabilization (or any other such rule) is not a counsel of perfection—it is a precept of action. But such a rule for monetary stabilization can play a very important part in maintaining full employment, once it is attained. Any boom would directly lead to rising prices, which would call for monetary contraction to maintain the stability of the price index; any important recession would lead to falling prices, which would call for monetary expansion to maintain the stability of the price index.¹⁰ In either case the price index would call for exactly the monetary action calculated to check the tendency of business to unwarranted expansion or contraction; and the monetary action would have to be continued as long as the price index reflected important deviations. In terms of anticipations, worsened anticipations might set a recession under way in the face of monetary stabilization; but if sufficient monetary action was taken immediately to return the index to normal, the pessimistic expectations would not be realized and a cumulative wave of worsening anticipations would be prevented. The converse would be true in the case of expansion. It should be obvious that any other similar plan, such as Hawtrey's stable per capita income proposal, would give essentially the same results and be subject to the same limitations.

Lastly, there is a need in the midst of our present "emergency" program to take every care lest we lead ourselves into precisely the authoritarianism we seek to avoid. On top of the cumulative increase of authoritarian "planning" in economic life, the present rearmament program promises to impose

¹⁰ This assumes the use of a sensitive price index, which would reflect reasonably promptly important changes in the level of business activity.

Implementation of any stabilizing "monetary" policy must obviously be in terms of both monetary and fiscal action. When the phrase "monetary rule" or "monetary policy" is used, it is intended to include fiscal policy. This paper is not concerned with problems of implementation. Yet three major comments need to be made here. First, the grant of power to the monetary authority to enforce the rule (policy) adopted ought to be very generous. Second, implementation of such a policy could not be successful without at least two important reforms: (1) greater unification of fiscal and monetary policy; and (2) stricter control over our fractional reserve banking system, preferably through raising reserve requirements and stricter control over money substitutes. (Cf. Simons, "Rules versus Authorities in Monetary Policy," *op. cit.*) Third, the problems of implementation would be very much the same as those faced in any monetary policy which seeks to "do something" about business fluctuations. *The common argument against a monetary rule on the ground of impossibility of enforcement carries much less weight if viewed in proper perspective—i.e., in comparison with the likely alternatives.*

It is assumed throughout this discussion that implementation is (can be) successful.

a much heavier control. While this control may well be necessary as an emergency measure, it is surely desirable to avoid blind recourse to centralization of power. The central argument for more authoritarian regulation and "planning" is that the necessary coördination and coöperation cannot be obtained without it. An example in point is the danger of employer-employee conflicts over wage rates holding up production. Adoption of a "rule" of monetary policy such as price-level stabilization could be of major importance in withstanding the rush toward authoritarianism. If such a policy could be made the basis for a truce between various group interests, it might well protect the interests of each of them from encroachment by government "planners," thus saving them from greater losses than they ever feared at the hands of each other. The surest way for labor to avoid loss of many of its newly gained liberties is by so coöperating on wage rates and working hours as to make authoritarian pressure unnecessary. Yet without assurance to the contrary, labor justifiably fears that price increases will cut real wages if it agrees not to press for higher money wages. Similarly, we, the general citizenry, will gain tremendously in preserving democratic government, if we can find a rule to replace discretionary authorities in the all-important field of monetary and fiscal policy, quite aside from the advantages gained in maintaining business stability. Positive, close control of the monetary system along stabilizing lines is surely one of the primary functions of government in a liberal democratic state. Stable rules as to money (monetary certainty) are among the most important of the essential "rules of the game."

III

There are important objections to the adoption of a monetary rule. One often heard is that such a rule (policy) would not necessarily eliminate business fluctuations. This is of course true, but largely pointless. The real issue is whether such a monetary policy would do more to eliminate fluctuations and to expedite rearmament than the present or some other policy.

Most important is the argument that especially now we need to maintain every possible bit of flexibility to face the uncertain future—that to tie the hands of the monetary authorities at such a time would be most unwise. To be sure, flexibility is highly desirable, but it is informative to pause and ask, exactly what sort of flexibility? The classical argument against a monetary rule here has been that it would tie the monetary authorities' hands in the face of (1) labor pressure for higher wages, and (2) depreciation of foreign currencies to our disadvantage. But if the preceding argument that some such monetary rule can provide the basis for a truce on wage and price increases is correct, the loss of flexibility on the first score is not important. Indeed, it would be a tremendous gain from the present situation where there is no "stabilizer" in the wage-price relationship. Second,

in the present world one can hardly hope for a stable exchange standard. If domestic stabilization here means more sharply fluctuating exchange rates, this is a small price to pay for the blessings of domestic business stabilization. But it is by no means sure that domestic stabilization would necessarily mean more sharply fluctuating rates. Exchange equalization funds can do much to eliminate temporary deviations; and if we are to dominate the Americas more than ever, it seems likely that domestic stabilization here would do much to promote stabilization in those other countries which will presumably be tied to our currency. With the rest of the world plunged in war we must recognize the fact of fluctuating exchanges. Indeed, in the face of such a world picture, the case for independent national stabilization becomes strongest.

Assuming that we stay out of the actual conflict and that the totalitarian states win, there will obviously be nothing left of the traditional international trade picture; and in the mass of government controlled transactions, formal exchange rates are apt to be less and less important. If England should win and desire to "reestablish" the traditional liberal economic and political system in Europe, the picture would be very different. In that case, reestablishment of freer international economic intercourse and international monetary stability would be of basic importance. But here again, our domestic stabilization would surely help by providing a sorely needed basis for international stabilization, rather than hinder.¹¹ If we are to become involved in the war, probably to expect such monetary moderation as the maintenance of a stable price level is merely to dream. For the present, however, it need not be a dream, and it surely would be a healthy influence in a war economy.

The loss of flexibility on the two scores stated above thus seems much less serious than at first glance. The other main flexibility lost is that possessed by discretionary authorities in dealing with particular disturbances, as contrasted to general movements of wages, prices, etc. It is true that crop failures, special wage increases in particular occupations, and other events may occur and the resulting relative price maladjustments be serious threats to business stability. Relative price maladjustments, such as "too high" wages and industrial prices based on restrictionist practices, may prove insuperable barriers to reaching or maintaining relatively full employment.¹² What is called for here is a direct attack on all monopoly restrictionist practices. But the precise anti-monopoly steps are not in question here—*the important thing is that they are a problem quite apart from monetary policy.*

¹¹ It is of course quite possible that stabilization at a different value of the dollar might become feasible as part of a "good" peace.

¹² Thus simple statements as to necessary relationships between "wages" and "the price level" for full employment must be read with important reservations because of the important differential movements within the averages, especially in cases where monopoly elements are present.

No monetary policy can succeed if the relative price problem is not successfully attacked. Monetary stabilization is no cure-all.

Recognizing that, in carrying out monetary policy, a price disturbance from a crop failure should be distinguished from one resulting from a building boom, the important fact is that this distinction could be made as well under a monetary rule as by completely discretionary authorities. For under a monetary rule the executive authorities surely would be left considerable discretion as to the actual means of maintaining the rule (price index). For example, a rise in the index caused by a building boom could be attacked by means directed at that particular disturbance, just as it could under discretionary policy. Thus, the abilities of the monetary "experts" could be exploited while maintaining the fundamental certainty which only a stable basic policy can give. Adoption of a price stabilization policy need involve no loss of desirable flexibility which a discretionary policy might possess in this connection.

This compromise of fundamental rule with closely limited discretionary power may be the best compromise in the field of monetary policy. If we are looking forward to a long-run monetary policy, the assurance of a basic stable rule of policy is essential to continued business stability. On the other hand, there are obvious advantages in avoiding unnecessary rigidity—in leaving as much freedom as possible to deal with varying sources of disturbance. In Sweden this compromise seems to have been attained without the necessity of any rigid rule.¹³ There has grown up a tradition, generally accepted, that no government will permit serious fluctuations in the price level, if this is at all preventable—that no government will overthrow the general lines of stabilizing fiscal and monetary policy developed in recent years by leading economists and statesmen of that country. In short, a high degree of monetary certainty has been realized without the necessity of a rigid legal "rule." This undoubtedly is a close approach to the "ideal" situation. But obviously such a combination could succeed only in a politically stable country such as Sweden—only in a country where both legislature and lay population are well informed and recognize that such basic issues as monetary and fiscal policy must rest above the conflicts of party lines. Unfortunately the United States has not yet reached this state. Here the actual statement of the legal rule is necessary if its advantages are to be obtained; and only through the adoption of such a legal rule can we expect to develop a tradition of "sound" monetary and fiscal policy so strong that no precise legal rule is necessary. Such traditions do not grow overnight, but they are well worth cultivating vigorously.

¹³ See R. A. Lester, *Monetary Experiments* (Princeton, 1939), chap. 10, and Brindley Thomas, *Monetary Policy and Crises* (London, 1936), chaps. 5-6, for good discussions. The statements here are based on both the available literature and conversations with Mr. Gunnar Lange, assistant to the Swedish Minister of Agriculture.

To summarize, the adoption of a fundamental monetary rule as a central tenet of, or guide to, monetary and fiscal policy might do much: (1) to minimize group frictions in the stress of the rearmament effort, if it could be "sold" as the basis of a working truce, (2) to eliminate the necessity of powerful authoritarian control in the all-important field of monetary policy, and (3) to provide the basis for a sound, continuing business "recovery" and "prosperity." But adoption of such a monetary rule could not by itself "solve" any of the three problems attacked.

IV

The critical reader will have been aware of a disconcerting haziness about the rule which is to be used. This haziness has been purposeful—to emphasize the fact that the important consideration is whether *some* such rule may not be worth adopting. As Graham has pointed out, the question of exactly what rule to use is definitely secondary to the need for some announced stable policy:

. . . it makes little or no difference, in principle, whether we seek stability by keeping per capita incomes horizontal and suffering the general price index to move inversely with changes in general productivity or by keeping the general price index horizontal and suffering per capita incomes to move directly in a similar correspondence.¹⁴

The large literature on the relative merits of long-run monetary policies makes any lengthy discussion here superfluous. The following brief paragraphs include only observations on four points which seem to the writer to have been under-emphasized.

(1) In regard to "equity" between debtors and creditors, distinctions between various long-run monetary stabilization rules are important only in connection with existing contracts. For all future contracts, *assuming the monetary rule is publicly known*, an allowance for expected changes in the value of money would be made in the principal sum (in case of salaries, etc.) or in the interest rate (in case of bonds, etc.). Thus the textbook standby that creditors gain and debtors lose from falling prices, and vice versa, is largely irrelevant in choosing a long-run monetary rule.¹⁵ The greatest contribution monetary policy can make toward achieving "equity" is to make as certain as possible the monetary basis for expectations—essentially Bentham's dictum that equity consists in the non-disappointment of expectations. On this basis there is little to choose between a gradually

¹⁴ *Op. cit.*, p. 6. See also the following pages for a good statement of the advantages of price stabilization as a rule.

¹⁵ Although existing contracts are affected by the rule chosen, the difference in the value of money under alternative plans is apt to be small in any short period of time (when existing contracts have not yet expired). In any case, concern over this aspect of a monetary policy has received tremendously more than its share of weight as compared with the need to adopt the particular policy best adapted to business stabilization.

rising, a stable, and a gradually falling price level, except that price stabilization provides perhaps the simplest guide to expectations. The major criterion for choice among the alternatives ought surely to be their effectiveness in promoting business stability.

(2) The choice between a gradually rising, stable, or gradually falling price level must rest primarily on considerations of expediency (*e.g.*, on such "non-economic" considerations as the attitude of labor leaders toward stable money wages). In principle there is no important difference between them. Many writers now argue that our economy is "mature" and that an inflationary policy of continual governmental "shots" is necessary, if full employment is to be maintained. But if we start from full employment, it makes no difference in principle which type of rule is used. If business recession should develop, a fall in the price index below the prescribed rate of increase (if the rule were gradually rising prices),¹⁶ or an absolute fall in the price index (if the rule were price stabilization),¹⁶ or a fall in per capita money incomes (if the rule were stable per capita incomes), would occur to give the signal for the monetary or fiscal "shots" necessary to restore full employment. These "shots" would be continued until the index was restored to the desired position—ideally, until full employment had been restored. Whatever index was used would reflect the business decline and thus *automatically* give the signal for inflationary action.

The particular advantage claimed for a gradually rising price level is that this acts as a stimulus to business activity, fundamentally because of an expected lag of costs behind selling prices. But if rising prices were generally anticipated (as they would be under an announced policy) this advantage would be eliminated, since prices of productive services (especially wages) would be bid or forced up as rapidly as selling prices. An announced rising price rule would thus lose this important advantage claimed over price stabilization, and would have the important disadvantage of less certainty, since there would always be the pressure to increase the rate of price increase "a little." A rising price level rule would be political dynamite and would probably lead directly back to purely discretionary authority, with a race between trade unions and the monetary authority.

It *may be* that we shall need to stimulate production of armaments by inflationary rising prices, but if so, this cannot be an announced policy. Whatever advantages are to be gained by this sort of "unexpected" monetary shots must be weighed as alternative to the advantages offered by a stable rule of policy.

(3) This leaves price stabilization and "neutral money" (prices falling gradually with increasing productivity—including such proposals as Haw-

¹⁶ Continuing to assume the use of an index of "flexible" prices, which would mirror changes in productive activity. See *infra*, for a brief note on the practical problems involved in making such an index.

trey's stable per capita incomes) as the major alternatives. Since publication of Hayek's *Prices and Production* there has been a mass exodus from the price stabilization ranks over to the neutral money banner. This shift has occurred primarily because of the belief that improving technology with price stabilization would lead to profit inflation, which in turn would lead to a depression.

The central assumption of the profit inflation argument is that money costs will in fact fall with increasing productivity while prices are held up by monetary action, thus "inflating" profits. But if price stabilization were an announced policy, profit anticipations would cause the prices of the productive factors (loosely, wage rates) to be bid up accordingly—and this rise in costs (wages) would of itself prevent profit inflation. Under the classroom assumptions of perfect mobility and perfect competition for the factors, this conclusion follows necessarily—there would be no profit inflation. The general failure to grasp this simple point presumably rests on the widespread failure to consider closely the part played by anticipation in entrepreneurs' plans.¹⁷

But these classroom assumptions are not true to fact, and critics often point to the period of the 1920's in this country as proof that the theory of profit inflation "works." They argue that price stabilization "failed" to maintain economic stability. The fallacy of this historical argument is so obvious as to need little comment. Price stabilization did not "fail" to maintain economic stability *because there was no price stabilization*. The severe disruption of economic activity came following 1929, *and the price level was not held stable then*. Furthermore, the stable price level of the 1920's was largely a fortuitous by-product rather than the result of a known definite policy and hence was not a basis for stable expectations as a definite rule would have been, either during the good times or immediately following the crash.

But this still does not answer adequately the fear that profit inflation might occur under price stabilization. The primary answer lies in the tremendously increased power of organized labor to obtain higher wages over what it had a decade ago. The great danger now is that money wages would be forced up too fast to permit full employment to continue (*i.e.*,

¹⁷ As far as the writer can tell from a fairly thorough survey of the literature, there was very little advance made on the price stabilization—neutral money issue from the early discussions of Knut Wicksell and David Davidson (around 1900) until the recent Swedish works stressing anticipations, which are only now finding their way into English. The Wicksell-Davidson controversy, carried on for several years in the *Economisk Tidskrift* following publication of Wicksell's *Geldzins und Guterpreise* in 1898, early recognized the dangers of "profit inflation," and then went further into the various results following varying entrepreneurial expectations. It was, thus, superior to most of the recent naïve arguments which completely neglected the effect of an announced policy on expectations. For a brief English summary of this early controversy, see Bertil Ohlin's "Introduction" to Wicksell's *Interest and Prices* (London, 1936).

faster than the increase in productivity), not that money wages would rise so slowly as to lead to profit inflation. Any successful monetary policy must reckon with wages as the central problem, and on this score price stabilization has the marked psychological advantage of permitting gradually rising money wages with increasing productivity. Even though workers would be equally well off through higher real wages with constant money wages under neutral money, the advantage of the visible increase in monetary rewards is hard to over-emphasize.¹⁸ The task of "selling" labor on any such plan is none too easy at best, and rising money wages are a strong talking point.

Under neutral money, stable per capita incomes mean that average money income must remain constant as prices fall with increasing productivity. This means that higher money wages for those workers with increasing productivity must result in lower money wages for other workers. This must be true even though all have increasing productivity—the higher money incomes of the more efficient can come only with an absolute decrease in money incomes of the less efficient although real incomes of both are increasing. Similarly, increased productivity of piece workers would be apt to necessitate lower money wages per piece. Such results as these are not conducive to pleasant industrial relations or to improving efficiency of operation.

The argument of neutral money advocates that neutral money would eliminate the necessity for continual wage conflicts is thus erroneously simple. Neutral money would eliminate the need for *general* wage movements, but the problem of *relative* wage adjustments would remain, made all the more painful by the fact that relative increases for some would force absolute decreases for others. Under price stabilization problems of wage changes would remain, but a truce built here looks more hopeful. Labor would have to recognize that the test of a "too high" wage would be unemployment in that particular area, beginning from a situation of reasonably full employment.¹⁹

These are only particular aspects of the general proposition that relative adjustments are much easier when the necessity of positive deflationary pressure is avoided. Appropriate monetary policy cannot eliminate the painfulness of such adjustments, but it can make them easier. Practical expediency today dictates strongly the avoidance of unnecessary deflationary policies, especially if there is substance to the current gloom over the "maturity" of our economy.²⁰

¹⁸ E.g., H. A. Millis, labor expert and for years a labor arbitrator, stresses this point in *Labor's Risk and Social Insurance*, vol. ii of *Economics of Labor*, by Millis and R. E. Montgomery (New York, 1939), p. 75.

¹⁹ As noted above, however, this test could be adequate *only if* steps were taken to eliminate restrictions now so prevalent on entrance to many occupations.

²⁰ The question of exactly what sort of price index would be most suitable for stabilization purposes is a nice one, and the writer hopes to set forth some of his conclusions, based

(4) It would be unwise to forget the considerable appeal which stable prices have for the "man on the street." For many there is something "inherently just" about this ideal. And considerable sympathy for price stabilization has been built up in Congress, primarily through the untiring efforts of Professor Fisher and his associates. Ground painfully won should not be surrendered too lightly. Much effort would be required to shift this allegiance to another slogan such as "stable average incomes."

G. L. BACH

Iowa State College

on theoretical and practical considerations, at a later date. Strangely enough, in spite of the enormous literature on price stabilization, virtually no attention has been given this problem of constructing a satisfactory price index. Even in the price stabilization bills introduced in Congress, the problem has been left untouched. Obviously, for this problem, the question of the particular index number formula used is not the central one—any one of several formulas would do almost equally well, since no question of precise measurement is involved. The crucial questions are: (1) what criteria should be used in choosing the commodity prices? (2) what weights should be given the various prices used? and (3) are the theoretically desirable prices available for use? (*e.g.*, if we want "important," "flexible" prices of semi-finished industrial products, are many such prices available?).

THE ARMAMENTS PROGRAM AND NATIONAL INCOME

The armaments program will probably lead to a smaller increase in the national income than would a work-relief program involving the same amount of net government spending. This is due to higher leakages in the first-round turnover of armament expenditures and to the rapid amortization of privately financed capital equipment in the armaments field. If the period considered is long enough for complete amortization to take place, the expansionary effect of induced investment will be neutralized by depreciation charges. The argument may be generalized for use in the evaluation of the income-increasing potential of any spending program.

The purpose of this note is to point out that the dollar-for-dollar value of an armaments program in increasing the national income may well be *less* than that of a work-relief program.

In appraising the income-increasing value of any expenditure we have to consider not only the *net* addition to the income stream which that expenditure represents, but also the direction of the expenditure. It is the second of these considerations which is being dealt with in this note. As far as government programs are concerned the first point has been pretty well covered in recent discussions of tax policy, and I have nothing to add here. What is being compared is the dollar-for-dollar value of two types of programs—armaments and work relief—with the comparison put on a net basis. Any difference due to choice of fiscal methods is ignored.

The effect of a spending program on total income is governed by (1) the spending reactions of recipients at all stages, or "rounds of income," and (2) the amount of induced investment, also at all stages. In order to compare two programs, however, it is necessary to follow the spending only through the hands of one set of ultimate consumers, on the assumption that, for all practical purposes, spending reactions and induced investment after the initial expenditure has completed an "income round" will be the same regardless of the purpose or source of the original expenditure.¹

It is fairly certain that a work-relief program has a greater potential as an income-increasing force if investment induced by the primary expenditure is not considered, attention being focussed on first-round spending reactions alone. The direction of work-relief spending is such that leakages are at a minimum. There is, of course, the familiar proposition that workers in the industries supplying goods for rearmament enjoy a higher income than relief workers and hence are likely as a group to have a lower marginal

¹ This assumption is, of course, contrary to fact. Ultimate recipients of the primary armaments expenditures are a quite different group than WPA workers; the reexpenditures made by the two groups may differ somewhat in direction as well as in volume. If the difference is significant there might be an advantage, one way or the other, in investment induced by *second-round* (and subsequent) spending. Also, no account is taken of the impact of different programs on "confidence." In my judgment, these factors, while important in some respects, are of insignificant magnitude in the special case being considered, and their inclusion in the analysis here would make it unnecessarily cumbersome without altering the substance of the conclusions.

propensity to consume. While this proposition seems to be reasonable, it is by no means unassailable; it must be proven to be true before any conclusions derived from it alone can be relied upon. However, there are at least two other important sources of leakages which tend to reduce the effectiveness of armaments as compared with relief spending.

In the first place, rearmament funds do not go directly to consumers, but first pass through the business structure where there is some diversion into entrepreneurial and corporate income, a very important source of saving. Furthermore, a significant portion of the armaments requirements will be supplied by large monopolistic units which are in a better than average position to obtain very profitable terms, even in the face of preventive legislation and government bargaining.

Second, and probably more important, a part of the expenditure will constitute a transfer of equity in existing property from present holders to the government. The acquisition of (or payment for the use of) existing shipbuilding facilities is a case in point. Such a transfer does not necessarily affect the income of the recipient, although there may be capital gain. Much of it represents a shift in the composition of his assets from property to cash; there is little ground for presuming that this will materially alter his evaluation of current new investment opportunities or will lead him to increase his scale of consumption. The amount of funds which will be absorbed by these equity transfers may be considerable. They apply to payments for the use of all existing facilities to the extent that current replacements do not provide an offset; they apply also to the acquisition of factory and camp sites, rights-of-way, etc.²

However, in spite of the higher leakages, it is often argued that the primary demand of an armaments program will be for a type of goods for which productive facilities do not exist in sufficient quantity, and that therefore there will be a certain amount of induced investment in connection with the original expenditure. Since there is very little, if any, such induced investment in connection with a work-relief program—the expenditures being spread so thin throughout consumption goods industries that no one segment of the economy is affected sufficiently to call forth an expansion—it is held that an armaments program provides an initial stimulus, on a dollar-for-dollar basis, greater than that provided by a work-relief program because of the plant expansion which it calls forth.

Now the fact that there will be plant expansion does not *by itself* tell us anything about the income-increasing effect of the armaments dollar as compared with the work-relief dollar. This is clearly seen in the extreme

² It is not claimed that this type of leakage is peculiar to an armaments program or even more significant there than it is with regard to other programs, such as public housing or highway construction. In the case of work relief, however, it is practically non-existent, since relief work is usually done on land already publicly owned, and a minimum of equipment is used.

case where the government itself builds the plant capacity as part of the defense program. In such a case the armaments dollar goes to pay for both factories and tanks instead of tanks alone, and there is no "induced investment" in the sense that the term is usually understood (*i.e.*, private funds are not tapped). Clearly, if the government pays for the plant, then the dollar-for-dollar comparison with a work-relief program must be based solely on the spending reactions of the recipients under the respective programs. On this basis alone, because of lower leakages, a work-relief program is superior.

Perhaps the "extreme" case in which plant is paid for out of the armaments appropriations is not so extreme after all. Our interest is in how expansion is financed *in fact*, and not simply in form. Thus, if the cost of privately financed equipment is immediately recovered in the price of the goods produced, the effect is practically the same as if the plant had been paid for by the government in the first place. We are guilty of double counting if we include both the original expenditure and the immediate amortization.

It has been recognized by both business and government that ordinary amortization practices cannot be applied to construction for arms production. Entrepreneurs are naturally reluctant to make investment commitments unless they are reasonably sure that they will recover their capital costs; since there can be no guarantee that the demand will continue long enough to permit orderly amortization over the physical life of the assets, emergency amortization procedure must be adopted. According to the *Wall Street Journal*,³ "those handling the defense program have agreed that private industry cannot be expected to supply capital to increase production of war materials, which would have no market under normal conditions, and that the government should bear this cost."

On its part, the government is prepared to permit prompt recovery of capital outlays or to assume the risk in some form. Indeed, it has no choice. Insofar as it depends on private enterprise to construct plants, it must permit business-men to recover their costs on at best the minimum terms which they are willing to accept. The alternative is for the government to build or to finance the plants itself. In any case, the cost of plant expansion is ultimately chargeable to armaments appropriations, either directly or through higher prices.

Immediate full amortization would hardly be typical; perhaps a two to three year period will be the general rule in strictly war industries, although in some fields obsolescence and experimental demand will be factors making for prompt writing-off. At the time of this writing the Treasury has indicated a willingness to permit five-year amortization for tax purposes. This concession is simply a recognition, and not a solution, of the problem

³ June 17, 1940.

discussed here. Its effect will be chiefly to limit the field in which the government will have to make special concessions (or engage directly in building or financing plants) to equipment the useful life of which is expected by entrepreneurs to be less than the amortization period permitted.

There will be, of course, some privately financed expansion. But on the other hand, there will be price control and taxation errors (inherently in one direction) which will have the effect of the government's paying for more than the cost of the plant. The net effect of such things is impossible to determine. However, even granting that there will be a significant net contribution from private sources it must be sufficient to offset the added leakages if there is to be expansion in excess of that which would be produced by the same expenditure on work relief.

In the absence of much data required to determine the magnitude of the forces it is impossible to say definitely that there will or will not be such an offset. It seems to me, however, that the best we can hope for is a level of activity temporarily higher than that which would be brought about by an equivalent relief expenditure, and that this temporary advantage will be speedily turned into a disadvantage as the short-term amortization factor comes into play with large withdrawals to pay for equipment which is not to be replaced.

Certainly we cannot expect a superiority of armaments expenditures over work relief if the program is considered for the entire period during which expenditures will be continued. In the case of a five-year program, for instance, we can accept it as a fact that most of the amortization will have taken place before the five years have passed, and this amortization will be chargeable to the defense appropriations. Therefore, since there will be little private income stimulation extending beyond the period of rearmament, the ruling consideration is the extent of first-round leakages under the respective programs, which are less with respect to relief spending.

The conclusion of this note, then, is that if our objective were to increase the national income rather than to increase our military strength, it would be better done with the same government expenditure over a definite period of, for instance, five or ten years by a work-relief program.

This analysis does not, of course, lead to any conclusion about the virtues of work relief except as a means of distributing purchasing power for the purpose of increasing the national (money) income, a poor criterion—if taken alone—by which to judge a program. Work relief is in many respects an undesirable form of public enterprise, and it will continue to be undesirable so long as statutory restrictions limit the effectiveness of the work. It is used as an example in this note simply because it serves as a good illustration of the case where little induced investment can be expected from the primary expenditure and where first-round leakages are

small. Similarly, an armaments program is used as an example of the case where a great deal of induced investment is absorbed by rapid amortization and first-round leakages are significantly larger.

The points made may be generalized to apply to an evaluation of the income-increasing potential of any two programs:

(1) In the very short run privately financed expansion can be added to the government expenditure only to the extent that it is not offset by higher first-round leakages.

(2) In a period long enough to cover complete amortization, the extent of first-round leakages is the dominant consideration.

(3) In any program of an emergency nature, which is not expected to continue, amortization of privately financed capital built solely to satisfy the emergency demand may be extremely rapid, and hence much of the income-increasing value of the private investment will be cancelled out.

JOHN LINDEMAN

The George Washington University

STRIKES IN A DEMOCRACY

The popular notion that strikes are unreasonably costly is not well founded. Real and fancied strike evils have led to many "solutions." These solutions generally fail to distinguish between strikes over rights and strikes over interests. The former may be adjudicated, the latter may not. The ordinary strike to increase wages, shorten hours or improve working conditions is a democratic alternative to authoritarian determinations. Some limitations on strikes now exist, and others could be introduced without violating the principles of democracy. It would be reasonable to compel adjudication of disputes involving rights, to prohibit altogether strikes in public utilities, to compel settlement in any strike when the public is suffering seriously, and to require limited production of certain commodities and services during some strikes. These restrictions would raise the struggle for status to a higher level and would protect the public interest.

The common belief that unreasonably great losses of time and money result from industrial disputes is not well founded. Most of the production lost during a strike is usually made up either before or after the strike, by the persons directly involved or by others. Indeed, it is not possible to estimate accurately the simplest and most objective elements of strike costs—namely, the man-days or wages lost; "and any figure on the total cost of strikes would be even more fictitious."¹ Nor can the direct and indirect gains to be used as offsets be measured, such as reductions in waste and inefficiency and increased use of machinery, where these occur.

Even if exaggerated estimates of strike losses should be accepted as reasonably accurate, it would still be true that those losses are relatively small. The annual cost of industrial accidents in the United States has been estimated at between three and five billion dollars, and the cost of sickness at from eight to ten billion dollars. The cost of unemployment not the result of strikes, accidents and sickness is tremendous, especially that of recent years, and more especially if the unemployment of land, capital and management is included, as it should be. These estimates, it should be noted, are also commonly exaggerated, but when all allowances are duly made, the losses are still appreciably greater than those occasioned by industrial disputes.

The real and fancied evils resulting from strikes have led to many proposed "solutions." One extreme proposal, rarely advanced openly, is that they should be completely outlawed and that the free play of competitive forces should be depended upon to establish desirable conditions of employment. As a "solution" of the problems involved, this proposal has no merit whatsoever. For prohibiting the strike would not establish sufficient freedom of competition to bring about desirable conditions, and such an absolute prohibition could not possibly be enforced in a democracy. Another extreme proposal is that strikes should be permitted without restrictions or regulations of any kind. Advanced by left-wing radicals, this pro-

¹ Florence Peterson, *Strikes in the United States, 1880-1936*, U. S. Bur. of Labor Stat., bull. no. 651, 1937, p. 11.

posal is intended to make possible that solution of labor problems which would follow the overthrow of a capitalistic democracy. It is on a par with and deserves as little consideration as the reactionary proposal to prohibit strikes altogether, and for the same reasons—namely, that its adoption carries no assurance of justice and it would not be tolerated in a democracy.

Compulsory arbitration has also been offered as a general solution and is as good as any other panacea and perhaps better than most. Yet Governor Allen was right when he said that arbitration "holds no guarantee of justice."² For after all, successful arbitration consists largely of "awarding with much unction the lion's share to the lion."³ That, however, is not what makes compulsory arbitration unacceptable as a panacea, for there is much to be said in favor of awarding the lion's share to the lion, with or without unction. The trouble with compulsory arbitration lies in the inherent difficulty of determining what constitutes the lion's share. If that could be done, then arbitration might well succeed, and disputes might be resolved in the council chamber instead of on the industrial battlefield, assuming that the contending parties are aware of their relative strengths and that the awards could be enforced. When applied generally, compulsory arbitration has not in the past been notably successful, and there is no reason to suppose that it could be more successful in the future.

The Kansas industrial court was supposed to have been based on a still different principle—namely, adjudication. The court was supposed to differ from an arbitration board because it was composed of impartial members; it was a continuous body; the scope of its power was far-reaching; it emphasized the public welfare and laid just emphasis on fair returns to capital as well as fair wages; it settled controversies in accordance with established rules of justice. It must be admitted that in some respects the court did differ from arbitration boards established to settle labor disputes, but those differences were not really fundamental.

A fatal weakness inheres in these and in most other proposed solutions of the so-called strike problem. For there are two fundamentally different types of strikes and the same treatment is not applicable to both. The first of these types consists of strikes involving the interpretation and application of a collective agreement duly made by workers and employers. These have been called disputes concerning rights, for the agreement does establish rights and obligations and the agreement having been duly and properly made may be considered a contract.⁴ Disputes of this type are adjudicable, for adjudication consists essentially of determining a con-

² Message to the special session of the Kansas Legislature, 1920, *House Jour.*, pp. 1-2.

³ B. M. Squires, *Mo. Rev. of the U. S. Dept. of Labor*, Sept., 1918, p. 19.

⁴ John V. Spielmans, "Labor Disputes on Rights and Interests," *Am. Econ. Rev.*, June, 1939, pp. 299-312.

troverſy in accordance with reaſonably definite and generally accepted rules, and there has been developed a code of law which can be applied to them by a trained judiciary whoſe deciſions can be enforced by the police power of the ſtate. It is ſignificant that in deciding diſputes of this nature, judges are not called upon to diſpenſe juſtice, but they are called upon merely to apply the eſtabliſhed rules, which rules were known to, or could reaſonably be expected to have been known to, the contracting parties.

The ſecond type conſiſts of ſtrikes reſulting from failure to agree upon the terms and conditions of employment and thus involve intereſts, as diſtinguiſhed from rights. For the reſolution of theſe diſputes there are few reaſonably definite and generally accepted rules that can be applied.

Coſt of living ſtudies made by various agencies give us reaſonably accurate notions of what wages ſhould be to afford decent minimum ſtandards of living. Indeed, legiſlatures, boards and commiſſions have quite generally eſtabliſhed wages, and although theſe have uſually repreſented the extreme lower limit of fairneſs, yet they have generally reflected commonly accepted conceptions of what conſtitutes a fair minimum wage, eſpecially for ſub-ſtandard workers. But the problem of determining fair living ſtandards and wages for ſkilled and clerical workers is infinitely more complex. Not only are there differentials to be maintained, but annoying and baffling problems of juriſdiction over different and changing types of work as well. Stagnant pools of capital and labor reſulting from ſecular movements in an economy preſent ſerious difficulties, and authoritarian determinations of wages, profits, intereſt, and prices may intensify rather than alleviate the accompanying diſtreſs. Furthermore, administrative expediency and conſiderations of coſt would almoſt certainly lead to broad determinations applied generally and with too little regard to ſpecial and local conditions and exigencies, with conſiderable reſulting conſuſion. Sub-ſtandard workers will accept what is given them, but it would very likely be extremely difficult if not altogether impoſſible in a democracy to ſecure the general acceptance by ſkilled workers of authoritatively determined ſtandards of fair wages and working conditions applicable to them.

Commiſſions have for years regulated the rates charged by public utilities and in doing ſo have preſumably attempted to aſſure fair returns to capital and management. The ſucceſs achieved has not been ſtriking, in ſpite of the fact that the problems involved have been relatively ſimple, for public utilities are characterized by greater ſimplicity and ſtability in ſtructure and function than our other major induſtries. Furthermore, the concept of a fair return has neceſſarily been a competitive one. It has not been eaſy to diſcover the appropriate competitive rates and to modify them to ſuit the utility in queſtion, and it is even more difficult to eſtabliſh and maintain a juſt valuation baſis. But it would be vaſtly more difficult to

determine the rates that should in fairness prevail in complex and unstable industries and without competitive standards to use as guides. And when authoritarian determinations become general, competitive standards are no longer available as guides—a simple fact too frequently overlooked.⁵

Thus a generally acceptable ideological basis adequate for the settlement of disputes involving terms and conditions simply does not exist in our capitalistic democracy.⁶ Should one be formulated, its application would involve the regulation of most prices, considerable supervision of most processes, and a very great participation of centralized authority in all phases of economic activity. No doubt this control would have to extend beyond the boundaries of the purely economic. Such powers over the destinies of society would have to be exercised by human beings. Placed in the hands of persons motivated by high ideals of social welfare, rigorously trained in scientific methods, and possessed of adequate and accurate data, they might be exercised properly and beneficently. But democracy, at least as we know it—and use of the term in any other sense is generally a deliberate subterfuge or the result of ignorance—would cease to exist and in its place would come fascism, socialism, communism, or something else. Under any effective form of planned economy, unionism and industrial democracy as we know them would cease to exist and the problems of labor would be “settled” by authoritarian statesmen, professional party leaders and politicians, by people who “know what is best” for the worker. And “what is best” for the worker would be synonymous with what best maintained or promoted the dominant ideology, or rather the dominant ideologists.

The ordinary strike to determine wages, hours and working conditions is a democratic alternative to authoritarian determinations or to “automatic” social determinations by the unfettered “laws of supply and demand”—the ultimate test of strength between adherents of conflicting and otherwise irreconcilable points of view as to what conditions of employment should exist. Furthermore, the conflict is not between capital and labor, but is primarily a struggle between one group of workers and the remainder of the public, directed through and not against the employer. The most important social consideration involved in strikes of this kind is not whether the result be victory or defeat for one party or the other, or simply a compromise, but whether there is a free field and a fair fight. For with a free field and a fair fight those conditions will result which

⁵ Arthur D. Lewis advances Labriola's “solution” of payment according to needs. *Syndicalism and the General Strike*, p. 251. Pigou suggested adjusting the “normal” wage to the cost of living and making further allowances for changes in capital and unemployment. *Principles and Methods of Industrial Peace*, pp. 62-63.

⁶ Wm. M. Leiserson, *Right and Wrong in Labor Relations*, 1938, pp. 67-68. Joseph B. Eastman, *Barron's Finan. Weekly*, Oct. 3, 1938, p. 9.

reflect the relative strength of the parties concerned and not the ideology of a dictatorship. Of course, the lion, who, it must be emphasized, is not always the public or the employer,⁷ will get the lion's share. But the lion gets his share everywhere, including all types of totalitarian society, where he is no more lovable or charming than he is in a democracy, although he may wear different clothing.

The strike in a democracy need not be, and in truth is not, the brutal and lawless struggle of the jungle, for it is generally conducted in accordance with rules of combat laid down and enforced by the people. Thus, for example, the sit-down strike is illegal, advance notice of intention to strike or lockout is sometimes required, mass picketing and boycotting are subject to limitations, the use of violence and intimidation is unlawful, as is destruction of property, and the use of injunctions is limited. To be sure, the rules laid down are frequently violated by both sides, much more frequently in the United States perhaps than in other countries, but so are the rules laid down for the conduct of business—and for conduct in all other walks of life, for that matter. Yet if the violations are not excessive there should be no great cause for concern, and in this realm of human activities we must be prepared to accept as normal a larger measure of violations than in many other realms, partly because we are not yet generally agreed on the rules and partly because the heat of conflict leads to irrational conduct. There is reason to believe that as our concepts are clarified, an increasing degree of discipline, self-imposed or super-imposed, is being achieved.

Furthermore, the field of combat has been restricted. Minimum wage and maximum hour legislation and regulation in effect eliminate the struggle to reduce wages or increase hours beyond the established limits in specified occupations. On those limits we are agreed, for the time being at least, and we forbid combat. Organized employees of governmental units have by common consent voluntarily relinquished the strike as a tactic, and in any event we seem to be generally agreed that "you can't strike against the government." The National Labor Relations act and several similar state acts have declared certain actions to be unfair labor practices, have implemented the right to organize and to bargain collectively, and have made unnecessary the strike for union recognition in a considerable portion of our economy, although such strikes are still distressingly common. The Railway Labor act of 1934 provides for obligatory adjudication of disputes arising out of collective agreements.

Further restrictions will no doubt be introduced as general agreement on desirable measures develops. But because in the democratic crucible principles are refined slowly, rapid progress cannot be expected. Yet even now

⁷ Florence Peterson, *op. cit.*, pp. 34, 40, 69. See also John Griffin, *Strikes*, Columbia Univ. Press, 1939, pp. 81, 115.

it would be possible to take certain additional positive steps to mitigate and regulate strikes without seriously violating the fundamentals of democracy.

It would obviously not violate any democratic tenet to require that all disputes involving the interpretations and application of collective agreements, as well as those arising from laws or custom, be adjudicated and to make acceptance of the award compulsory for both sides. Disputes of this character are now frequently settled by joint boards or impartial chairmen, where awards are final and binding for the duration of the agreement, and the practice seems to be growing. The Federal Railway Labor act of 1934 established the National Railroad Adjustment Board and requires that disputes growing out of grievances, or out of interpretation or application of agreements concerning rates of pay and working conditions shall, if not otherwise settled, be adjudicated by that Board at the request of either party. The proposal advanced here differs somewhat, in that adjudication of such disputes would be made compulsory, that is, a strike or lockout would be prohibited even though both sides might want to "fight it out." The difference between the two methods is important in principle, but in practice the results would be practically the same.⁸ Freedom to use machinery for adjudication established by the disputants themselves should extend to all cases except those involving rights established by law, where as a matter of public policy recourse should be permitted only to government agencies. In any event, the use of strikes, boycotts, picketing, lockouts, blacklists and other forms of industrial combat would be prohibited in disputes involving rights. It would be necessary to insure in some way reasonable promptness in the settlement of these disputes, for unreasonable delay is extremely provoking and may well constitute justification for drastic action, or should at least be considered a mitigating circumstance.

A further step might also be taken without seriously violating the principles of democracy. Strikes and other forms of industrial warfare to determine wages, hours and conditions of employment might be prohibited in those industries and occupations such as public utilities where the general welfare is directly and immediately dependent upon continuity of operations. Arbitration of those disputes would be made compulsory, although the principals should be permitted recourse to their own arbitration machinery in preference to that established by the state. Here, however, one is confronted with the argument made above that no adequate democratic ideological basis exists for determining terms and with the further argument that such action would constitute an unfair discrimination against public utility workers and others in this group.

⁸ A. C. Pigou, *op. cit.*, pp. 198-199.

Convincing answers can be given to both objections. If compulsory arbitration is applied in only a limited and relatively small segment of the economy, it will be possible for the arbitrators to award to workers in that segment the terms and conditions determined by competition for comparable workers in the non-regulated industries. Arbitrators will not be concerned with the problem of what constitutes fair and just and adequate wages, hours, and conditions of labor. Nor will they need to estimate the relative strength of employers and workers. All that need concern them will be to discover the comparable standards prevailing elsewhere. That will not, of course, be easy to do. There would, however, be something of a quasi-automatic, long-run check on the operations of such an arbitral body. If the wages and conditions established are relatively unfavorable to the workers, there would be a tendency for labor gradually to drift out of the regulated sections of the economy, or for inefficiency and sabotage to appear, while unduly favorable conditions would have the opposite effects. The check would not, to be sure, operate perfectly, but it would serve as a rough guide to the arbitrators and would lead to an approximate equalization sufficiently accurate to be workable and defensible. In all probability, the wages and conditions established would generally be somewhat better than comparable competitive standards.⁹ It is true that compulsory arbitration would act here to prevent workers employed in strategic positions from exploiting their advantage to the fullest extent. But surely that could not reasonably be interpreted as constituting an unfair discrimination against them. Rather it would simply prevent them from getting an unfair advantage of the consumers of vitally essential goods and services.

Still another restriction would seem to be defensible. Strikes and lock-outs in any industry which are causing widespread and serious hardship or suffering among the public might reasonably be subject to compulsory arbitration. It should be noted that this proposal is not designed to prevent the occurrence of disputes that are likely to result in hardship or suffering. It is not intended that there should be a "waiting period" before the strike begins or any cessation of hostilities while an investigation is being made. But when suffering actually becomes sufficiently acute to constitute a genuine emergency, then government should intervene. Some responsible government agency should be empowered to determine when a state of emergency exists. An investigation should thereupon be undertaken, with a view to developing findings and recommendations that might serve as a basis for the settlement of the dispute. The recommendations should be those thought most likely to be acceptable to the disputants, and considerations of justice to any of the parties concerned, including the public, should

⁹ *Ibid.*, pp. 205-207.

be purely and distinctly incidental, if indeed they should be entertained at all. Findings and recommendations should be submitted to the disputants. Should the disputants fail to reach an agreement on the basis of the recommendations, they should then be given the option of establishing their own arbitral agency to settle the dispute or of submitting it to an agency established or designated by the government, preferably to one especially established for that particular dispute. Acceptance of the award for a reasonable length of time should be made compulsory. This procedure would constitute real interference with the right to struggle for status, but it is an interference that can be justified on the ground of public welfare, and if not too much abused will not seriously violate any tenet of democracy.

It would be within the bounds of democratic procedure to prescribe another restriction. Limited production of commodities and services might reasonably be required during strikes in some industries and occupations. During any nation-wide strike of coal miners, for example, the contending parties might well be required to furnish fuel for public utilities, hospitals and some other institutions. Milk is another commodity that falls in this class, and there are still others. The net effect of this restriction on the strength of either party would not generally be great. Indeed, it would seem that careful observance of the restriction would actually make it possible for the struggle to be continued in the main arena to a decisive conclusion, to a conclusion determined by the real strength of the combatants and not by the weakness of some helpless class of consumers or the indignation of the public at the suffering of that class. The administration of this restriction would no doubt be exceedingly difficult and subject to some abuse, but it does not seem impossible or impracticable.

Refusal by unions or employers to follow the procedures here suggested—compulsory adjudication of disputes involving rights arising out of law or custom or involving interpretation or application or collective agreements, the arbitration of all industrial disputes in public utilities, the arbitration of disputes resulting in genuine and serious public emergencies, and limited production in some instances—should be declared to constitute unfair labor practices, for both unions and employers. Appropriate penalties for those guilty of such unfair labor practices should be provided, and suitable legal procedure for their trial developed. But in the final analysis this means that the orders of the state, whether involving the interpretation of a collective agreement or the arbitration of disputes over new terms, if not voluntarily obeyed would be put into effect by force. Only in the most extreme circumstances would it be necessary or desirable for the state to operate an industry, but that should be undertaken if necessary.

The suggested restrictions on the actions of organized labor and capital are not really severe, they would arise out of and be based upon the

machinery and processes of widespread collective bargaining, most of which is voluntary, and they would be applicable for the most part only after organized workers and employers failed to agree upon settlement. Many disputes involving interpretations of agreements and some involving new terms are now voluntarily and successfully adjudicated and arbitrated. The suggested alternative of allowing the disputants to establish their own machinery will drastically limit the need for state action, and constitutes a satisfactory answer to the charge that arbitrators rarely have adequate knowledge of industrial technique. It is at present not uncommon for unions to permit limited production of vitally essential commodities and services during strikes. And when the public is seriously threatened, all parties to the dispute expect the state to intervene, forcibly if necessary, and workers and employers are resigned to that intervention, although they are sometimes vociferous in their denunciations. Legal enactment would thus merely crystallize, institutionalize, and extend somewhat practices that are now already fairly widely accepted and followed, and by bringing into relief the elements of a beneficial policy would stimulate further refinements of that policy. The right of a group to struggle for status, which is quite properly considered fundamental in a democracy, would continue to exist largely unimpaired, but the struggle would be carried out on a higher plane, on a plane in which the public interest, which is also fundamental in a democracy, would receive due consideration.

DOMENICO GAGLIARDO

University of Kansas

RECENT CHANGES IN WORK-RELIEF WAGE POLICY

Recent changes in WPA wage policy have been substantial. The relief act of 1939 required that regional differences in monthly earnings should be based on differences in cost of living. "Cost of living" may refer to the income needed to maintain (1) a uniform level of living, or (2) the actual levels of living that prevail in different regions. The new WPA wage schedule, revised in accordance with a qualified cost-of-living concept, raised the national average approximately \$2.50 a month. Substantial increases were made in unskilled earnings in the South with only small changes elsewhere. The 1939 act also established a uniform work month of 130 hours, thus abandoning the prevailing-hourly-wage policy. This provision has increased efficiency in various respects. Changes in work-relief wage policy have been associated with shifts in the distribution of emphasis between the work and relief aspects of such programs. In recent years, a growth in legislative determination of wage and hour policy has accompanied increasing emphasis upon the efficient accomplishment of useful work.

An analysis of work-relief wage policy covering the period 1930-37 was published by the present authors in a previous issue of the *Review*.¹ Since 1937 the wage policy of the Work Projects Administration has been changed materially, particularly by the Emergency Relief act of 1939.

In general, work-relief wage policy has reflected the peculiar position and the innumerable difficulties of a work-relief program. Work relief is a hybrid, combining many of the aspects of normal employment with those of relief. Because it is a compromise between work and relief, a number of special features are found in a work-relief program: (1) need is the primary basis for employment while occupational fitness is secondary; (2) provision of employment is the chief objective and the completed work is subordinate so that the major canon of efficiency is maximum direct employment and not minimum cost of completed work—in other words, need for the completed public work is subordinated to the need for employment of otherwise-idle labor; (3) work completed is presumed to be that which otherwise would not have been undertaken currently; (4) wage payments are primarily for subsistence, the *quid pro quo* aspect being subordinate.

Work relief, of course, can emphasize either work or relief. The development of work relief during the 1930's was consistently in the direction of approximating regular work as much as possible. Although the WPA embodies more of the features of regular public work than any of the preceding work-relief programs, it is still a compromise. During the course of its operations, WPA has developed a body of principles and practices which are unique in the field of project operation and employment. Because of its relief aspect, work relief is distinguished from "normal" public work by such peculiar features as the low ratio of non-labor costs and the provision of the maximum possible amount of direct employment, as well as by special problems of project operation arising from the necessity of selecting, combining, and shifting types of projects to meet rapid changes in relief

¹ *Am. Econ. Rev.*, Dec., 1937, vol. xxvii, no. 4, pp. 711-24.

needs. Despite these special conditions, however, the WPA program has assumed more of the aspects of normal public work than its forerunners.

Early Work-Relief Wage Policy

The special difficulties of a work-relief program are clearly seen in the field of wage policy. Total monthly earnings on such a program conceivably can range between an upper limit set by the earnings paid for similar work in private employment and a lower limit set by local relief allowances. Such earnings may be computed on an hourly basis, or on a monthly basis without reference to the rate per hour. A survey of work-relief wage policy shows a diversity of practice in the past.²

In 1933, after some casting about, the FERA adopted a prevailing-hourly-wage policy, with total monthly earnings determined by the "budgetary deficiency." A 30-cent-an-hour minimum was adopted in an effort to raise standards. The number of hours worked varied, depending upon the particular hourly rate and the budgetary deficiency of the worker. Under this policy, hours worked per month varied from a few to as many as 140. During the winter of 1933-34 the Civil Works Administration began operations with the PWA wage rates, then shifted to the locally-determined prevailing hourly wage with the 30-cent minimum rate of the FERA. The budgetary deficiency formed no part of this policy; workers were employed 30 hours a week (later reduced to conserve funds) at their respective hourly rates. When the CWA was closed down, the FERA encouraged the development of work relief in the states on the basis of the prevailing hourly wage, the 30-cent minimum, and the budgetary deficiency. The 30-cent minimum was subsequently dropped; otherwise this policy was retained until the FERA gave way to the WPA in late 1935.

WPA Wage Policy

At the outset, WPA wage policy broke with the prevailing wage idea, instituting in its place the "security wage." This was a monthly payment which varied in terms of four broad occupational groups, four geographical regions, and five urban-rural areas within each region. All workers in a given occupational category, region, and population area received the same monthly wage regardless of the degree of need. The budgetary-deficiency principle has never been a part of WPA wage policy. The original policy established a range of from 120 to 140 hours per month with the specific number to be determined by the state administrators. This policy, therefore, abandoned the prevailing hourly wage rate for a monthly payment and a prescribed number of working hours per month.

Opposition on the part of labor to the abandonment of the prevailing

² See Arthur E. Burns, "Work Relief Wage Policies 1930-1936," *FERA Monthly Report*, June, 1936.

hourly wage was largely responsible for a drift back to this policy. The original security wage policy was gradually altered by the granting of exemptions, by abolishing the required minimum of 120 hours a month, and by redefining regions. In 1936, Congress approved this drift by requiring the payment of not less than the prevailing hourly rate. The fixed-monthly-payment plan was retained, although the regions and earnings were modified somewhat.³ Each WPA employee worked whatever number of hours was sufficient, at the local prevailing hourly rate for his occupation, to earn the amount designated in the schedule of monthly payments. Originally a repudiation of the prevailing hourly wage, the "security wage" policy was spliced to it in 1936.

There are certain general principles that broadly determine the level of monthly payments for each occupational group in the WPA earnings schedule. The lower limit is established by the dual consideration that remuneration for performing useful work should exceed direct-relief payments, and that WPA earnings should provide a decent minimum subsistence standard of living. The upper limit is established by the necessity for maintaining an incentive to accept private employment when it becomes available: it is intended that WPA wages should not exceed the earnings paid to corresponding occupational groups in private employment. In areas where earnings in many types of private employment are scarcely above relief standards, there is no middle ground for WPA earnings to occupy. In these areas, notably the rural South, WPA monthly payments are often above the amounts customarily earned in private employment.

The Emergency Relief Appropriation act of 1939 contained two important provisions with respect to WPA wage policy. The first of these provisions required that regional differentials in monthly earnings shall be based solely on differences in cost of living. The second provided for abandonment of the prevailing-hourly-wage policy by establishing a standard work month of 130 hours, thereby returning to a policy substantially similar to the original policy adopted in 1935 and abandoned in 1936.

Cost-of-Living Differentials

Section 15 (a) of the 1939 Act states, in part, that "the Commissioner shall fix a monthly earning schedule for persons engaged upon work projects financed in whole or in part from funds appropriated by section 1 which shall not substantially affect the current national average labor cost per person of the Work Projects Administration. After August 1, 1939, such monthly earning schedule shall not be varied for workers of the same

³ In July, 1936, the regions were reduced from four to three, and in 1938 substantial revisions were made in the earnings schedule, particularly in the South. For details of the shift from the original policy to the prevailing-wage policy in 1936, see the previous article in the *Review*, Dec., 1937.

type in different geographical areas to any greater extent than may be justified by differences in the cost of living. . . ." The reason for the insertion of this clause in the Act is obscure. It was not discussed in committee hearings or on the floor; the clause was inserted by the conference committee of the House and Senate. Presumably, the purpose was to narrow the regional differentials by raising rates in the southern states, or by lowering rates in the North and West. The original differentials were considered to be discriminatory by many of the legislators from the states with lower WPA monthly payments.

The first major problem that arose in carrying out this provision of the Act was concerned with the interpretation of the term "cost of living." This term may be interpreted to refer (1) to the income needed to maintain a uniform level of living throughout the country, or (2) to the income needed to maintain the *actual* levels or standards of living that prevail in different regions of the country. Standards differ materially by geographical regions for the same occupational groups. In popular usage, however, "cost of living" is not clearly distinguished from "standard of living." The present WPA wage schedule may be said to involve a compromise between the "cost-of-living" and the "standard-of-living" concepts.

Adherence to a uniform cost-of-living concept undoubtedly would have reduced the rather wide differentials found in the WPA wage schedule in effect when the 1939 Act was passed. The cost of living at a uniform standard does not vary greatly between an industrial city in the South and in the North. Much the same can be said of rural communities in both regions. Consequently, if the Act had been construed in a technical sense, a drastic revision in the schedule would have been required. For example, the monthly earnings of unskilled labor in a city of 75,000 ranged from \$38 in the South to \$52 in the North. On a technical cost-of-living basis, these differentials would have been narrowed. This would have required a considerable reduction in the higher rates since any other procedure would have violated the provision that the national average wage should not be substantially altered.

Wide differentials could be justified under the 1939 Act if "cost of living" were taken to mean the cost at the varying standards of living that exist throughout the country. These existing standards, however, were not accepted without modification. Revisions in the schedule to accord with this provision of the 1939 Act involved general increases in the low rates in the southern states⁴ and slight reductions in some areas in the North and West. Thus another step was taken to increase living standards in those areas where they are lowest.

A second major problem created by the cost-of-living clause in the 1939

⁴ This latest increase practically doubled the unskilled rural rate over the original monthly payment in the 1935 schedule—\$35 compared with \$19.

Act arose from the inadequacies of the available data concerning cost-of-living differentials in various parts of the country. In formulating the schedule, it was necessary to rely entirely on data already available for the following reasons: (1) the cost of a sufficiently comprehensive new survey would have been too great; and (2) such a survey would have taken more time to complete than the period allowed by the Act for formulation of the new schedule.

Three existing surveys⁵ were combined to obtain measurable differences for 106 cities, distributed by population groups as follows:

<i>Population of Cities</i>	<i>Number of Cities</i>
500,000 and over	13
100,000 to 500,000	49
25,000 to 100,000	25
5,000 to 25,000	19

Measures of rural cost of living were essential because WPA employment extends widely into villages, small towns, and rural areas. Studies of rural living costs by states had been published by the Bureau of Agricultural Economics. For the purpose at hand, the procedure followed in these studies was sufficiently comparable to that followed in the urban surveys.

The urban studies of cost-of-living differentials were based entirely on cash costs, with no allowance made for non-cash income. In many rural areas, however, non-cash income in the form of food, fuel, clothing, etc., is substantial and had to be included for the purpose at hand.⁶

Because of the limited coverage of the available data, it was impossible to measure exact differences in living costs for each town or city in the country and establish a separate wage schedule for each. Even if this had been possible, the administrative problem of working with hundreds of different schedules would have been too inefficient and costly to be practicable. Therefore, it was necessary to accept the available data as being representative of comparable areas for which specific data did not exist. This procedure involved the assumption that living costs vary with fair consistency within any region by degree of urbanization. Accordingly, wage differentials were established (1) by counties (grouped according to the population of the largest city in each county); and (2) by regions.

⁵ (1) The Works Progress Administration cost-of-living survey of 59 cities in March, 1935, which is brought up to date periodically; (2) the National Industrial Conference Board study of February, 1935, and subsequent years; and (3) the Bureau of Labor Statistics survey of living costs in 10 small cities in December, 1938. These three studies followed the same method: a budget composed of enumerated items of expenditure was established for a hypothetical wage-earner's family of four at the maintenance level and the items in this budget were priced in the various communities. The budgets used by the Works Progress Administration and the Bureau of Labor Statistics were identical; that used by the National Industrial Conference Board was only slightly different.

⁶ Using data from the *Study of Consumer Purchases*, the Bureau of Agricultural Economics provided the WPA with unpublished estimates of non-cash expenditures of farm families by regions.

Since the wage rates were to apply uniformly to an entire county, it was necessary for the rate for any given county to be a composite of the costs of living in the various parts of the county, rural as well as urban. The composite wage was obtained by weighting the cost-of-living figure for each urbanization group and rural area within each region with the percentage of the population contained in each urbanization group and rural area.

The calculations for the new wage schedule were first made in terms of unskilled wages. The differentials for semi-skilled, skilled, and professional-and-technical wages were derived from unskilled wages and approximate those contained in the wage schedule that prevailed prior to September 1, 1939. As required by law, the new schedule results in substantially the same national average labor cost as prevailed previously but the differentials between areas are modified.⁷ Wage schedules are shown in the accompanying table.⁸

Amount of Changes: 1939

In June, 1939, the average WPA wage was approximately \$53 a month. The new schedule increased the national average by approximately \$2.50 a month. The chief changes in the monthly earnings schedule were made in the South (wage region III). The unskilled rate in rural sections of the South was increased from \$26 to \$35.10. (The latter figure is the Unskilled "A" rate.) In southern cities of 100,000 and over, the unskilled rate was increased from \$40 to \$50.70. For other classes of work, the increases were not as large.

Generally speaking, only small changes were made in the remaining parts of the country (wage regions I and II). In cities of 100,000 and over, the Unskilled "A" rate is \$57.20 as compared with either \$55 or \$60.50 under the previous schedule.⁹ The largest increases in regions I and II

⁷ The new schedule contains a number of changes of a technical character. The unskilled worker category is divided into two classes—Unskilled "A" and Unskilled "B." The Unskilled "B" class, with a wage about 10 per cent below the "A" class, includes work of a simple nature requiring little training and for which proficiency may easily be acquired. This class includes such occupations as flagman, janitor, messenger, charwoman, and seamstress; in some areas, negro workers are put in this category. Some consolidation was made in the urban groupings in the schedule because cost of living data showed little difference between cities of 25,000 and 100,000.

⁸ Wage region I runs from the north Atlantic seaboard to the western boundaries of North Dakota, South Dakota, Nebraska, and Kansas, and from the Canadian border to the southern boundaries of Kansas, Missouri, Illinois, Indiana, Ohio, West Virginia, and Maryland. The states south of this area, including Texas, are in region III. The states west of it and of Texas are in region II.

⁹ Prior to September 1, 1939, the wage for unskilled workers in these cities was \$55 a month with discretionary authority vested in the state WPA administrators to increase this rate by 10 per cent. In a number of cities (including New York City, Cleveland, and Detroit) this increase had been granted, resulting in an unskilled wage of \$60.50 a month. Other cities (including Chicago, Los Angeles, and San Francisco) had continued to pay the base rate of \$55. The new wage schedule provides an Unskilled "A" rate of \$57.20 for all of these cities.

occurred in the less populous counties of the West where differences between the cost of living in small towns and in the large cities are typically less than in other sections of the country.

Before the new wage schedule was put into effect, WPA wage payments ranged from \$26 to \$94 a month.¹⁰ Under the present schedule, the range is from \$31.20 to \$94.90.

SCHEDULE OF MONTHLY EARNINGS

Counties in which the 1930 population of the largest municipality was—	Wage class				
	Unskilled "B"	Unskilled "A"	Intermediate	Skilled	Professional and technical
WAGE REGION I					
100,000 or more	\$52.00	\$57.20	\$68.90	\$89.70	\$94.90
25,000 to 100,000	48.10	52.00	62.40	81.90	84.50
5,000 to 25,000	42.90	48.10	57.20	74.10	76.70
Fewer than 5,000	39.00	42.90	52.00	67.60	68.90
WAGE REGION II					
100,000 or more	52.00	57.20	68.90	89.70	94.90
25,000 to 100,000	48.10	52.00	62.40	81.90	84.50
5,000 to 25,000	46.80	50.70	61.10	79.30	81.90
Fewer than 5,000	44.20	49.40	59.80	76.70	78.00
WAGE REGION III					
100,000 or more	46.80	50.70	61.10	79.30	81.90
25,000 to 100,000	42.90	48.10	57.20	74.10	75.40
5,000 to 25,000	36.40	40.30	48.10	62.40	65.00
Fewer than 5,000	31.20	35.10	42.90	54.60	55.90

The WPA schedule of monthly earnings applicable to any county is based upon the 1930 population of the largest municipality within the county, in accordance with the above schedule, except that the schedule of monthly earnings applicable to counties in which the 1930 population of the largest municipality was 100,000 or more shall be applicable to the entire area included within the following metropolitan districts as such districts are defined by the *Fifteenth Census of the United States, Metropolitan Districts, Population and Area, 1930*: Baltimore; Boston; Buffalo—Niagara; Chicago; Cincinnati; Cleveland; Detroit; Kansas City, Kan.—Kansas City, Mo.; Los Angeles; Milwaukee; Minneapolis—St. Paul; New York City—Northeastern New Jersey; Philadelphia; Pittsburgh; Providence, R. I.—Fall River—New Bedford, Mass.; St. Louis; San Francisco—Oakland; Scranton—Wilkes-Barre; Washington, D. C.

It would be rash to insist that the present WPA wage differentials are a completely accurate reflection of differences in cost of living in different parts of the country. To a considerable extent the differentials still reflect differences in cost at the existing standards. There is a basic reason why the revised WPA wage schedule accepted a qualified cost-of-living concept. Regional differentials in the private wage structure rest less on differences in *costs* of living than on differences in *standards* or *levels* of living. If work-relief wage payments are intended to vary with private wage pay-

¹⁰ The maximum rate in New York City (for professional and technical workers) was \$98.70.

ments, remaining somewhat below private wage payments but somewhat above direct-relief payments, WPA differentials in general must follow private differentials by reflecting primarily differences in *levels* of living. However desirable a reduction in the existing disparities in standards may be, a work-relief program is probably a limited means of achieving this end. The various work-relief programs have exerted an influence in this direction. But if this clause in the 1939 Act had been interpreted to mean full acceptance of such an objective, the already-numerous operating difficulties encountered on the WPA program would have been multiplied.

In the South, unskilled earnings under the new schedule are frequently higher than wages paid for unskilled labor in private employment, particularly to farm and domestic labor. The problem presented by women whose WPA wage is higher than the earnings on available jobs in domestic service has been accentuated. The same may be said of farm laborers, although the problem is not so serious because this group leaves the program more frequently to accept temporary employment.

In general, the increases in scheduled monthly earnings have strengthened the reluctance of WPA workers to accept private employment that is either temporary or pays lower wages. However, no appreciable amount of friction has developed on this account, probably because of the large non-WPA labor supply that has been more than sufficient to meet the demand for labor. WPA workers are required to accept bona fide employment offers when they are officially made because of regulations which deprive them of their WPA assignments during the period that such private employment is available.

Abandonment of the Prevailing Hourly Wage

The 1939 Act abolished the prevailing-wage policy that was first incorporated in the 1936 Act. On the basis of experience at operating a work-relief program on which the number of hours per month for each worker was determined by dividing the scheduled monthly earnings by the prevailing hourly rate of pay, the WPA Commissioner recommended to Congress in May, 1939, that all persons employed on WPA projects be required to work a uniform number of hours per month without alteration in monthly earnings. Such a proposal, of course, involved abandonment of the prevailing-wage principle. Section 15 (a) of the Emergency Relief Appropriation act of 1939 provided for the establishment of a standard work month of 130 hours, effective July 1, 1939.

As an example of the difficulties encountered in scheduling operations under the prevailing-hourly-rate policy, the commissioner cited a building-construction project in Pittsburgh. Bricklayers were permitted to work only 48½ hours per month while hod carriers worked 63½ hours, building-trade laborers worked 89 hours, and unskilled laborers worked 120 hours.

On the same project, a plumber was limited to 50 hours while his helper was scheduled for 71½ hours. Compressor operators were limited to 56¾ hours per month while jackhammer operators were scheduled for 119 hours.¹¹

Schedules such as these presented a serious practical problem of staggering employment that affected the efficiency of operations. The commissioner expressed the opinion that an increase in efficiency would be possible under a uniform working month of 130 hours since the necessity for staggering employment would be eliminated.

Furthermore, the charge was frequently made that skilled workers receiving the prevailing hourly wage in WPA employment were disposed to supplement their WPA earnings by accepting private employment at less than prevailing rates. For instance, a bricklayer in New York City might work his allotted hours on WPA (determined by dividing the prevailing hourly wage into the scheduled monthly wage for skilled workers in New York City) and then go into another borough and obtain part-time employment with a private contractor, often by accepting less than the union wage scale.

The extent to which this practice actually prevailed is not known. There is no doubt that it existed to some extent. The number of such cases, however, was probably a very small proportion of total WPA employment.¹²

The result of the shift away from the prevailing wage to the 130-hour month has been a general increase in the efficiency of project operations. Improved planning of operating schedules is made possible since it is no longer necessary to stagger the hours of skilled workers. Supervision is more effective for the same reason. The number of hours worked by skilled workers has increased.¹³ Projects are completed at a faster rate. Consequently, the unit cost of output has been reduced.¹⁴

The prevailing-wage policy gave rise to numerous complaints regarding the accuracy of hourly wage rates. Under the present policy, disputes regarding wages have been almost entirely eliminated. However, organized labor—especially the building-trades group—opposed the 130-hour month since it meant abandonment of prevailing hourly rates. Protests occurred in

¹¹ *House Hearings*, April, 1940, p. 19f.

¹² In an effort to deal with this problem, the relief Act of 1938 required all WPA workers to file a quarterly statement of earnings from outside employment. The statements submitted as of September 30, 1938, showed that 76.5 per cent of the persons employed had received no earnings from outside jobs held concurrently with WPA employment; for those reporting earnings during the quarter the average amount was \$10.47. Thus, according to these reports, practically none of the workers earned enough to affect their WPA status. *House Hearings*, January, 1939 (H.J. Res. 83), pp. 96-7.

¹³ The number of hours worked by the unskilled was reduced in some areas, but this reduction was not substantial.

¹⁴ Payment of prevailing hourly rates did not increase the per-capita cost of conducting the WPA program because of the limitation on monthly earnings. The effect was on the unit cost of the work accomplished.

various urban centers during July, 1939. In many instances, these protests were in the form of resolutions; in others, there were brief stoppages of work.

The relief Act of 1939 represents a further step in the direction of legislative control over the wage and hour policies of the work-relief program. For the first time, Congress established a statutory basis for the monthly schedule of earnings. The original schedule of monthly earnings and the innumerable modifications effected up to the passage of this Act were all determined by administrative discretion. Although Congress provided a basis for the differentials, it accepted the general average as satisfactory by stipulating that this average should not be substantially affected by the modifications imposed by the cost-of-living clause. The hours provision in the Act was the first direct legislative attempt to fix the number of hours on the WPA program.

At the outset of the program, the number of hours was administratively determined. In 1936, Congress required payment of the prevailing hourly wage which had the effect of establishing a variable hours policy.

Changes in work-relief wage policy have been associated with shifts in the distribution of emphasis between the work and relief aspects of such programs, since changes that promote the work objective frequently conflict with the relief aspect, and vice versa. Another factor of importance, of course, has been the pressure exerted by wage-earner and employer groups in questions of wage policy. During the early 1930's, when unemployment was considered to present a problem of a temporary and emergency character, the relief aspect of work-relief programs received major emphasis. This is seen, for instance, in the early prevalence of the budgetary-deficiency principle of wage policy. With the persistence of mass unemployment, the emergency aspect has receded and increasing emphasis has been placed on the efficient accomplishment of useful work. This is seen, for instance, in the adoption of the 130-hour provision.¹⁵ A growth in legislative determination of wage and hour policy has accompanied this shift.

The conflict between the dual objectives of work and relief is apparent in an examination of the pros and cons of the prevailing-hourly-wage policy. Adoption of the 130-hour provision resulted in more efficient work without conflicting with the relief objective. But adoption of a prevailing-hourly-wage policy in conjunction with the 130-hour provision would conflict with the relief objective since fewer jobs (and hence less relief) could be provided with the same expenditure.

¹⁵ The relief objective has been kept in the foreground, however, because of the fact that federal appropriations for WPA have never been adequate to provide employment for all employable persons in need of relief. During recent years, estimates of the number of persons eligible for WPA but not employed have been in the neighborhood of one million.

On the other hand, it may be considered to be unjust to require WPA employees to work side by side, as it were, with the employees of private contractors who are doing the same type of work but are receiving prevailing hourly wages. This, of course, raises the further question of whether the standard of output of the individual WPA worker (as influenced by restrictions on the use of equipment and other factors which differentiate work relief from regular construction work) justifies payment of the prevailing wage rate.

The problem is further complicated by the possible effect of work-relief wage rates on private wage rates. Organized labor has taken the position that work-relief rates below prevailing rates tend to lower private rates. On the other hand, private-employer groups have contended that work-relief wage policy has had the effect of raising private rates. The evidence one way or the other is inconclusive.

Any changes in wage policy in the near future will probably be determined largely by expectations regarding the effect of the defense program on unemployment. If it is considered that unemployment will substantially disappear in a comparatively short time, the relief aspect of work relief might conceivably receive increased emphasis. If the prevailing analysis indicates, however, that large-scale unemployment will persist for some time, the WPA program might conceivably be transformed into something approaching a regular public-works program for the prosecution primarily of defense projects on the ground that a maximum defense effort requires the utilization of all available manpower.

ARTHUR E. BURNS
PEYTON KERR

The George Washington University

THE PRODUCTION FUNCTION FOR AMERICAN MANUFACTURING IN 1919¹

Continuing earlier studies in the marginal productivity of labor, the production function $P = bL^kC^j$ was applied to data for 556 manufacturing industries in the United States in 1919. It was found that $k = .76$, and $j = .25$. This meant that if conditions of perfect competition had prevailed throughout, labor would have received 76 per cent of the value of product. The actual wages paid totaled only 60 per cent of the product. This discrepancy may have been an important factor in the large number of strikes during that year.

I. The Setting

Amid the relief which followed the end of the first world war, undertones of anxiety began to arise. In the world at large, there was the danger that the forces of selfish nationalism might triumph. At home, worries arose over the economic readjustment and the reemployment of five million demobilized soldiers and sailors. As the year 1919 opened, there were signs that a domestic crisis might be close at hand. There was a decrease in the output of metals and their prices fell by 10 per cent from November to January. Chemicals and textiles fell in price by a similar proportion. Unemployed men began to appear in the streets of our cities. Scattered groups of radicals began to dream of revolution. These very dreams roused fears and led to repressive measures.

The clouds of an impending depression were dissipated by the Victory Loan of April for no less than $4\frac{1}{2}$ billion dollars, almost completely subscribed by the banks. With ample funds, the government proceeded to settle its war contracts on generous terms, to demobilize its armies, and to supply Europe with food, textiles and industrial materials. Stimulated by this transfusion of credit, industry rallied. The general level of wholesale prices rose indeed by 17 per cent between April and December, while the advance in house-furnishings amounted to 40 per cent, in textiles and clothing to 54 per cent, and in building materials to 56 per cent.² The South, buoyed up by 30 and even 40-cent cotton, the highest price since the Civil War, radiated prosperity. In the Middle West wheat sold in Chicago for as high as \$3.50 a bushel, corn for \$2.10 a bushel, and pork for \$56.00 a barrel.³ The value of farm lands rose almost precipitously. The farming population of the nation therefore had a purchasing power which, though largely based on credit-financed exports, was a no less potent

¹ The authors are indebted for numerous fertile suggestions to their friend and colleague, Mr. H. Gregg Lewis. We also wish to acknowledge aid given, in computing by K. Sanow, H. Minsky, and B. Nimer, and in the drawing of the charts by Mr. Lewis and Mr. Y. K. Wong.

² "Index Numbers of Wholesale Prices by Groups of Commodities," *Mo. Labor Rev.*, Dec., 1920, p. 63.

³ *Sixty-Second Annual Report of the Trade and Commerce of Chicago*, Board of Trade, Chicago, pp. 56-79.

source of demand for the industrial products of the towns and cities. The construction of houses and apartments, which had virtually ceased during the two preceding years, now went forward at an accelerated pace and furnished a large volume of reemployment.

Despite the effects of the great coal and steel strikes, industry continued at a high pace through the closing months of the year. The depression of 1920 was still some months ahead, when the withdrawal of American credits to Europe would diminish the foreign demand for goods and when the quantity of internal purchasing power would be insufficient to purchase at current prices the quantity of American goods produced.

It might be expected that the forces governing production in this tumultuous year would defy analysis and that no quantitative laws of cause and effect could be found between the quantities of the so-called factors of production on the one hand and the quantity of the product upon the other. For how, it may be asked, can we determine the relative effects of labor and of capital upon industry when certain industries, such as the munition plants together with the breweries and distilleries, were idle, while clothing factories, automobile plants, and luxury shops were working overtime. And yet the census of manufactures furnishes us with three basic sets of data for 1919 for each of the 556 industries: namely, (1) the average number of persons employed, which may be taken as a measurement of the quantity of labor used; (2) the value of the invested capital, both fixed and working; and (3) the value in dollars added by manufacture. With such tools ready for our hands, and with so many observations with which to work, it is surely worth while, however foolhardy it may appear, to subject these data to a statistical and mathematical analysis. If any fairly clear relationship is found between the determining variables of labor and capital and the resultant product, then the belief that there are underlying laws of production will be strengthened. Moreover, if there is any appreciable agreement between the results for this year and those for others, the case for such basic laws will be still further strengthened. For, if the unruly year of 1919 was still subject to basic economic forces operating beneath the turgid surface of events, how much more then, would any ordinary year be subject to them?

II. The General Problem of the Production Function and a Summary of the Results of Past Studies

The early studies by one of the authors (Douglas) and his associates were based upon time-studies for manufacturing and employed a simple and somewhat restricted formula. Index numbers over time were computed for: (1) the relative number of men employed, representing L or labor; (2) the relative quantities of capital available for use, or C ; and (3) the relative quantities of physical product, or P . After charting these three

variables, it became evident that the index of production, or P , was almost invariably between indexes of labor and of capital and was much closer to the former (L) than to the latter (C). Disregarding the possible influence of land upon manufacturing product, a simple production function was devised in which

$$P = bL^k C^{1-k} \quad (1)$$

Here the sum of the exponents of labor and of capital is made equal to unity. This means that a 1 per cent increase in the quantities of each of these factors would be expected to call forth a corresponding increase in the quantity of product, no more and no less. This would constitute true constant returns. Under these conditions, as has been demonstrated in these earlier studies,⁴ the marginal productivity of each factor when multiplied by the corresponding quantities of each would when totaled be equal to the total quantity produced, *i.e.*,

$$P = \frac{\partial P}{\partial L} \cdot L + \frac{\partial P}{\partial C} \cdot C \quad (2)$$

It would also follow according to this formula that the share of the total product received by the factors under conditions of perfect competition would be equal to k for labor and $1-k$ for capital, *i.e.*,

$$\frac{\partial P}{\partial L} \cdot L/P = k; \quad \frac{\partial P}{\partial C} \cdot C/P = 1 - k \quad (3)$$

Four sets of time-studies were made under this formula—namely, for the United States (1899-1922); Massachusetts (1890-1926); New South Wales (1901-1927); and Victoria (1907-1929). The results showed apparently good fits of the computed products (P') in terms of the actual products (P). The values of k and $1-k$ as found by the method of least squares were as follows:

	k	$1-k$
United States (1899-1922)	.75	.25
Massachusetts (1890-1926)	.74	.26
Victoria (1907-1929)	.71	.29
New South Wales (1901-1927)	.65	.35

It will be seen that there was a surprisingly close agreement among the values found for k in the various economies. There was also an almost precise identity between the shares of the value product which labor in the United States actually received and what it would be expected to receive according to the formula under conditions of perfect competition. In the

⁴ Douglas. *The Theory of Wages*, p. 155; Handsaker and Douglas, "The Theory of Marginal Productivity Tested by Data for Manufacturing in Victoria," *Quart. Jour. of Econ.*, Nov., 1937, Mar., 1938 (vol. 52), pp. 251-254.

two Australian studies, however, the actual shares received by labor were approximately 10 points less than the exponents found under the formula—namely, .61 in Victoria and .56 in New South Wales.

These time-studies were, however, legitimately subject to at least three sets of criticisms—namely:

1. Since they dealt with time series, in which all three variables, labor, capital, and product were increasing, the apparent relationships might be accidental rather than real. Thus, a third force including technical progress, which might be termed "time" (t), might be the fundamental causative force behind both capital and product and at least a partial cause of the increase in labor.

2. The formula of $P = bL^kC^{1-k}$ was inflexible, since by making the sum of the exponents equal to unity or 1.0, the possibility of increasing or decreasing returns for the economy as a whole was excluded. Thus, an increase of 1 per cent in the quantity of labor and capital might give rise to an increase of more or less than 1 per cent in the quantity of the product; and it was therefore urged with much cogency by Mr. David Durand that a better and more flexible formula would be that of $P = bL^kC^j$ where the sum of k and j need not equal 1.0.⁵

3. The exponents of the factors of production were obtained by minimizing the errors in the P direction above. It was alleged, however, by Dr. Horst Mendershausen, a student of Professor Ragnar Frisch, that it was equally important to minimize in the L and C directions as well, and that if this were done the results were so different that no real credence should be given to those obtained from minimizing in the P direction.⁶

In later studies, we have taken cognizance of all these criticisms by choosing as a field for analysis cross-section studies of different industries at a given moment in time, and by using more refined and powerful methods. In a previous article the present authors reported on the results of five cross-section analyses of Australian manufacturing in certain specific years.⁷ Here each industry was taken as an observation with P representing the net value added by manufacturing, L the average number of workers employed, and in general C the total fixed capital. Both forms of the function were used with the following results:

Economy

	k	j	$k+j$
Victoria (1910-11)	.74	.25	.99
34 industries			

⁵ David Durand, "Some Thoughts on Marginal Productivity with Special Reference to Professor Douglas' Analysis," *Jour. of Pol. Econ.*, vol. xlv (1937), pp. 740-758.

⁶ Horst Mendershausen, "On the Significance of Professor Douglas' Production Function," *Econometrica*, vol. vi (1938), pp. 143-153.

⁷ Gunn and Douglas, "Further Measurements of Marginal Productivity," *Quart. Jour. of Econ.*, vol. lv, pp. 399-428.

Victoria (1923-24)	.62	.30	.92
38 industries			
Victoria (1927-28)	.59	.27	.86
35 industries			
New South Wales (1933-34)	.65	.34	.99
125 industries			
Commonwealth of Australia (1934-35)	.64	.36	1.00
138 industries			

The values of k which were obtained under the k and $1-k$ formula were closely similar to those given above, being in order: .75, .61, .60, .66, and .64, or identical in the last case and with a difference of only .01 in the first four.

It will be seen, first, that the values obtained by this cross-section analysis were rather similar to those obtained from the time series studies. Thus, the average of k for the three years chosen, for Victoria was .65 as compared to .71 for the time series, while for New South Wales, k for 1933-34 was .65, the same as for the period 1901-1927; second, that there was some evidence of a declining importance of labor in the production formula for Victoria, since it decreased from .74 in 1910-11 to .62 in 1923-24 and to .59 in 1927-28; third, that there was a relative degree of agreement between the share received by labor and that which would be expected from the exponents themselves.

A further study for manufacturing in the United States in 1909 was made by Dr. Martin Bronfenbrenner and one of the present authors which took the 90 most important industries in that year.⁸ In this study k was found to have a value of .74 and j a value of .32, or a total for the two of 1.06. The value of k in the k and $1-k$ formula was .75. These values of k were virtually identical with that found for the United States for the time-period 1890-1922, which it will be remembered was .75. The actual share of the value product received by labor was .68, or .06 less than the value of k . In a formula, however, where the sum of the exponents is greater than unity, the share which might be imputed to labor might be expected more closely to approximate the ratio of k to $k + j$ rather than purely k itself. This would be $.74 \div 1.06$, i.e., .70, or only .02 more than the actual share received by labor. This was only about one-half of the standard error of k , which was .05.

III. The results for 1919

The statistical data for the present cross-section study of manufacturing in the United States for 1919 were taken from the *Census of Manufactures* for that year.⁹ We used no less than 556 industries. For each of the indus-

⁸ M. Bronfenbrenner and Paul H. Douglas, "Cross-Section Studies in the Cobb-Douglas Function," *Jour. of Pol. Econ.*, vol. xlvii, pp. 761-785.

⁹ *Fourteenth Census of the U. S. Taken in the Year 1920*, vol. viii, *Manufactures, 1919*, Table 52.

tries we determined L , the total number of persons engaged in manufacturing, C , the total capital, and P , the value of the product added by manufacturing. The values for L and C were taken directly from the census, the value of P , however, is not the census figure for value added in manufacture. The census figure is the value of product minus materials, fuel, and rent of power. To obtain a more precise value of P we made further deductions for contract work, rent of factory, and taxes.

In the series of studies which have been made using the Cobb-Douglas production function, various meanings have of necessity been attached to *labor*, *capital*, and *product*. In most of the earlier studies the value of labor represented the average number employed including working proprietors, while in the present study it also includes firm members and salaried officers of corporations. Capital in this study means both fixed and working capital. The earlier studies with two exceptions used fixed capital only, and land was generally excluded. In the earlier time-studies product was defined as physical volume. Though value added by manufacturing was used in the other cross-section studies, a difference remains between the value of product as computed here and in that of the other cross-section studies, for in the present investigation we could make no adequate deductions for depreciation. We found it impossible to estimate depreciation since only the total capital was given by the 1919 *Census of Manufactures*, and we had no sufficient guide to the proportions of fixed and working capital which prevailed in the individual industries.¹⁰ It can of course be argued that depreciation charges correspond to wages, one being charged for the replacement of fixed capital and the other for replacement of man-power, and that following this argument neither should be subtracted in computing the value of product added by manufacturing. This may, however, be making a general virtue out of a present necessity.

We do nevertheless wish to stress the fact that in the different studies the variables L , C , and P are not always precisely comparable, and this must be kept in mind when comparisons of results are made.

(The values of L , C , P for each of the 556 industries are, for reasons of space, not printed in the present article, but will be furnished upon request.)

The equation $P = bL^kC^j$ can be rewritten as a linear one by letting

$$X_1 = \log P, \quad X_2 = \log L, \quad X_3 = \log C, \quad a = \log b \quad (4)$$

Then the equation becomes

$$X_1 = a + kX_2 + jX_3 \quad (5)$$

This equation we fitted by the method of least squares, minimizing in the X_1 direction. In an earlier article¹¹ we discussed at some length the problem

¹⁰ In the Bronfenbrenner-Douglas study of 1909 it was possible to use the 1904 proportions, but this could not safely be done after an interval of 15 years.

¹¹ "Further Measurements of Marginal Productivity," *Quart. Jour. of Econ.*, May, 1940, pp. 399-428.

of selecting a direction of minimization, and following the same reasoning, we concluded in this case that minimizing in the X_1 direction gives a satisfactory estimate. We thus obtained the following values for the parameters and the standard errors

$$\begin{aligned} a &= 2.39 \\ k &= .76 \quad \sigma_k = .02 \\ j &= .25 \quad \sigma_j = .02. \end{aligned}$$

Substituting these values we have

$$X_1 = 2.39 + .76X_2 + .25X_3 \quad (6)$$

or

$$P = 2.39L^{.76}C^{.25} \quad (7)$$

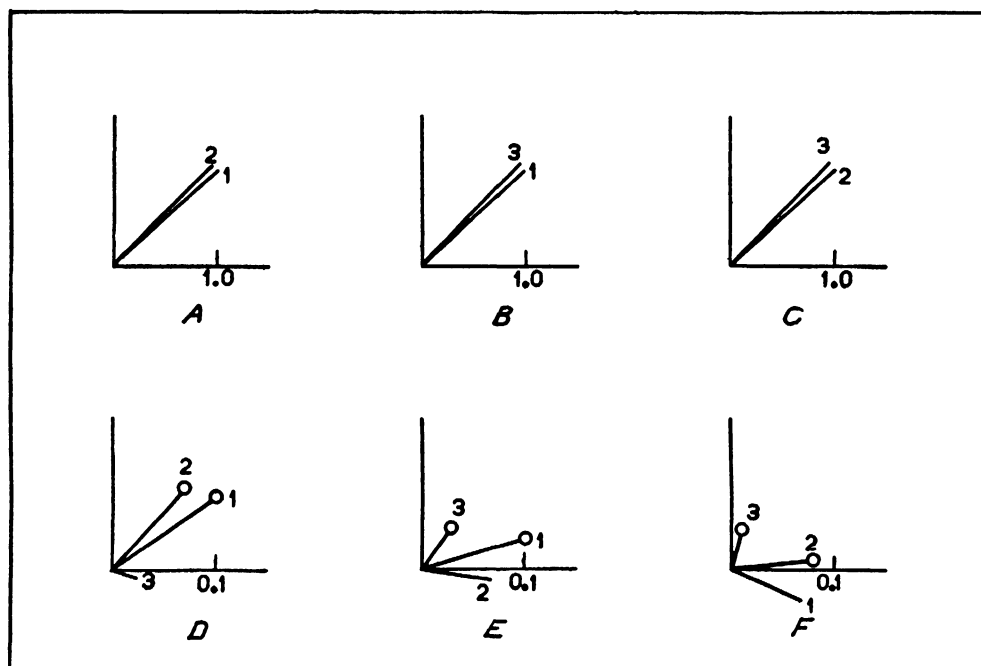


CHART I. Complete Bunch Map

1. Logarithm of Product
2. Logarithm of Labor
3. Logarithm of Capital

As we stated in the preceding section, in determining the direction of minimization we followed the same line of reasoning as in the Australian cross-section studies. This was based chiefly upon graphic analysis of the data.

To determine whether or not the same three variables previously used—namely, Product, Labor, and Capital, should be included in the function, we constructed bunch maps¹² as shown in Chart I.

¹² For a detailed discussion of bunch maps the reader is referred to *Statistical Confluence Analysis by Means of Complete Regression Systems*, by Ragnar Frisch, Oslo, 1934, pp. 97-106.

Figures A, B, and C represent the relationship between pairs of variables. In each case the two rays spread very little, indicating a high degree of correlation between the two variables. Figures D, E, F show the effect of the addition of a third variable. Comparing D with A we see that the relationship between product, X_1 , and labor, X_2 , is but little altered when the third variable, capital, X_3 , is included. The addition of labor makes a greater change in the product-capital relationship, and the consideration of product

LOG (P)

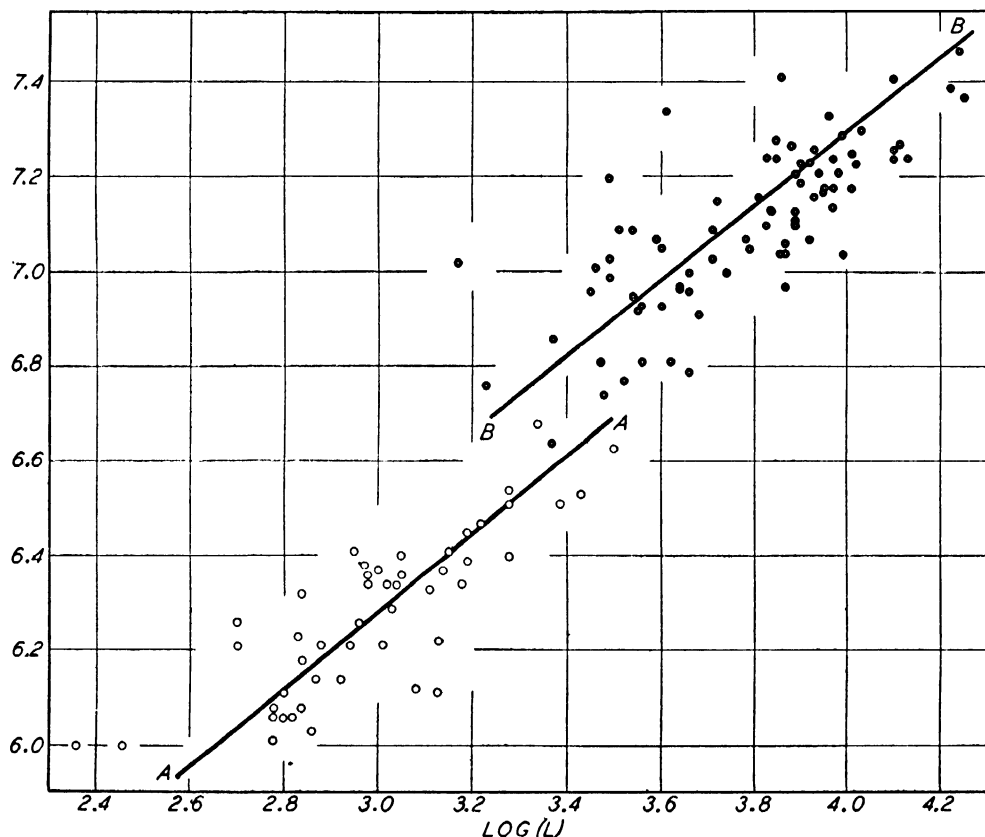


CHART II. Relationship of Log P and Log L by Industries within Capital Groups IV and VII. (Quantities of Capital Being Relatively Constant within Each Group)

AA. Line of best fit for Group IV, range of log C—6.30 through 6.59

BB. Line of best fit for Group VII, range of Log C—7.20 through 7.49

alters even more that of labor-capital. The maps indicate that capital has not a strong effect, but they do not indicate that it must be discarded.

This problem might be approached from the point of view of elementary regressions, recognizing the fact that one could not reasonably expect these variables to be perfectly correlated even if the data were complete and accurate. This leads to the interpretation of our results as a description of the average change in products as a function of changes in factors

of production. This point of view has been very ably set forth by John H. Smith in his doctoral dissertation entitled *Statistical Deflation in the Analysis of Economic Series* (University of Chicago, 1941, privately printed by the author).

The high degree of correlation between pairs of variables suggests the possibility that the observations lie along a line, instead of along a plane as we have assumed in fitting the equation

$$X_1 = a + kX_2 + jX_3$$

Since the task of constructing a three-dimensional model showing 556 observations presented many difficulties, we tried to learn the nature of the scatter by taking cross-sections. In the case of the Commonwealth of Australia, we had found that the observations seemed to lie along a plane that was nearly parallel to the X_3 -axis (log of capital). The observations for the United States in 1919 showed the same tendency. We grouped the data according to capital, and for the industries in each group plotted the points determined by the logs of product and labor, X_1 and X_2 . This amounted to taking a series of thin slices of the production surface and within each slice projecting all the observations onto a plane, measuring the logs of product and labor along the two axes, shown in Chart II.

For each scatter we drew the line which seemed to be the best fit and these lines were then projected onto a plane. In Chart III these lines are numbered to indicate the capital group for which they are drawn, and the table gives the range of log C for each group and number of observations.

If it had been true that the observations lay along a line in each of these layers, the scatter would tend to cluster about a point instead of showing a tendency to spread out along a line. The fact that the cross-sections approximate straight lines indicates that we have a plane surface. With the exception of Groups 1 and 9,¹³ the lines are almost parallel, which means that the production surface approximates a single plane. The slope of the line for Group 9 may mean that the plane is warped, so to speak, but it is more likely that the arbitrary division into groups caused the variation. The lines would have coincided if the plane were parallel to the capital axis; as it is, the plane shows a rather slight degree of inclination to the capital axis.

We also grouped the data according to labor, and for the industries in each labor group plotted the values of X_1 , the log of product, and X_3 , the log of capital. Similarly we grouped according to product and for the industries in each product group plotted X_2 , the log of labor, and X_3 , the log of capital. After taking these cross-sections of the production surface parallel to each of the three coördinate planes we concluded that the plane was inclined less to the capital axis than to either of the other two, that, in fact,

¹³ The steeper slope of Group 1 may be due to the wide range of capital within the group.

LOG (P)

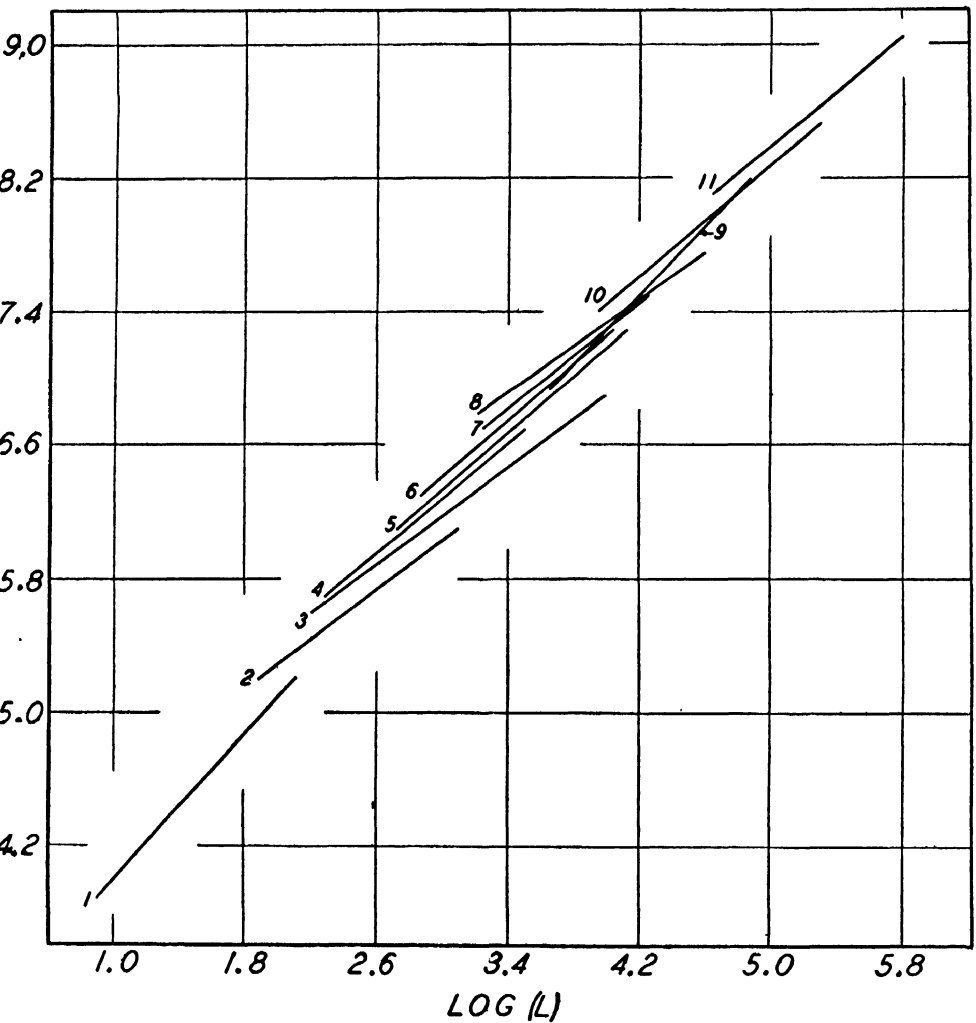


CHART III. Lines of Best Fit of Logs of P and Logs of L for Eleven Capital Groups.
(Quantities of Capital Being Relatively Constant within Each Group)

TABLE OF CAPITAL GROUPS

Group	Range of log C	Number of Industries
1	3.30-5.49	16
2	5.50-5.89	17
3	5.90-6.29	38
4	6.30-6.59	51
5	6.60-6.89	73
6	6.90-7.19	79
7	7.20-7.49	83
8	7.50-7.74	74
9	7.75-8.09	55
10	8.10-8.59	45
11	8.60-9.42	25

as we have stated before, it was almost parallel to the capital axis. This being the case, to minimize in the capital direction would give a very poor estimate of the regression plane, for it is the deviations in that direction which determine the plane. The *disturbances* in X_2 , or labor, are apparently much less than in X_1 , and consequently we believe minimization in the X_1 , or product, direction gives a good estimate.

LOG (P)

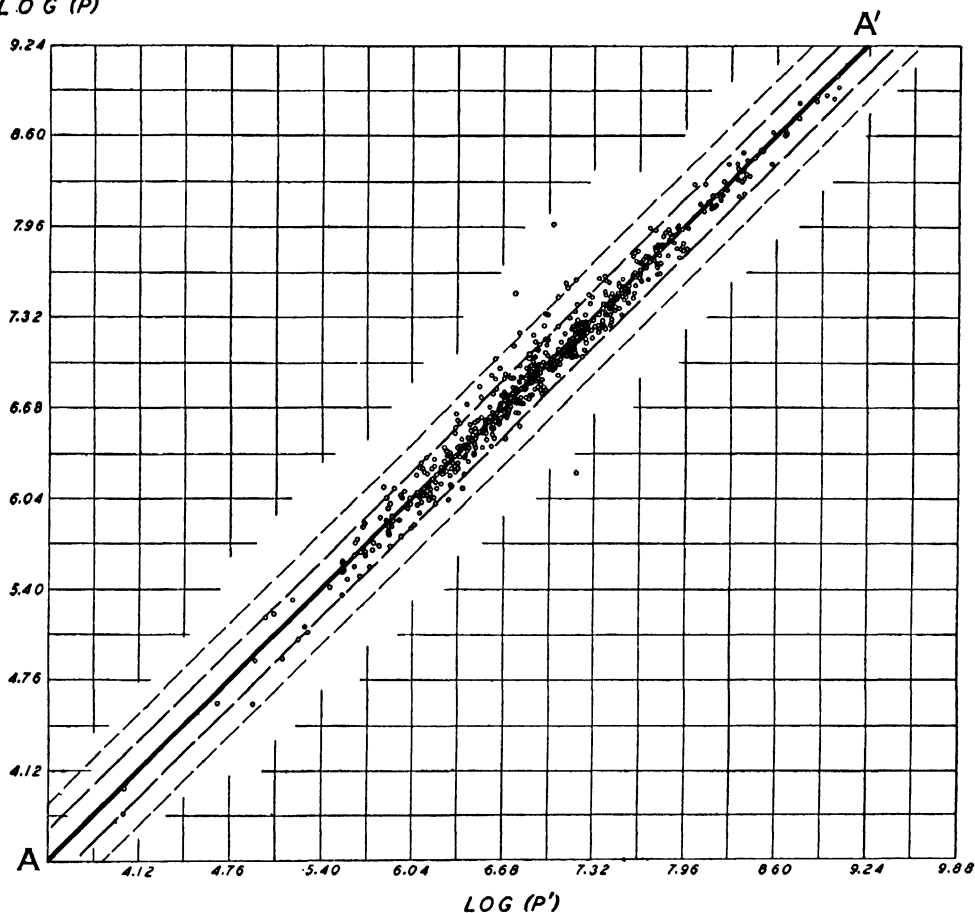


CHART IV. Theoretical and Observed Values of Log P
 $P' = 2.39 L^{.76} C^{.25}$

The value of k (namely, .76,) is virtually identical with that obtained by the use of the cross-section method of 1909, or .74, and also with the value of k , .75, for the time-period 1899-1922. It is also virtually the same as that found by Professor Cobb for Massachusetts over the period 1890-1926—namely, .74. As to the value of j (namely, .25) or the exponent for capital, while it is slightly less than that obtained for 1909, which was .32, it is practically identical with that for the period 1899-1922.¹⁴

¹⁴ According to Dr. Durand and Dr. Mendershausen's computations the value of j for that period would be .25.

This must be considered to be a striking degree of agreement, which is in fact truly surprising. The differences between the various values of k are indeed much less than their standard errors. It is difficult to see how these close agreements between the four different sets of American studies, two for time-periods and two for cross-section studies for 1909 and 1919 can be regarded as accidental.

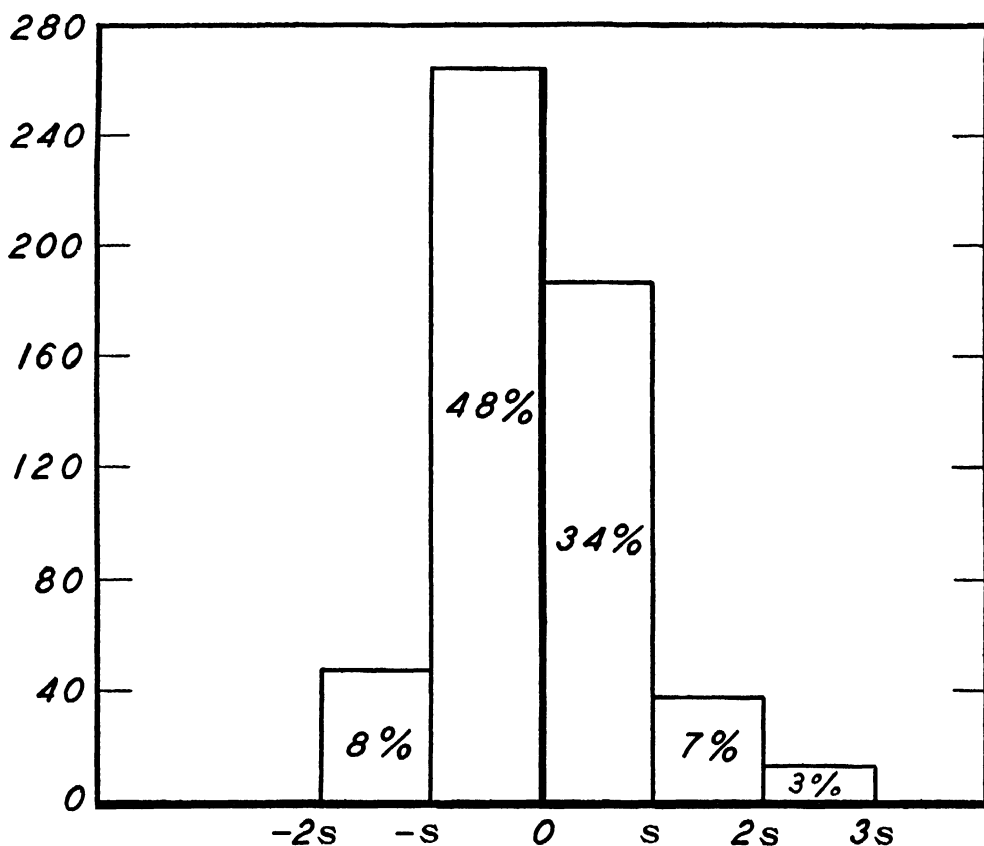


CHART V. Frequency Distribution of Deviations $X_1 - X_1'$

X_1 observed value for Log P

X_1' computed value for Log P

$$P' = bL^kC'$$

From the formula $P = 2.39 L^{.76} C^{.25}$ we computed product using the actual values of L and C for each industry. We call this theoretical product P' and its logarithm X_1' . In Chart IV we have plotted for each industry the theoretical and observed values of the logarithm of product; X_1' , the theoretical, along the horizontal axis and X_1 , the observed, along the vertical. The heavy line, AA' , is the locus of points for which $X_1' = X_1$. The standard error of estimate, S , which is the standard deviation of the residuals, $X_1 - X_1'$ proved to be .14. The broken lines are drawn at distances of one and two standard errors of estimate on either side of the line AA' .

Chart V shows the distribution of the residuals in terms of the standard error of estimate. We should expect that roughly two-thirds of the cases would fall between $X_1 + S$ and $X_1 - S$, and 95 per cent between $X_1 + 2S$ and $X_1 - 2S$.

For 453 industries, or 82 per cent of the cases, the observed value of X_1 lay within the range $X_1 \pm S$. In 97 per cent, X_1 lay within $X_1 \pm 2S$. This indicates that the actual values in general were surprisingly close to what they should be according to the formula. A part of such divergences between the observed and the theoretical values as appeared was undoubtedly due to errors of measurement by the census, while a part was also probably due to the rapid shifting in this tempestuous year of the demand curves for various products. The closeness of the two series furnishes, however, added proof of the general reliability of the formula and of its values for the year 1919.

Using the equation $P = bL^k C^j$ we can express the marginal productivity of labor as $k \frac{P}{L}$, or k times the average productivity. For an individual employer, provided his output does not alter the demand curve for his product, the demand curve for labor is the marginal net productivity curve of labor. The elasticity of demand for labor is then the reciprocal of φ_L , the flexibility of the marginal productivity, or wages.

$$\begin{aligned}\varphi_L &= \frac{\delta(MP_L)}{\delta L} \cdot \frac{L}{MP_L} \quad \text{flexibility} \\ MP_L &= \frac{\delta P}{\delta L} = k b L^{k-1} C^j = k \frac{P}{L} \quad \text{marginal productivity} \\ \frac{\delta(MP_L)}{\delta L} &= k(k-1) b L^{k-2} C^j \\ \varphi_L &= k - 1 \\ \eta &= \frac{1}{k-1} \quad \text{elasticity of demand}\end{aligned}$$

Since we found the value of k to be approximately $\frac{3}{4}$, the elasticity of demand for labor for the firm is -4 . This means that an increase of 1 per cent in wages, *ceteris paribus*, would bring a 4 per cent decrease in the number employed by a typical firm. We wish to point out, however, that this result is based on the assumption so generally made in economic theory that the employer knows the marginal productivity of labor and hires laborers to the exact point at which marginal productivity is equal to the wage. It is also based on the assumption that changes in the output of the given unit do not change the demand curve for its product.

If the marginal productivity of labor is $k \frac{P}{L}$ and the wage equals marginal

productivity, the wage bill will amount to $\frac{3}{4}$ of the product. From the *Census of Manufactures* we obtained the total payments to labor for each industry and computed $\frac{W}{P}$, the share of product which was actually paid

out to labor. For the group of 556 industries taken as a whole, $\frac{W}{P}$ was .60.

The unweighted average of the $\frac{W}{P}$ values for the individual industries was .59. It was above .75 in 39 industries and below .60 in 281. In comparing these values of $\frac{W}{P}$ with those obtained in earlier studies, it should be borne in mind that since depreciation has not been deducted in estimating the value of product in the 1919 data, we should expect $\frac{W}{P}$ for that year to be less than in other cases. The year 1919 was one of rapidly rising prices, and this would also affect the value of P , since it refers to value added in manufacturing. In such a year, one would expect $\frac{W}{P}$ to be less than k and so in fact it is. Perhaps this fact may have accounted for much of the labor unrest of the year.

On the whole, the results of this study tend to corroborate the findings of the earlier ones. We invite comments and criticisms.

GRACE T. GUNN
PAUL H. DOUGLAS

University of Chicago

SOME NEGLECTED RELATIONSHIPS IN THE BALANCE OF PAYMENTS

Under the new pattern analysis, a 4-item balance of payments (Merchandise, Capital, Gold, and Miscellaneous) is studied as a 4-element equation. When the four items are ranged in magnitude, there are seven limitations upon their size—usually in the ratio of one item to a second item. Transgressions of those mathematical ratios in estimates inevitably cause "Discrepancies due to errors and omissions." This contributes to pure science. Further, the new analysis can sometimes be put to guarded use in localizing and bracketing errors in balance-of-payments estimates.

Item-by-item differences between two 4-item balances of payments, both in equilibrium, likewise make a 4-element equation. Therefore, fluctuations of *estimates* for one year compared with the estimates of each other year of a series can condemn a specific estimate. The estimated item may be jointly erroneous with each of the three others, in turn, and always too large or always too small. A "joint error" with gold is especially condemning; because gold statistics are often trustworthy.

The accountancy plane of equilibrium in international dealings has been dismissed, sometimes, as too simple to warrant much analysis. That plane has heretofore been supposed to involve merely the simple arithmetic of double-entry bookkeeping: the adding and subtracting of equals. Because the debit and credit of each international transaction are equal the totals of all international transactions must likewise be equal.

Of the two entries for each transaction with foreigners, one inevitably affects the international movement of short-term capital; barter is rare enough in practice to be ignored. Each credit in our balance of payments is an increase of American deposits abroad (a balance-of-payments debit); or, it is a reduction of foreign deposits in the United States (also a balance-of-payments debit). The reverse is true of each debit in our balance of payments. Even when dollar paper currency is spent abroad or is mailed there—by tourists, immigrants and others—the currency pours through the "reservoirs" of short-term capital, usually with little lag, freezing or thawing. Further, gold shipments, often falsely declared to be the balancing item in a balance of payments, are not exceptions; these, too, have double-entries affecting the international movement of short-term capital.

Thus offhandedly, the accountancy plane of international equilibrium could be well enough pictured, heretofore. What challenged the wits and knowledge of many of the keenest thinkers among economists were other planes of equilibrium. The accountancy plane was supposed to stop, dead, with equal debits and credits.

This paper will describe some neglected mathematical relationships between groups of debits and credits, inside the balancing grand totals of international accounts. What was speciously so simple will be shown to be complex. Equilibrium on the accountancy plane will emerge with new properties which, incidentally, hold not only in international dealings but also in domestic trade and virtually throughout all human economy.

In interpreting balances of international payments, economists often bulk their numerous figures into the net amounts of *four* main accounts: the merchandise balance, the net movements of capital and of gold, and the balance of a great volume of relatively stable miscellaneous transactions. These four balance-of-payments accounts supply the real fireworks of fluctuation, in any nation's foreign dealings.

Such an abbreviated balance of payments is a 4-quantity equation, if, as in the real world, there is no net discrepancy due to errors and omissions. Each of the four accounts in these abbreviated tables is, therefore, obedient to the laws ruling 4-quantity equations. Those laws, perhaps not systematically enunciated in pure mathematics and not heretofore consulted for insight into international equilibrium, will now be explored.

There can be no equation among four quantities, items or accounts, unless (Pattern A) one of them balances the remaining three, or (Pattern B) two of them balance the two others. These two arbitrary designations, Pattern-A and Pattern-B balances of payments, are convenient in exploring the peculiarities of each.

The mathematical properties of equilibrium can be seen best when the four accounts are arrayed *as to size*. The nature of a one-three (Pattern A) equation, however, is quite apparent. Obviously, the account which equals the three others is the biggest. The three smaller accounts can, theoretically, all be equal. Likewise, the second and third, as well as the third and fourth, can be equal.

The properties of a two-two equation (Pattern B), on the other hand, demand closer scrutiny. The outstanding peculiarity here is, that the biggest and littlest of the four accounts must be *on the same side of the equation*; while the two accounts intermediate in size must be on the opposite side.

Mathematical proof of that minor signs-principle comes by eliminating the two following false hypotheses:

(1) That a 4-quantity equation is possible, with the biggest and next biggest quantities on the same side of the equation.

(2) That a 4-quantity equation is possible, with the biggest and third biggest quantities on the same side of the equation.

The first of those two false hypotheses is absurd at sight.¹ The other hypothesis is wrecked by the following brief resort to first-year algebra: If a , b , c , and d are arrayed according to size, $a > b > c > d$; therefore, since $a > b$ and $c > d$, $a + c > b + d$.

Below are two imaginary balances of payments, both in perfect equilibrium. They illustrate the two alternate patterns possible without a net

¹ Exception: In Pattern B, but not in Pattern A, all four items can be equal.

discrepancy due to errors and omissions. The amounts can be visualized as millions of a nation's currency in international exchange.

PATTERN A		PATTERN B	
Item	Amount	Item	Amount
Merchandise	+618	Capital	-1,116
Capital	-335	Merchandise	+913
Gold	-234	Miscellaneous	+215
Miscellaneous	-49	Gold	-12
Discrepancy	0	Discrepancy	0

From those two imaginary balances of payments and from the brief mathematical analysis preceding them, one deduces the major signs-principle of 4-account equilibrium: *The plus-or-minus sign of the biggest account must offset those of both the two next biggest.* In balance-of-payments parlance, this means that if the biggest account of the year (or day) is a net export, visible or invisible, the two accounts next in size must both be net imports, visible or invisible; and *vice versa*. In both patterns, the biggest item may be said to "command the signs of" both of the two next biggest; whereas, in Pattern A, the biggest item "commands the sign of" the fourth in size, also.

A corollary of the major signs-principle in 4-account equilibrium is, "If the sign of one of the three biggest items is known and if the order of their size is known, the signs of all three are known."

There are inflexible mathematical laws, also, which shape the relative sizes of items within each of the two possible patterns of 4-quantity equilibrium. Pattern A has three limits upon the relative size of its items; Pattern B, only one.

These relativity limits, proved by simple percentage, are easy to state: In a Pattern-B balance of payments, *the second variant can never be less than half the biggest variant*—whatever those items chance to be. In a Pattern-A, by contrast, *the second variant can never be less than one-third the biggest; the third variant, never more than one-half the biggest; and the fourth variant, never more than one-third the biggest.*²

To obtain precise relativity limits within patterns, one merely computes the maxima and minima of each of the three minor items, in percentages of the biggest. Each of the three minor items, in other words, is in turn pushed to the largest possible and the smallest possible, always in percentages of the biggest. The method is illustrated in the following table, which analyzes Pattern A.

² A property of 4-quantity equilibrium is that, though each of the three minor variants of a Pattern A is limited in size, in relation to the biggest variant, they are at no point related to one another.

Size of item	CASE I 2-item balance. (per cent)	CASE II 3-item balance. (per cent)	CASE III 4-item balance. (per cent)
Biggest variant	+100	+100	+100
Second variant	-100 (max.)	-50	-33 $\frac{1}{3}$ (min.)
Third variant	-Negl. (min.)	-50 (max.)	-33 $\frac{1}{3}$
Fourth variant	-Negl. (min.)	-Negl. (min.)	-33 $\frac{1}{3}$ (max.)
Discrepancy	<u>0</u>	<u>0</u>	<u>0</u>

To study this table on Pattern A, read across one line at a time—the fourth-variant line, for example. Notice from that line that the fourth-variant can be “negligible,” in Cases I and II, and that the largest it can ever be is in Case III, where it is one-third of the biggest variant. Similar examinations of the second and third lines establish their relativity limits, under Pattern A.

The only relativity limit under Pattern B is established by analyzing three “cases” in an analogous fashion. Thus it can be easily demonstrated that equilibrium is not mathematically possible, under Pattern B, unless the second variant is at least one-half the biggest.

In motion, balance-of-payments items become kaleidoscopic, in the light of these mathematical relationships. In a table of the *fluctuations* of the balances of payments of a given country, movements are especially lively. The biggest fluctuation for one year (or one day), for example, may be merchandise, with a plus sign. The very next year (or next day) may carry merchandise as the second, third or fourth biggest fluctuation, also with the plus sign of an export; or, it may become any of the four fluctuations, in size, with the minus sign of an import. Similar flickerings in position can occur with any of the three other accounts in 4-account balances of payments. At no point, obviously, can the signs principles or the relativity limits fail (ruling out a net discrepancy due to errors and omissions).

What determines a Pattern A or a Pattern B is, whether the sign of the fourth variant offsets that of the biggest variant. The fourth variant may remain, say, gold; or, as transactions pile up, some other account may come to have a balance smaller than that of gold. There is a dramatic moment, at the sign-change of the fourth variant, when relativity limits relax or tighten, with the suddenness of a change in design of the cat's cradle.³

The laws of 4-quantity equilibrium have at least one practical use. This is in localizing and roughly measuring certain types of errors in balance-of-payments estimates and in reducing the errors accordingly.

³ There is danger of inferring that, in the light of patterns and relativity limits, there must be a heretofore undiscovered type of transfer problem arising from the mathematical law of equations. Such an inference would be fallacious.

This localizing of error starts with a table of maximum comparisons,⁴ which exhibits the fluctuations of the balance of payments of a given year, item by item, away from each other year of its series. Next, each fluctuation in that table, which jointly transgresses a relativity limit or a signs rule, is encircled.

If one item in the table, say merchandise, has a circle for each year's fluctuation throughout the series, and if its plus-or-minus sign consistently agrees or disagrees with the discrepancy fluctuation, it clearly defies the mathematics of 4-quantity equilibrium. It cannot live with its pattern-mates. Sometimes the guilty item quarrels with all three other items, in turn; while no other item quarrels with any item except the guilty one. Further, somewhere in the table, the guilty item may go wildly over a relativity limit with gold, which is usually known to be closely accurate.

Where guilt is thus dramatized, a balance-of-payments compiler now has scientific proof that one of his three groups of estimates is seriously erroneous, in relation to his other groups. He will, of course, adjust his preliminary estimate of that group accordingly; for accuracy will be served by any adjustment less than double his error. Each of these three groups is largely a conglomeration of conjectures; none is without sparse samplings, dubious reporting and poorly educated guesses. The new technique will sometimes establish beyond doubt that one estimated group is wrong; though there may never be proof that any is correct. Further, with error localized to one group of estimates, a scrutiny of these may point the way to improved methods of future estimating.

How errors of varying amounts are reflected in the error-circles of a table of maximum comparisons can be tested variously. A quick test is that of "known error artificially injected." Error can be deliberately injected into one item in one of a series of imaginary balances of payments, all previously in perfect equilibrium; or, error can be injected into one item of one year of a series of official balances of payments. In the latter test, gold is suggested as guinea pig, if statistically most dependable.

Certain balance-of-payments errors are beyond the reach of this pattern analysis. This is true of small errors, of course—how small becomes clear enough in tests of "known error artificially injected." Perfectly compensating errors, also, are beyond any technique yet devised; these do not transgress the mathematical relationships of equilibrium. On the other hand, supplementary errors (two or more items having errors with the same plus-or-minus sign) can be cautiously felt out and reduced, through tests with artificially injected supplementary errors.

A by-product of the new pattern analysis is a new type of error-pre-

⁴ *International Transactions of the United States*, by R. O. Hall and associates, National Industrial Conference Board, New York, 1936. Chapter IX.

sumption against a specific item in an estimated balance of payments. Examples of older error-presumptions are: relative unreliability of statistics or estimates; unexplained failures of merchandise exports to rise or fall together; and unexplained failures of large capital fluctuations to offset the plus-or-minus signs of gold fluctuations. To the older error-presumptions are now added several resulting from studying the order of variants. Thus, capital is suspect as third or fourth variant; miscellaneous, as biggest or second variant.⁵ Again, studies of the order of variants indicate that the biggest variant is often too big.⁶ Still further, a strongly suspected error in the order of variants may be supported, slightly, by the ratio of the fluctuation of discrepancy to the sum of the fluctuations of the four variants; as higher averages of these discrepancy ratios are associated with certain types of pattern errors than with others.

The new techniques to localize errors are not recommended indiscriminately. Some of the world's balance-of-payments estimates are miserably constructed, with regard to completeness, comparability or even arithmetic. In such cases, the task indicated is reconstruction, not scientific revision. Estimated adjustments of error by pattern analysis are recommended only where intelligent and meticulous compiling has reached the dead-end of factual resources but where a large net discrepancy still challenges—and guides.

RAY OVID HALL

Washington, D.C.

⁵ In 163 balances of payments of 14 countries whose fluctuations have been analyzed by the writer, capital is the biggest variant in 75 and second variant in 55; while miscellaneous occupies one of those two positions in only 26 of the 163 cases.

⁶ In the 52 balances of payments in the writer's notes, in which the biggest variant of the year exceeds one-third the biggest variant of its series of approximately 10 years, its plus-or-minus sign offsets that discrepancy in 44 cases.

RUPEE CIRCULATION IN INDIA

Since the outbreak of the European war, the flow of rupee coins back from circulation to reserves, which has been going on for many years, has been reversed. The stock of rupee coin in the Reserve Bank of India decreased from 750,000,000 rupees in September, 1939, to 300,000,000 rupees in July, 1940; while circulation increased from about 1,500,000,000 to 1,950,000,000 rupees. This increase of coin circulation has been due partly to the proportional increase of note circulation, for which the coins serve as small change, and partly, in all probability, to some tendency to hoard coins in preference to notes, although at the present or any probable future price of silver they are not worth melting. To avoid exhaustion of the Reserve Bank's supply of coin, the government of India, in July, 1940, began the issuance of 1-rupee notes, which would be counted as "rupee coin" in the Reserve Bank's accounts. Finally, in December, 1940, it announced a reduction in the fineness of the rupee from 11/12 to 0.500. It remains to be seen whether this section will be acceptable to the population.

At the outbreak of the European war in September, 1939, the circulation of rupee coins in India had reached its lowest level since the World War. In that era the use of paper notes had perforce been greatly increased; in the succeeding two decades they had become pretty generally acceptable. Rupee coins had been steadily flowing back from circulation into the government's paper currency reserve prior to 1935 and thereafter into the issue department of the Reserve Bank of India which took over the management of the paper currency on April 1 of that year.

In September, 1939, the quantity of rupee coin and of bullion derived from coins withdrawn from circulation was approximately as follows:

	<i>Millions of rupees</i>	<i>Equivalent millions of fine ounces</i>
In circulation (including hoards)	1,500	500
In issue department of Reserve Bank	750	250
Total in monetary system (all in coin)	2,250	750
Held by government, withdrawn from monetary system (coin and bullion)	480	160

At the same time, the circulation of paper notes, issued in dominations of 5 rupees and upward, amounted to about 1,800,000,000 rupees, or considerably more than the coin circulation, especially when allowance is made for hoarded coins not in active use.

At the outbreak of the war in September, 1939, the price of silver in Bombay jumped about 15 per cent, and has since remained, with minor fluctuations, at a level equivalent to about 50 cents per ounce as compared with the American price of 35 cents. This disparity is caused by the existence of an import duty on the white metal in India and by restrictions on the supply of exchange for purchasing it, so that the Bombay market is "insulated" from the American one. During the autumn of 1939 there developed a large demand in Bombay for silver bullion. This was met

largely by sales from the stock held by the government, which is reported to have disposed of some 60,000,000 fine ounces.

Less spectacular than the bullion speculation in the autumn of 1939, but attaining significant volume, was the outflow of rupee coins from the Reserve Bank into circulation. From 750,000,000 rupees in September, 1939, its stock decreased steadily until the "standard" level of 500,000,000 rupees was reached on May 24, 1940. Thereafter the flow was more rapid; and less than 300,000,000 rupees remained on July 19, 1940. If withdrawals had continued at this rate the reserve of rupee coin would have been exhausted in a few months.

This great increase of rupee circulation was ascribed in part to the fact that total note circulation had also grown greatly, to take care of increased wartime demand for various commodities at rising prices. Thus the increase of coin circulation from 1,500,000,000 to 1,950,000,000 rupees was almost exactly proportional to the increase of note circulation from about 1,800,000,000 to about 2,400,000,000 rupees. Part, though probably not all, of the increased supply of coin would be needed as "small change" for the increased business done with the notes. In addition to this legitimate business demand, the cultivator, with a larger income at higher crop prices, was perhaps holding some of his surplus in rupee coin, both because coin is not as destructible as paper and also because he may have had a feeling that coin might become more valuable than paper. There was actually, of course, little justification for expecting any rise in the price of silver sufficient to make the rupee worth melting, as it had been during the World War. Even at the high Bombay price of the white metal, the rupee melted was worth little more than half its face value. Still the ryot could hardly be blamed for remembering his experience of 20 years before and preferring to hold hard money rather than paper.

To meet this situation, the government finally acted. The first step was at the end of June, when a rule was promulgated under the Defense of India act making it an offense for any person to acquire coins in excess of his personal or business requirements and providing that in cases of doubt the judgment of the Reserve Bank or its duly appointed agents as to what constitutes the reasonable requirements of an individual should be conclusive.

A month later an ordinance was passed providing for the government to issue and put into circulation 1-rupee notes. The law provided that these should be treated by the Reserve Bank in its accounts exactly as if they were rupee coins. In addition provision was made that the government, at the close of any week in which the amount of rupee coin (including, of course, the new notes) held by the issue department of the Reserve Bank should fall below the "standard" 500,000,000 rupees, might, with the consent of the Bank, deliver to the Bank, against legal tender value, enough "rupee

coin" (including the new notes) to make up the deficiency. By the original Reserve Bank of India act such deliveries could be made only after the close of a financial year on March 31; the new ordinance made immediate adjustment possible.

The Bank's statement for July 26, 1940, the first after the passage of the ordinance, showed an increase of "rupee coin" by 90,000,000 rupees, from 292,000,000 to 382,000,000 rupees. It is probable that this increase was entirely in the form of 1-rupee notes; and that the government may have turned over more than 90,000,000 rupees, the remainder having flowed into circulation during the week. The stock of "rupee coin" decreased at the rate of about 30,000,000 rupees per month in August and September, which is the latest date for which figures are at hand at this writing.

That the issue of 1-rupee notes was not adequate to check the hoarding demand for coins is evidenced by the much more drastic action taken by the government of India at the end of December, 1940, when announcement was made that the fineness of the rupee would be reduced from 11/12 to 0.500.¹

Such a step might logically have been taken in India during the World War when the rising price of silver made the rupee worth melting. A similar situation was met in this way by a number of countries when the price of the white metal rose moderately in 1906 and greatly during the war.² In India, however, it was feared that the people would not willingly accept a reduction in the fineness of the rupee which had been unchanged since 1835, and the idea was rejected both by the government during the war and by the Babington Smith committee which investigated Indian exchange and currency in 1919. Instead, the exchange value of the rupee was raised, by successive steps during the years 1917 to 1920, to keep pace with the rising value of its silver content.

The recent action of the Indian government cannot be based on any reasonable expectation of a rise in the price of silver sufficient to attract the coins of 11/12 fineness to the melting pot. Presumably it was taken because it became evident that 1-rupee notes would not be wholly acceptable, because additional rupee coinage would be necessary, and because it would

¹ It should be pointed out that this reduction in the silver content of the rupee has nothing in common with the reduction in the gold content of the American dollar in 1934. The theoretical gold rupee established in 1927 remains unchanged as the basis of the system. The silver rupee has been compared to a note printed on metal instead of on paper; and from that point of view the change is similar to the change in size of United States paper money in 1929. The weight of the silver rupee will continue unchanged at 180 grains, and presumably its exchange value will continue to be pegged at 1s. 6d. as it has been since 1927. Since 1931 this has represented a depreciation of Indian currency below its theoretical gold value in exactly the same proportion that the pound sterling is depreciated below the gold sovereign.

² For an account of the adjustment of Indian and other currencies under such conditions, see Leavens, *Silver Money*, Bloomington, Indiana, 1939, chaps. 13, 18-20.

be cheaper to coin debased rupees than the old ones (especially if the purchase of additional bullion and the consequent need for dollar exchange could be avoided).

It will be interesting to see whether the measure is successful. With the silver content reduced nearly one-half, the government will be able to recoin the stock of silver in its control into nearly twice as many rupees as before. This stock, however, is now only about a quarter as great (in ounces) as the amount of rupees in circulation and hoards. It would seem probable that the hoarding demand for the old rupees will become all the stronger and that the government will have difficulty in recalling any great amount of them for recoinage. The new rupees will not be wanted for hoarding, but may be acceptable in circulation.

In any case the reduction in the fineness of the rupee after 100 years marks an epoch in the history of Indian currency. Moreover, as regards the world silver market, it is just one more step in lessening the world demand for the white metal.

DICKSON H. LEAVENS

Cowles Commission for Research in Economics

COMMENTS ON 100 PER CENT MONEY

Recent discussion to the contrary, the chief argument for the 100 per cent reserve plan rests upon a monetary theory of economic fluctuations. The merit of the plan is that it tends to prevent investment in excess of voluntary savings. Other claims for the scheme are extravagant. Some of the advantages claimed can be obtained with less radical reform; others involve accompanying and offsetting disadvantages. Reduction of national debt, for example, could be obtained through the 100 per cent plan only at the expense of bank earnings. Economic fluctuations would not be entirely eliminated. Indeed, minor changes in demand for idle cash balances can be better met under the present system. Since some demand deposits are savings in the relevant sense, and some time deposits are not, the plan does not guarantee equality of savings and investment. It does tend to minimize divergencies between them. If over-investment is not a problem of the real world, the plan is of no practical significance. Equality of saving and investment is not a sufficient condition for a high level of income and employment. While too much has been claimed for the plan, a step in its direction deserves serious consideration in view of the large excess reserves and the stimulus of armaments expenditures.

Controversy over the 100 per cent reserve plan has been revived by the appearance of two articles on the subject in a recent issue of this *Review*.¹ The revival is opportune. The possibility that a strong recovery will develop is no longer remote, member banks are in possession of nearly seven billion dollars in excess reserves, and accordingly discussion of measures for control of monetary expansion is no longer purely academic.

Advantage of the Plan

Contrary to Thomas,² it is my opinion that the chief argument in favor of the 100 per cent plan rests upon the monetary theory of the trade cycle,³ and that the peculiar feature of the scheme is that it appears to provide an automatic check to investment in excess of voluntary savings.⁴ The degree of effectiveness of the plan in preventing over-investment depends upon the extent to which time deposits can be identified with savings, and demand deposits with money. It is true that under a rigorous 100 per cent reserve plan, so long as the supply of currency is fixed, no increase in the total volume of demand deposits could arise except through a withdrawal of currency from private circulation. There is some justification, then, for regarding an increase in volume of demand deposits as the result of a

¹ Harry Gunnison Brown, "Objections to the 100 Per Cent Reserve Plan," and Rollin G. Thomas, "100 Per Cent Money," *Am. Econ. Rev.*, June, 1940.

² *Loc. cit.*, p. 316.

³ That is, the sort of theory that traces depression to over-expansion of credit in the boom, with accompanying over-investment and distortion of the capital structure. Perhaps the best known presentations of this theory are by Hayek (*Prices and Production*, London, 1935, and *Profits, Interest, and Investment*, London, 1939) and Robbins (*The Great Depression*, London, 1934); but it is worth noting that even some of the "Keynesians" have reverted to explanations of disturbances in terms of discrepancies between savings and investment. See, for example, Kaldor, "A Model of the Trade Cycle," *Econ. Jour.*, March, 1940.

⁴ The terms "savings" and "investment" are used throughout in the "Robertsonian" sense: savings are income of last period minus consumption of this period, investment is expenditure on capital goods in this period.

decision on the part of the community to hold one form of money instead of another, and not as a result of a decision to save a larger portion of income. Similarly, there is some justification for regarding an increase in total volume of time deposits as the result of a decision on the part of the community not to spend its entire income during the current income period; that is, as the result of a decision to save more.

An original increase in time deposits through a shift from demand deposits or currency could result in a multiple expansion of loans through return flow to the banks in the form of new time deposits. Each time a recipient of the proceeds of expenditure of loans decides to make a time deposit, however, he has made a decision to save. The spread between income and expenditure on consumption (=saving) grows *pari passu* with the loan expansion, even if consumption merely fails to keep pace with the growth of national income. Thus if equilibrium demands that savings and investment be kept equal, a banking law requiring 100 per cent reserves against demand deposits, and no reserves against time deposits, has much to recommend it.⁵

Other Claims for the Plan

Other advantages claimed for the 100 per cent reserve plan are extravagant, resting either on special forms of organization of the scheme which have offsetting disadvantages, or upon improvements which could be obtained with less radical reform. For example, it is pointed out that the scheme would eliminate the disturbances that now result from shifts of deposits from bank to bank.⁶ Virtually all of these disturbances could be avoided by a system of branch banking with equalized reserves. Other proponents of the scheme have argued that it would completely eliminate bank failures. It is true that the unfavorable effects of withdrawal of demand deposits disappear under the 100 per cent plan. Withdrawal of demand deposits would lead to no contraction of the money supply. However, there could still be "runs" on time deposits, which could necessitate calling of loans and thus could result in deflation. While the amount of loans that would have to be recalled would be somewhat less than under the present system, there is evidence that withdrawals by holders of large time deposits were more serious in the case of some of the bank failures in the thirties than runs on demand deposits. The very fact that their funds cannot be immediately withdrawn makes time depositors more nervous. It might also be pointed out that the danger of runs could be much diminished by unlimited insurance of deposits.

⁵ The significance of this distinction between demand and time deposits with respect to their relative ability to support an increase in loans without leading to disequilibrium seems to have been missed entirely by Brown (*loc. cit.*, pp. 309-310). He argues that demand depositors are the true "lenders," and thus implies that they are all savers; but such is surely not the case.

⁶ For example, A. G. Hart, "The Chicago Plan for Banking Reform," *Rev. of Econ. Stud.*, Feb., 1935, p. 108.

It is against such exaggerated claims for the 100 per cent scheme that most criticisms have been directed. For example, it has been argued that the scheme provides a means of retiring the public debt, since the reserves needed to support the existing volume of deposits could be supplied by purchasing government securities from the banks.⁷ The following disadvantages of this proposal can be pointed out:

(1) By depriving banks of income earning assets, as well as limiting their lending powers, you force them to impose high service charges on demand deposits. These high charges would in turn deflect methods of payment into channels less subject to government control, such as use of private debt for payments.

(2) By absorbing those assets traditionally regarded as "best," bankers are induced to rearrange their portfolios with resulting disturbances in the capital market. It is also possible that the necessity of parting with the best assets would diminish confidence in time deposits and lead to a conversion of time deposits into demand deposits, with probable deflationary effects.⁸ However, if the added protection against time deposits through the rise in stockholders' equity, as time deposits decrease, proves insufficient to check such conversion, the extension of deposit insurance to time deposits would provide a remedy.

(3) The decline in volume of government securities held by the banks would make open-market policy more difficult to carry through effectively.

These particular difficulties could be avoided by outright gifts of reserves, or by permitting the banks to hold bonds as reserves and to draw interest on them.

Under the first plan, either the banks must be subsidized by the government, adding to the fixed charges of the Treasury, or they must levy high service charges, with the dangers mentioned above. Under the second plan, an interest burden which has no counterpart in income-creating government expenditures is made a permanent feature of the banking organization.

Similarly, the claim that the 100 per cent reserve scheme would eliminate cycles is excessive. One hundred per cent reserves cannot prevent increased holding of cash balances, and the resulting deflation. It cannot stimulate expansion in depression. It could only be argued that by preventing over-expansion, the uncertainty which gives rise to increased holdings of cash is less likely to arise, and the necessity of stimulating recovery is less likely to develop.

It could be argued that the 100 per cent system is at a disadvantage as compared with the present system whenever an increased demand for cash balances appears. Under the present system, such "hoarding" can be offset

⁷ For example: Irving Fisher, "100 Per Cent Money and the Public Debt," *Econ. Forum*, Spring, 1936.

⁸ It is barely conceivable that if the new demand deposits are used to increase consumption, the deflationary effects of calling loans will be offset.

by an expansion of loans based on the rise in voluntary demand deposits. However, whenever a strong deflationary movement sets in, the reduction of those interest rates which the banks can control usually proves insufficient to stimulate borrowing. Under either reserve system, such movements can be adequately offset only by Treasury operations. On the other hand, there may be seasonal or temporary increases in voluntary demand deposits which could be offset by loans under the present system, and which under the 100 per cent reserve plan might lead to an unnecessary deflationary movement. It might be advisable to retain fractional reserves for the federal reserve banks, and let the Board use discretion in expanding and contracting member bank reserves through rediscount, for the purpose of offsetting fluctuations in demand for idle cash balances. This modification, however, robs the scheme of its "automatic" character, and exposes the economy to the dangers of unwise decisions by the board of governors of the federal reserve system.

Limitations of the Plan

There are two limitations on the capacity of the 100 per cent reserve scheme for preventing over-investment. First, there is a strong possibility that new lending institutions would grow up duplicating the present partial reserve system, or that bankers would find a way to make savings deposits available to more than one borrower simultaneously.⁹ Control of the banks outside the system presents a serious problem, and the requirement of 100 per cent reserves only for member banks would drive banks out of the system. Such developments could be met by revision of the law when they occur. Second, so long as the United States is not a closed system, we are subject to influences on our economic structure from abroad. Limitations on lending by our own banks would bring capital from foreign money markets whenever the demand for loans was high, and over-expansion based on foreign loans could result.¹⁰ Some law could be drafted to prevent such capital inflows, but it would be likely to prevent desirable world distribution of the capital supply in the process.

A more serious objection is that some demand deposits are really savings in the relevant sense, and some time deposits are not savings in the relevant sense. Some people leave deposits on demand through an entire income period, in excess of the balances needed to meet emergencies. When such deposits, which are really savings, are not offset by investment, the national income is kept lower than need be.

However, if there is a strong demand for loans, and insufficient reserves

⁹ This point is made both by Brown (*loc. cit.*, p. 312) and Thomas (*loc. cit.*, p. 317).

¹⁰ Presumably no disturbances would arise so long as voluntary savings equal to the increased American investment took place *somewhere* in the system; but if other countries expand on a fractional reserve basis, over-investment and consequent breakdown in the system as a whole is still possible.

to meet this demand, loan-rates of interest will rise, enabling the banks to offer higher rates on time deposits and so attract savings out of demand deposits. It is questionable whether any demand deposits that cannot be lured into time deposits by higher interest rates are savings in the significant sense. When the problem is not one of offsetting savings, but of offsetting hoarding, an increase in quantity of money rather than an increase in *investment as such* is the proper solution.

Other people withdraw time deposits before the end of an income-period; if loans have been made on the basis of such deposits, they must be recalled or reduced, with disturbing effects. This difficulty could be largely avoided by imposing a minimum notice period for withdrawal of time deposits equal in length to the average loan period, or by having bank customers themselves purchase liquid assets such as commercial paper, the banks serving only as brokerage houses, and eliminating savings accounts altogether.

It might be questioned whether the volume of voluntary savings that can be achieved would be sufficient to obtain a high level of national income even if it were all invested. On the other hand, the proper solution for an insufficient volume of savings is surely not "forced" savings through credit inflation. Additional loan funds could be obtained by banks either by selling additional stock or other securities (which would tend to raise interest rates) or by raising rates offered on time deposits, and raising loan-rates of interest accordingly. An insufficiency of loan-funds will appear only in face of an increased demand for loans; and does not equilibrium theory tell us that with an increased demand for loans interest rates should rise?

Of course, if it is true—as some of the Keynesian literature implies¹¹—that business cycles are fluctuations *above* the equilibrium level of employment and income, we ought not to oppose *any* tendency to expansion. A return to depression after a period of prosperity is better than continual depression. In such a world, the 100 per cent plan would have no place. My own guess is that this view grossly underestimates the scarcities of certain key resources, such as skilled labor, and the difficulties of overcoming bottlenecks by continued monetary expansion. It seems too much to hope that the release of resources through the development of bottlenecks will be entirely offset by expansion in other parts of the economy, under the impetus of credit inflation. Once it is admitted that a level of employment can be attained where parallel expansion of all stages of production is no longer possible, it follows that there is a limit to safe and desirable monetary expansion. Once such a level of employment is reached, inflation-financed investment could continue indefinitely only if the con-

¹¹ For example, J. M. Keynes, *General Theory* . . . , pp. 322-323.

sequent rise in money income called forth a volume of new voluntary savings equal to the entire increase in investment and income—a result that is impossible to imagine.

In this connection, it might also be pointed out that for the banking system as a whole, slightly more than half of total deposits at the present time are in the form of time or savings deposits, which would provide the basis for a substantial expansion of loans even under the 100 per cent reserve system. If these time deposits, plus those that could be attracted by raising interest paid on time deposits, plus the funds flowing directly into the capital market, do not provide enough funds for a high level of investment, there is no remedy within the banking system. Moreover, it could surely be questioned whether under present conditions more *consumption* would not do much more to expand investment than more *saving*.

A system which expanded loans only to the extent that people voluntarily forego consumption would result in a fall in the price level whenever output increased.¹² Since falling prices have an unfavorable effect on business expectations, the 100 per cent scheme might therefore prevent the attainment of full recovery. There is a dilemma here; we may have to choose between weak recoveries and dangerous booms.

Conclusions

While too much has been claimed for the 100 per cent proposal, it is also true that most criticisms are merely objections to such claims. The plan is not a cure-all, and it may even be less adapted to offsetting minor fluctuations in demand for cash balances than the present system. It will aid materially in the control of booms. Under present conditions, when the large volume of excess reserves threatens inflation, and large armaments expenditures promise a high level of employment, a step in the direction of 100 per cent reserves is worthy of serious consideration.¹³ On the other hand, our immediate problem is still to stimulate investment rather than to check it, and for that purpose the 100 per cent reserve scheme is no help.

BENJAMIN HIGGINS

Harvard University

¹² Brown (*loc. cit.*, pp. 309, 312) implies that the 100 per cent plan is designed to *stabilize* the price level; such is not the case. It is true that some supporters of the plan, such as Irving Fisher, have linked "a stabilized price level and stable business," but the link is not justified. It is not clear whether Brown himself identifies stable prices with equilibrium or not.

¹³ Thomas (*loc. cit.*, p. 318) says that "the 100 per cent plan offers nothing in avoiding undue expansion of credit that is beyond the power of the monetary authorities under the present system." He offers two remedies for excess reserves. The first is a rise in reserve requirements—but that is at least a step in the direction of 100 per cent reserves. The second is sterilization of gold; but sterilization of gold adds to the interest burden without adding to national income, which is precisely the grounds on which the bank-subsidization version of the 100 per cent plan is criticized.

COMMUNICATIONS

Timing Pump-Priming Expenditure

If we assume that government expenditures are to be planned to influence the over-all level of business activity or national income, the timing of these expenditures becomes a major problem. One aspect of the problem is sudden curtailment of the expenditure, as typified by the American experience in 1936-37. Another, on which the object lesson appears to be less clear, is the comparative influence of expenditures made at the first sign of wavering levels of activity or after the decline begins to level off. This issue is brought to the fore by Mr. Samuelson's article in the September, 1940, issue of the *Review*, in which he holds that there is a growing reaction in the literature against delaying expenditures until the bottom of the depression has been reached.¹ The present writer believes that important logical considerations are overlooked.

The growth of maladjustments during cyclical upswings and downswings is generally accepted by students of the problem. Not only do maladjustments accumulate during these movements, but the movements away from extremely low or high levels tend to correct maladjustments which existed when the movement began. Evidence exists for believing that the unbalance at peak levels includes not only *some* abnormal wage rates and high costs, granted by Mr. Samuelson, but many other maladjusted situations: an unusually large number of monopolistic agreements, a reduced interest in new technological methods, a degree of inefficiency, an unusually wide area of weakly supported vested interests, disproportionate production of durable goods, excessive valuation of equities in comparison with bond and mortgage prices, disproportionately high rates on short-term as opposed to long-term loans, a disproportionately large part of the income flowing to speculators and risk takers. In all of these cases a decline which occurs and is expected to continue tends to produce readjustment as it occurs. Instead of the decline amounting to an industrial lockout, as Mr. Samuelson states when assuming that only wage-rate and other cost reductions are involved,² there is at least presumptive evidence for believing that a rather general readjustment takes place. Essential readjustments were staved off for a time in 1929-32, bolstered by the belief that no readjustment was needed.

Harrod's idea of the "breathing space," during which government expenditures may prevent the onset of a depression, represents the most carefully worked-out defense of early expenditure.³ His analysis is principally deductive. Before accepting the policy implied as expedient, the American experience should be examined from a more empirical point of view. The two declines in the middle twenties—1923-24 and 1927—were cut short by credit policies of the federal reserve system, exceptionally favorable agricultural relationships, and the stimulus provided by foreign investment whenever domestic business declined (as a result of the foreign-trade policy existing at the time). Those declines were promptly halted, but everlasting prosperity was only a dream in the minds of contemporaries. Is there not reason to believe that the excessive maladjustments of 1929 were related to the inadequacy of readjustments in 1924 and 1927?

Several major issues are involved. (1) Few hold that complete stabilization

¹ Paul A. Samuelson, "Theory of Pump-Priming Reexamined," *Am. Econ. Rev.*, vol. 30, Sept., 1940, especially pp. 495-96.

² *Op. cit.*, p. 496n.

³ See R. F. Harrod, *The Trade Cycle* (Oxford Univ. Press, 1936).

of industry can be achieved. Whatever the scheme of control employed, allowance must be made for margins of tolerance. Progress will be uneven, fluctuating about the line of growth. Hope to prevent all decline is visionary.

(2) The existence of a tendency toward cumulative movements of a dis-equilibrating kind is usually recognized. Only when a procedure is set up which promises to neutralize all downward reinforcement should hope be held out for the prevention of a downswing. This leads naturally to the argument for waiting until the most important reinforcing forces have spent themselves before increasing expenditures for the purpose of increasing national income.

(3) Distinction should be made between producing higher national income temporarily and maintaining a reasonably high level of national income over a period of years. Because a given policy of control definitely promises to produce a higher level of national income for the time being is no reason for endorsing it.

(4) Favor of the multiplier principle as opposed to the acceleration principle reveals causal implications. The question is whether consumption activity is the result of capital activity, or vice versa. Most probably, cause proceeds both ways. The failure of industry to increase capacity more than just enough to accommodate increases in consumption expenditure in 1935-37, thus providing a fit for the acceleration principle when the multiplier principle was tried on the largest scale in history, should give pause for thought. When it is realized that this was a period of upswing, experience can scarcely be held to demonstrate the likelihood of ultimate success in stabilizing business at a tolerable level if huge government expenditures are made during the early part of the downswing.

ELMER C. BRATT

Lehigh University

A Note on Business Concepts and Economic Theory

I

William W. Hewett wrote in the June issue of this *Review* that customary courses in the applied fields "have lost contact with their major objective—the application of economic theory—and have become adjuncts of the school of commerce rather than the social science of economics."¹ This failure to use economics as a "unifying agent," he says, should be charged to specialists in these applied subjects rather than to any shortcomings of the theory itself. Few will not agree that such a challenge is timely and well-put. I venture, however, to introduce a subject upon which altogether too little has been written. These remarks arise not from the use of theory in applied fields, but from a consideration of the relationship in somewhat reverse order.

Theory courses themselves should maintain contact and be reconciled in a better manner with the concepts, conventions and practices of the applied subjects. The theoretical concepts of economics must be brought to actual grips with those of business, accounting, and law.² It is perhaps the failure to bring these together in a satisfactory manner which causes students in professional schools

¹ June, 1940, p. 333.

² Hewett's work in the field of income and wealth makes me believe that he would be the first to agree that this challenge is of equal importance to the one made in his article.

to speak often of economic theory as being unreal, impractical, and removed from everyday business practice.³

II

The accountancy student may be used as an example of a large group of students specializing in other commercial fields, but with the same basic training and concepts, who make up a substantial part of the classes in almost all of the "principles" and theory courses. He may memorize definitions of "capital," "income," "profits," and "rent" in a theory course; yet in the accounting laboratory he works out results of an entirely different character and calls them by exactly the same names. Regrettably, this confusion exists for the concepts which are of primary importance to him—those of "income" and "profits." The term "profit" cannot be adequately explained by taking what we call "accounting profits" and simply stating that from this sum we subtract imputed interest and wages of management. Not only must the concept of "income" in the average textbook on economics be expanded; but also agreement among economists themselves must be brought about in order to make theory a "unifying agent."⁴

The accounting student wants to know in what way economic theory recognizes the concept of a period of time (accounting period) in reckoning income, or how the necessary tests for realization in a particular period differ from those used by the accountant. He is taught that there is not one "interest rate," but I am sure that he would be confused if he had to select one of the many rates which could be found in the present money market for the computation of imputed interest on capital. Where could the student find an example in an elementary textbook showing the amount in dollars to be selected from the balance sheet of a large corporation on which this interest is to be calculated? If particular prices have gone up and the inventory is now worth more than its original cost, is not the accountant clearly in error in not adding what he seeks to call an "anticipated profit"? If there has been a rapid and substantial change in the general price level, has not the accountant so hopelessly mixed dollars of so many values in his calculations as seriously to distort the profit and the financial position? If income is defined as a "net accretion between two points of time," the next step must be to determine the valuations upon which this income is based. If both the economist and the accountant agree that a charge for the replacement of capital is necessary, in what way is the straight-line method of depreciation generally used by accountants deficient? How would the valuations made by the economist and the accountant of a machine used in a factory differ at the end of a period? Are economists willing to accept "operating expenses" as being substantially the same as such phrases as the "necessary costs of acquisition"? The only way to realize the many questions which might be asked is to study the work of the specialists in the fields of income and taxation.

The concept of income is only a beginning, for there are equal difficulties with some of the other fundamental concepts such as those of the "entrepreneur," or "capital," and with the problem of capital valuation.⁵ The field of "costs" seems

³ The approach by Fabricant in the chapter on profits in the textbook by Spahr and others illustrates development toward more satisfactory treatment.

⁴ Paul H. Wueller discusses the disagreement among such writers as Seligman, Fisher, Haig, Plehn, Hewett, and others in his articles on "Concepts of Taxable Income," *Pol. Sci. Quart.*, Dec., 1938.

⁵ A report of the American Institute of Accountants lists 31 phrases using the general term "value." American Institute of Accountants, *Accounting Research Bull.*, no. 7, Nov., 1940, p. 2.

practically untouched in the matter of reconciliation. Where there is a decision to build a plant and provide the necessary labor force to run it, is the student to be blamed if the entire idea of the application of marginal units of labor and capital appears to him to be over-simplified? It does seem that if economics is to be made realistic to the accounting student this part of theory must be expanded and presented in a unified and more detailed manner.

III

There are much broader implications to this whole question. In the past few years able economists have stressed the need for a study of the interrelations between the social sciences. Should not accounting be dignified by being "taken in" on this matter of interrelations? The relation between economics and accounting is necessarily intimate. If economists are to make intelligent use of the vast flow of quantitative data afforded by accountants, they must know how to translate these data. Anyone who has attempted to translate them understands the thorough knowledge required in both of these sciences.⁶

Valuable material bearing on this problem of interrelations has been in existence for years. Practical solutions for some of the difficulties of estimating income from accountants' reports have been made by economists and statisticians at the National Bureau of Economic Research and elsewhere. Irving Fisher's work on the theory of income stands as the one most nearly approaching the accounting concepts. Canning's *Economics of Accountancy*, published in 1929, represents a scholarly study of the difference in approach and concepts between the economist and the accountant. Although it is, itself, a contribution to theory, it probably has not been assigned for reading in many theory courses.⁷ New stores of material are constantly being added by the National Bureau of Economic Research, governmental agencies, and other organizations in dealing with such problems as the national income.⁸ Especially significant, it seems, are the writings of such economists as Kuznets, Hewett, Warburton, Fabricant, and Copeland. The trouble is that practically all of this material is now in form to be used only by the specialist. It needs simplification, if possible, and summarization.

Accounting appears to have now reached that state in its evolution where it could best profit by further exploration of interrelations. The early treatises on accounting for the most part dealt with bookkeeping. As the vast literature on accounting has poured from the press, the subject approaches a more mature status. In recent decades there have been extensive and costly research projects on terminology.⁹ Research institutes have been established.¹⁰ In fact, accounting literature now clearly shows that it has had sufficient time and background to begin to reflect in a more or less philosophical way about the entire nature of its

⁶ Individuals who know both fields are convinced that few economists are capable of doing this. J. B. Canning, *The Economics of Accountancy*, Ronald, 1929, p. 313.

⁷ Economists who enter this particular field will immediately see the acknowledgment which is due this work. It may be true that from the point of view of the average professional accountant he somewhat "overshot" the mark.

⁸ Such as *Studies in Income and Wealth*, Nat. Bur. of Econ. Research, 1938, and other publications.

⁹ Accountants do not, of course, agree among themselves; but the agreement is much better than that prevailing among economists.

¹⁰ I have in mind especially the work of the American Institute of Accountants. Its work on the index to accounting literature and on terminology are well-known. Recently the program has been extended to include a research bureau. Many universities contribute in much the same way.

work.¹¹ Evidence of the maturity of accounting will immediately be recognized in the recent work of Paton and Littleton in *Corporate Accounting Standards*.¹² Here great care has been taken to define accounting concepts, and the economist will readily see what a far cry this book is from a treatise on bookkeeping.

As explorations in this field are put into use and supplemented by further thought and study, the teaching of theory will certainly improve. An ideal conclusion would be that: (1) the advantage of the vast amount of reflective thought by economists would be put to work in affording accounting a better basis for testing such concepts as it is now attempting to propose and define; (2) actual refinements in accounting technique might be expected to follow; (3) further improvements in the methods for translating data from accounting reports and for testing economic principles by quantitative data should evolve; (4) accomplishment might be made in part of what economists have long hoped for, that is, economics might be made more realistic; and (5) there would result a clearer understanding by economists of the social implications of the present business and accounting techniques and conventions.

LAWRENCE R. CHENAULT

Hunter College

Principles and Practice in Public Finance

The writer feels warm agreement with P. G. Hudson's communication, "Principles of Economics Prerequisite to Courses in Public Finance," in the September, 1940, issue of the *Review*, which reemphasizes the importance of a sound grasp of economic theory as a foundation for teaching and understanding public finance, and with Professor Hewett's article, "Teaching Applied Subjects," in the June, 1940, issue. To Professor Hudson's list of prerequisites might be added the principles underlying international trade in their relation to excises and tariffs; and also wage theory in relation to the conflicting claims with regard to the incidence and effects of social security taxes.

While Professor Hewett's indictment of the writers of textbooks in public finance for their failure to integrate their subject matter with the main body of economic theory is largely valid, the necessity for the inclusion of extensive descriptive matter in such texts needs to be stressed. Undergraduate students come to the course without a frame of factual reference, and have to be supplied it to prevent the course in public finance from becoming a sterile exercise.

It is in connection with incidence that many writers on public finance have been most vulnerable in their theoretical treatment. Too often the treatment has been both inadequate and superficial. The admitted difficulties are unnecessarily increased when writers use loose and conflicting definitions. The fundamental problem of relating economic theory to the applied subjects goes much deeper than terminology, but it starts with that.

MARK C. MILLS

Indiana University

¹¹ For example, the work by Gilman on *Accounting Concepts of Profits*, 634 pages, Ronald, 1939, and Sweeney's contribution to the problem of accounting and the price level, *Stabilized Accounting*, Harper, 1936.

¹² American Accounting Association, monog., no. 3, 1940.

"Principles of Economics Prerequisite to Courses in Public Finance": A Rejoinder

This writer wishes to take exception to Mr. P. G. Hudson's comment "Principles of Economics Prerequisite to Courses in Public Finance" which appeared in the September, 1940, issue of this *Review*. Mr. Hudson contended that a knowledge of economic principles should be required of all students before exposing them to such a course as public finance. This knowledge would include an understanding of such concepts as (1) supply and demand, (2) law of monopoly price, (3) principle of diminishing utility, (4) theory of economic rent, (5) interest rate theory, (6) economic meaning of surplus and cost, (7) equation of exchange.

This writer believes Mr. Hudson's view, which is probably shared by a majority of teachers of economics, has fundamental weaknesses which are becoming more and more apparent. It is not always wise to introduce the subject of economics to students by presenting abstract assumptive concepts. The writer's reasons include the following:

- (1) Many students are discouraged from taking advanced economic courses dealing largely in factual concrete materials because of their inability to grasp abstractions presented in the beginning principles course. Would it not be better for a student to have a well grounded factual knowledge of the economic system than to have frozen knowledge of theory and no practical application at all?
- (2) Neo-classical economic theory has demonstrated its limitations in dealing with the complications of the post-World War I period. To assume that because a student has memorized these principles he is better qualified to study these complications is an assumption which needs careful re-examination.
- (3) The principles of economics widely required of all beginning students in economics are tools and tools only. It is easier to show a student how to use these when actually working with a particular subject such as public finance or transportation, than in a course of principles which is merely an abstract prologue.
- (4) The dissatisfaction and confusion now prevalent in the teaching of economics is evidence that the deductive method is not effective. Experiments in inductive teaching give some hope for the future. We have probably had the cart before the horse. We should teach public finance and allied subjects first, then proceed to generalizations. If we do this we may find many of our present principles redundant and useless.

JOHN BISHOP PARRISH

Southern Illinois Normal University

A Plea for New Texts in Beginning Economics

Those instructors in beginning economics who believe in theory as an essential part of any program of teaching and who at the same time have been forced to discard the classical foundations must find themselves in a serious dilemma. Recent contributions in the field of economic theory have pointed out that the theoretical structure of the classical economics is not only erroneous but highly mischievous when relied upon as a basis for policy.

While economists busy themselves writing esoteric tracts on minor points, the

beginning textbooks in the field continue to expound the Marshallian and neo-classical bias of a generation ago with patchwork references to monopolistic competition or the work of Keynes. No amount of rigor in the following through of specific analyses can make up for the fundamental contradiction which results from combining antagonistic elements in a textbook. Our "economic illiteracy" referred to by Professor Hansen in his introduction to Meade and Hitch, *Economic Analysis and Policy*, is primarily due to the lack of any unified theory which is sound and acceptable for undergraduate instruction. The blind adherence of the large majority of business-men to the preconceptions of an economics, essentially along classical lines, must be attributed to the direct or indirect influence of the teaching of college economics of the past fifty years.

In a period of uncertainty and transition when a feeling of disillusionment and futility is likely to overcome anyone engaged in teaching, there is a real need for a sense of validity. Economists, by and large, are teachers, although as Dr. Krueger pointed out, at the 1939 meeting of the American Economic Association, at the annual conventions one would think that their only absorbing interest was research. If economists give up the teaching of theory because of their loss of faith in the validity of the classical school but turn to non-unified and unrelated facts of economic life as the mainstay of an education in the subject, their influence will be virtually nil. It is only through the teaching of theory to present-day students that the ideas and preconceptions of a future generation can be affected. I have been able to find only a single book which follows the newer theory and is at all suitable for textbook use in beginning economics. This book is Meade and Hitch, *Economic Analysis and Policy*. While the book is a remarkable achievement in its synthesis of the newer theory, as a textbook it has definite faults. It is to be hoped that some alternative to Meade and Hitch will soon be available. This plea is written to give encouragement to any competent person who would undertake the writing of such a book.

VALDEMAR CARLSON

Antioch College

Note on the Terminology Convex and Concave

The terms convex and concave are used by economists in their descriptions of curves in different, sometimes confusing ways. Although nomenclature is a matter of convention and taste (if only definitions are properly stated and adhered to) a uniform language has great advantages. It may, therefore, be recommended to standardize the terminology concerning the shape of curves.

These three expressions are commonly found. Curves are (a) concave or convex "to the origin";¹ (b) concave or convex "upward" or "downward";² (c) concave or convex "from above" or "from below."³

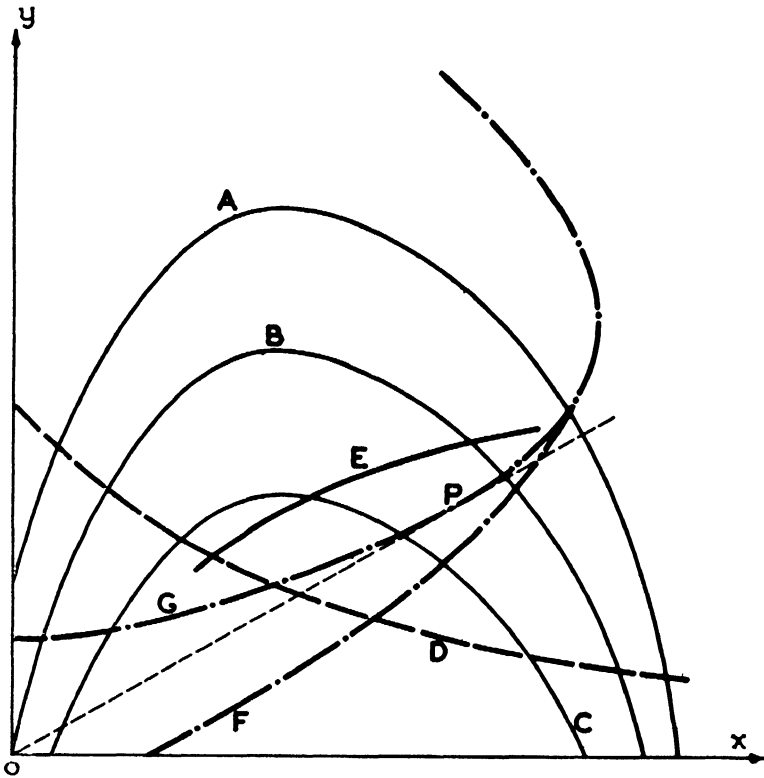
¹ See J. R. Hicks: *Value and Capital*, p. 14; G. Shepherd: "Price Discrimination for Agricultural Products" *Jour. of Farm Econ.*, vol. xx, no. 4, Nov., 1938, p. 794; R. G. D. Allen: *Mathematical Analysis for Economists*, 1938, p. 341; and others, but not Joan Robinson who uses the nomenclature convex or concave from above although Shepherd quotes her in his favor (J. Robinson: *The Economics of Imperfect Competition*, 1938, p. 23).

² See Jacob Viner: "Cost Curves and Supply Curves" in *Zeitschr. für Nationalök.*, Band III, pp. 23-46, who uses the term "upward"; Frederick V. Waugh, Edgar L. Burtis, A. F. Wolfe "The Controlled Distribution of a Crop among Independent Markets," *Quart. Jour. of Econ.*, vol. li, Nov., 1936, p. 10, who use the term "downward"; and others.

³ See R. G. D. Allen: *op. cit.*, pp. 184f and 191.

If terminology (a) is used, Curve D (on the accompanying graph) is clearly "convex to the origin," and Curve A "concave to the origin." But it may at first sight surprise many that Curve C, which has the same shape as Curve A, is not concave but "convex to the origin."

Terminology (b) is ambiguous because it is not clear without further specification whether the terminology means that the convex or concave side of the



curve looks upward or downward (Viner, Waugh) or that the curve appears to be convex or concave as the *observer* looks upward or downward.⁴

Terminology (c) is the one used by all mathematicians and therefore mathematical economists and most of the other economists.⁵ This terminology should be adopted universally for several reasons:

- (1) It is already used by most economists.
- (2) It is used by the mathematicians.
- (3) It can be defined by the negative or positive value of the second derivative or by the negative slope of the first derivative which is frequently used as a concept of its own in economics (marginal revenue, marginal cost).
- (4) The expression convex or concave downward or upward is in itself ambiguous, as it was pointed out.
- (5) The expression concave or convex upward (Viner) and convex or con-

⁴ Waugh's terminology is not improved by the fact that he adds in parentheses to "convex or concave downward" the opposite terminology, thus, "concave downward (convex)."

⁵ The expression "convex or concave from *above*" is more commonly used than "concave or convex from *below*" and therefore should be adopted.

cave downward (Waugh) are opposite to each other, and no standardization is reached.

(6) The expression convex or concave to the origin cannot be applied for curves which go through the origin, as the total revenue curve, the total cost curve, and many others (Curve B).

(7) It also cannot be applied to curves which are known only in part and of which it is unknown whether they cut the y -axis above or below the origin, as some cost curves (Curve E).

(8) Convex curves may become concave if shifted up or down or to the left or to the right without actually changing their shape, if the terminology convex or concave to the origin is used. The Curve C is convex to the origin, the Curve A is concave to the origin, and the Curve B is neither the one nor the other.

(9) The only type of curve for which the terminology convex or concave to the origin would have some advantages are curves which are double valued (*i.e.*, which have two y -values for each x -value) and which have no tangent from the origin (Curve F). Such curves, however, do not occur frequently in economics. (An example is the demand curve for an inferior good, or see the curves in Gottfried Haberler, *The Theory of International Trade*, 1937, pp. 155f.) If the curve has a tangent from the origin (Curve G) then the curve below the tangent point P is convex to the origin, and above the tangent point P it is concave to the origin. The terminology convex or concave to the origin is in this case more clumsy than the terminology convex or concave from above.

Except in very few cases of minor importance for economists the terminology convex or concave from above is the clearest, simplest and most generally used.

ADOLF KOZLIK

Iowa State College

Wars, Innovations and Long Cycles: A Brief Comment

Neither Dr. Kuznets in his article, "Schumpeter's Business Cycles," in the June, 1940, issue of the *American Economic Review*, nor Professor Bernstein in his article "War and the Pattern of Business Cycles," in the September issue, record adequately the possibility that modern war may play the dominant rôle in determining the relationship between the distribution of entrepreneurial abilities and the discontinuity in the propagation of innovations. Nor have they considered fully the possibility that modern war may be *the innovation* par excellence in the Schumpeterian system, and as such, the dominant cause of long waves in economic activity. Professor Schumpeter,¹ of course, has virtually disregarded both possibilities by means of the inadequate declaration that war is an external factor of declining significance to the cyclical processes of the capitalistic economy. For Dr. Kuznets, the emphasis on the external factor of war in the explanation of 50-year swings in economic activity is unsatisfactory in that it fails to demonstrate its "cyclical character in their tendency to recur as a result of an underlying mechanism." With Professor Bernstein, the suggestion is brushed off as a sidelight to his own important explanation of post-war business cycles in terms of monetary adjustments and maladjustments.

It is significant, however, that Kondratieff's three long waves are centered upon major wars, while at the same time, those innovations which "carry" Schumpeter's three Kondratieff waves reached their large-scale commercial application

¹ J. A. Schumpeter, *Business Cycles*, 2 vol., New York, 1939.

in the depths of the reaction from these major wars, in terms of prices and interest rates at least. During those periods of so-called "secondary" post-war prosperity (1922-1929) the expansion is based upon extraordinary demands for construction, equipment, and durable consumers' goods, respectively induced by war-time destruction, inadequate replacement, and the stifling of consumers' demands by means of "patriotism and high prices." The two most important periods of expansion in the long wave—namely, the pre-war prosperity and the secondary post-war prosperity seem related in some fashion to the three major wars since 1787. The approach to an equilibrium position in the decline of prices, costs and interest rates from the war-time peaks in the first two cases may have been the occasion for the outburst of innovation during the prosperity phases of the second and third long waves. On the other hand, the petering-out of the extraordinary post-war demands may have been the prime cause for the three extraordinarily deep depressions which have characterized the three long downswings, in 1820-25, 1873-78, and 1929-34. With the final liquidation of the effects of the war in the subsequent decline of prices and perhaps the lessened per-capita production of goods and services,² the situation again becomes favorable for the introduction of one of Dr. Schumpeter's "carrying" innovations; and the cycle is complete.

The tremendous implications of entire industrial (and agricultural) economies "machined" for the prosecution of a modern war, suggest a particularly important revolution. No longer, it would seem, are nations defeated in warfare to be forced to pay an indemnity in the standard monetary metal, in commodities or in cessions of the national territory, and then more or less left alone to resume in some fashion (as after the Franco-Prussian and World Wars), trade relations with the victorious nation and the outside world. They are rather, it appears, to be absorbed into the economic system of the victorious nation as slaves or helots, to work toward the greater satisfaction of the economic needs of the victorious power, to aid it in the prosecution of further "total" wars. War then, like the industrial innovation which competes industries out of existence, serves to compete whole nations out of existence, and in so doing changes the entire economic complexion of an interrelated world.

At the same time, without innovation in the armament industry, the present type of modern war could not have been undertaken. The coming of age of the airplane constitutes the innovation which has made possible the scale of the present war. Without the occurrence of the war (and the previous one) it might have been the innovation which could have "carried" the industrial system into the prosperity phase of the fourth Kondratieff wave.

It seems evident, then, that the interrelations of war, innovation and long waves are not negligible. Yet it is equally clear that that system which Professor Schumpeter has described has come to an end. It seems to have been a product of the Industrial Revolution (despite Schumpeter's hints of its extension back to 1640) and the modern industrial system. The destructive war of 1914-1918 dealt it a mortal blow, particularly in the monetary sphere. Has not the second World War already destroyed it completely? The end of the downswing of the third long wave may be justifiably dated in Germany and Italy with the re-armament programs of the early 1930's, and in the United States perhaps with the national defense program.

If it be argued that this is no proof of a cyclical mechanism or periodicity

² F. G. Dickinson, "An Aftercost of the World War to the United States," *Am. Econ. Rev. Suppl.*, March, 1940, pp. 326-339.

inherent in the occurrence of war, it may be answered that we may speak of long waves of prosperity or depression centered about a major war, without being concerned with the accidental timing of wars, or the periodicity of those two-phase wave-movements. If it be argued that it is then incumbent upon the economist to seek the causes of war, it may be answered with Wantrup,³ that those causes are best found in the fields of politics and psychology. The first and most important of the causes of war is war itself. The economist begins his study at that point.

ALBERT ROSE

University of Illinois

Note on National Income Measurement; a Supplement to Professor Whittaker on "Wealth and Welfare"

Professor Whittaker's penetrating note on "Wealth and Welfare" (*American Economic Review*, September, 1940, p. 580) prompts some additional comments which may reinforce his reasoning and open up some of its implications. He points out that an actual deterioration of individual economic welfare may be naïvely classified as "progress" because of the illusion which results from the conversion of free goods into marketable products. Moreover, economists who are aware of the limitations of market measurement may use language insufficiently guarded to warn laymen and legislators from drawing false conclusions. If this is true with reference to much of the literature dealing with individual economic welfare, and it is, it seems equally appropriate to emphasize some related flaws in the exposition of the conception and measurement of "the national income."

Foremost among the difficulties confronting those who attempt measurement of "the national income" is the really insurmountable obstacle of the inappropriateness of the market yardstick. All that the market yardstick can do is to yield a figure which shows the aggregate of all the incomes of the *individual* income recipients of the nation. Such an aggregate no doubt has some usefulness, but it is a mistake to label this aggregate a measure of "the national income." Every item of *individual* income entering into it is a relative and gets a particular numerical value from the fact that it assumes a certain position in relation to all the other individual items. The substantive figures of private accounting, all of which are relatives, are useful as control devices in determining comparative positions of individual business concerns, including households, one with another. But the sum of the operating results of all these individual units, that is the sum of a series of relatives, is certainly not a mere enlargement of individual items. Among other things, this means that above all we are not entitled to take this sum of individual incomes and assume that it indicates anything with reference to the income possibilities of the economy if the stream of income were to be distributed on a different basis. (Shades of Huey Long!) How much would sixty million tons of steel be worth if distributed equally among the gainfully occupied population? On beyond this lies the consideration that the physical items themselves would change if the claims upon the national output were reshuffled. Thus not only may the market measure fail to include many items which contribute to welfare, but it can give us only a very limited

³ S. von Ciriacy-Wantrup, *Agrarkrisen und Stockungsspannen, zur Frage der langen Welle in der wirtschaftlichen Entwicklung*. Berlin, 1936, introduction.

picture of the comparative well being of the national economy as a whole through time.

Alongside the fact that the numerical value of the sum of the individual incomes of the members of a community is conditioned by the character of the distribution of claims against the stream of products of industry, lies the consideration that the manner of determining the size of each individual claim is not uniform for all the income recipients. There are industries in which the income claims of the competitive individual participants in the industry are squeezed alum-dry, and there are other industries where protection of income structure may vary all the way from the delicate tissue of "gentlemen's" agreements to the virtually bomb-proof shelters of patent control, ownership of unique natural resources, or guarantee of legislative appropriation. This aspect of the problem perhaps reaches its most acute form when one considers the incomes associated with various branches of the government service. Certainly government activity creates numerous incomes for individuals, but it is not equally clear that these collections also represent *quid pro quo* contributions to the "national income." One need not associate himself with the "Tax Elimination Committee of the Universal Chamber of Commerce" to raise the question whether individual incomes drawn from taxing bodies represent *contribution to*, or *subtraction from*, "the national income." The fact is that sometimes they are one, and sometimes the other. An expenditure for government service *may* enhance the production stream which is "the national income" more than any similar expenditure in other directions. On the other hand it *may* represent nothing more than the sucking of parasitic leeches whose sole concern with the production stream is that it shall not dry up while they are attached to it. Unfortunately in dealing with the mass data which national income estimates require, there appears to be no conceivable way to separate the "productive" from the "predatory" activities, even if it were possible to do so in isolated individual cases. An unsolved problem need not be insoluble, but it is not likely to be solved by industrious manipulation of inappropriate data.

C. L. CHRISTENSON

Indiana University

The Conference on Science, Philosophy and Religion in Their Relation to the Democratic Way of Life

This conference held a series of symposia on September 9, 10, and 11, 1940 at the Jewish Theological Seminary of America in New York, at which sessions I had the honor to represent the American Economic Association. The conference was convened by a group of 80 founding members, who included among their number outstanding scientists and theologians. Approximately 150 learned institutions, the majority of national or international repute, sent delegates to the conference.

Convinced that the disintegration of European culture has roots deeper than the malevolence of Hitler, and further convinced that modern totalitarianism has been able to exploit the multifariousness of modern thought and life, the founding members hoped that the conference, by contributing to the integration of science, philosophy, and religion, could lay the groundwork for a true synthesis of modern thought. This achievement, in the opinion of the founding members, would contribute greatly to strengthening the democratic way of life.

Four symposia were arranged, relating to the social sciences and the humanities; philosophy; the natural sciences; religion and the philosophy of education. The speakers presented abbreviated versions of their papers that had previously been mimeographed and distributed; and much time was devoted to discussion from the floor. In addition, several founding members submitted papers to the conference on subjects within the province of their specialty or interest.

Although the points of view of the several speakers and discussants were highly varied, two major trends were discernible. Under the leadership of Jacques Maritain and Mortimer J. Adler and ably supported by a host of sympathizers, the philosophy of neo-Thomism was presented to the conference as offering the only unifying schema that could correctly order the relations of science, philosophy, and religion. The Thomists contended that only if a hierarchy of knowledge were recognized and only if truth—religious, metaphysical, and natural—could be distinguished, would it be possible to establish and maintain a tolerable equilibrium among science, philosophy, and religion. This position was vehemently attacked by the logical positivists, whose leader, Philip Frank, found major support among the scientists. This group admitted differences between the goals and the activities of science, philosophy, and religion, but it denied that speculation or revelation were the equal of experimental science as methods for the discovery of truth.

Reconciliation of these two approaches appeared impossible although to some degree at least the conflict was more verbal than real, since the logical positivists denied the "scientific" but not the "creative" aspects of religious and philosophical thinking. This concession was a victory for the Thomists, but their aggressive behavior at the conference suggested that they would not rest content until they had taken the whole of science into protective custody. The logical positivists sensed the danger and took measures to safeguard themselves. The struggle between the neo-Thomists and the logical positivists clearly illustrated the difficulties of establishing a synthesis in modern thought so long as modern life is typified by deep cleavages of culture, nationality, and wealth. Although the Thomists frequently referred to the *Summa* of Aquinas and urged it as a model for the contemporary world, their position appeared to this reporter historically unsound, for they failed to emphasize that the synthesis in medieval thought followed upon a prior synthesis in medieval life.

The conference clearly illustrated that the integration at the present time of science, philosophy, and religion was not only impossible but probably highly dangerous, since it could be achieved, if at all, only through the use of force. The conference further illustrated that distinguished scholars are frequently poorly equipped to diagnose and advise on social and political ills. However, the conference was not a failure. By facilitating the discussion of significant problems and by furthering the interchange of ideas among specialists, the conference helped to broaden the horizon and temper the pride of many savants, and in accomplishing this made a small but real contribution to the democratic way of life.

The conference has just published the papers that were prepared for the September meeting and the founding members are making plans for future meetings and publications. Your delegate believes that the members of the American Economic Association should watch with sympathetic interest the work of the conference.

ELI GINZBERG

Columbia University

Comment on Incidence of Taxation

In an article on the incidence of taxation, appearing in the December, 1940, issue of the *American Economic Review*, Mr. Grenville Holden uses an article of mine, published ten years ago in the same periodical, as a springboard for a dive into what is to him the clear pure waters of the classical analysis of incidence of taxation.

I do not mind Mr. Holden's selection of my article for that purpose. Indeed, he is in agreement with my analysis. Nor am I troubled by what he brings up out of the depths of economic thinking in the past. I am concerned only with his misrepresentation of what I said. Were this a casual mistake, I should probably ignore it. But the point is stressed, even to footnotes. Moreover, Professors Fagan and Buehler, who have commented on my article, are brought under the same criticism to which I am subjected.

Demonstration of the misrepresentation by a comparison of the relevant quotations is simple. Mr. Holden says (p. 775):

"In a note appearing in this *Review* in 1930, M. Slade Kendrick states that economists have always neglected the effects of public expenditures on demand and incidence, and his criticism appears to be accepted by Elmer D. Fagan and Alfred G. Buehler."

Here is what I said (*American Economic Review*, June, 1930, p. 226):

"Studies of the incidence of taxation commonly assume that the incidence of each tax may be examined without reference to the expenditure of the funds exacted by it. The usual discussion proceeds directly from a description of the tax to an analysis of its incidence under the conditions of supply and demand relevant to a consideration of this incidence."

Not many words are needed to point out the difference between the phrase, "have always neglected," and the phrases, "commonly assume," and "the usual discussion." Moreover, my article was clearly not in the historical emphasis. I ought not, therefore, to have to suffer for the sins belonging to that approach. And, incidentally, my manuscript was published as an article, not as a note.

M. SLADE KENDRICK

Cornell University

Capital Expansion, Employment, and Economic Stability: A Reply to H. H. Villard

In his review of the above book in the December, 1940, issue of the *American Economic Review* Mr. Villard not only misses the fundamental purpose of the analysis but he also definitely misquotes and misstates our position with respect to important questions.

He quotes from the jacket that the volume contains "a comprehensive analysis of the phenomenon of idle money, idle factories, and idle men," to which he adds,—i.e., of the business cycle. The phrase, i.e., of the business cycle, provides the key to Mr. Villard's dissatisfaction with the volume. He is evidently altogether certain that the business cycle, properly interpreted, can explain everything. Because *we* do not approach the problem from the point of view of cycle theory he says the book lacks focus—which merely means that it has not the focus which he would have given it. It *is* focussed upon the factors which many have advanced in explanation of the failure of the recovery movement which began in 1933 to materialize into full-fledged prosperity—some finding the explanation in

restrictive government policies and others in the coming of economic maturity.¹

The quality of Mr. Villard's review may be indicated by the fact that he says, in the first paragraph, that the purpose of the review is not to appraise our specific recommendations with respect to modifications of government policy; but he nevertheless concludes in his last paragraph that since his own (unpublished) analysis shows that government policies have on the whole been favorable to recovery, our "contrary conclusions must remain unsubstantiated opinions." It would seem to be incumbent upon any reviewer to reveal the shortcomings of the analysis *under review* rather than to dismiss it by reference to an analysis of his own which has not as yet become available for others to examine.

On the factual side, Mr. Villard's analysis is on the same plane. He says that it is never made clear whether the term "investment outlets" means security flotations, actual capital formation, or something else. The fact is that every chart dealing with this phase of the problem bears the specific label "*security outlets* for investment funds." Moreover, a section is devoted to showing that the volume of security flotations—whether public or private—differs widely from *capital formation*, which is always clearly used to mean physical plant and equipment. Notwithstanding this clear differentiation between security flotations and capital formation, the reviewer thinks it confusing or misleading to include public security issues under "*security outlets* for investment funds." Mr. Villard's difficulty—of which he is unaware—arises from the fact that his own underlying assumption is that *investment* is supposed to be identical with *capital formation*. The truth is that *money savings*, *investment in securities*, or other instruments, and *physical capital formation* are separate operations and independent variables.²

Again, the reviewer quotes us as saying, on pages 190-91, that "saving has been in excess of investment since the World War." What we say is that "there was an excess of aggregate *money savings* in the *late twenties* . . . and [that] the supply of available investment money in recent years has greatly exceeded the meager volume of new security flotations." Mr. Villard not only changes the dates but he drops the word "money" before "savings."

The reviewer also tries to make it appear that we have deliberately misrepresented Alvin Hansen's position as stated before the T.N.E.C. hearings. Everyone who has followed developments knows that Dr. Hansen was selected to sound the keynote in support of the thesis that the decline in the rate of population growth is ushering in the age of economic maturity. Mr. Villard, however, says that our quotation from Hansen does not indicate that he believes that population growth has been a *controlling factor* in economic expansion, or is the only impetus to economic growth. He says Hansen "makes it quite clear [in the quotation given] that the economic growth of the nineteenth century involved not only *population growth* but also *expansion* into new territories" (italics ours). Mr. Villard evidently regards population growth as one factor and expansion into new territories as a second. Hansen was not, however, talking about two factors but only one. The part of the quotation which Mr. Villard omits clearly indicates that Hansen was referring to the growth of population and *its* expansion into new

¹ That Mr. Villard's thinking is completely grooved in cycle theory is further evident from the fact that he refers in a footnote to the cycle theory put forth in the recent Brookings series on "Income and Economic Progress." That series, as was explicitly stated, was concerned with the factors involved in continuing economic progress; and the business cycle was only incidentally involved.

² This same elementary confusion underlies Mr. Villard's criticism of Moulton's *Formation of Capital*.

territory. Moreover, Villard omits the decisive statement, "This *one* central fact of growth and expansion *dominated the whole* of economic life" (italics ours). As we point out, Hansen at one place notes that the enormous capital outlays of the nineteenth century were "in the first instance conditioned by new technological developments"; and that only about one-half of the capital outlays were due to "the growth of population and its expansion into new territory." But his fundamental conclusion with reference to the great transition which is now occurring seems obviously based upon the statement that population growth *dominated the whole* of economic life.

In the light of this discussion it is of interest to note that Hansen specifically repudiates Villard's conviction that present conditions are merely manifestations of the ordinary business cycle. He holds that "it is a unique phenomenon. It cannot be explained in terms of ordinary business cycle analysis."

HAROLD G. MOULTON
GEORGE W. EDWARDS
JAMES D. MAGEE
CLEONA LEWIS

Brookings Institution

REVIEWS AND NEW BOOKS

General Works, Theory and Its History

A History of Economic Ideas. By EDMUND WHITTAKER. (New York: Longmans Green. 1940. Pp. xii, 766. \$4.00.)

In monographic studies we have long employed doctrinal journeys and we have regarded this method of exposition and analysis as useful and appropriate. It is the method of Böhm-Bawerk and Cannan, a method employed long before them in the history of law, philosophy and theology. I dare say every teacher of the history of economic thought and every conscientious graduate student has at one time or another tried to organize his knowledge of the history of ideas by constructing doctrinal genealogies. But no one before Whittaker, to my knowledge, has attempted to write a full-sized history of economic thought in the form of a series of doctrinal journeys. It is a good try and I want to commend Professor Whittaker for the valiant effort he has made to hew out major doctrinal paths through the boundless forest of economic ideas that centuries of thinking have produced.

Yet they can only be paths. When they are well separated one from another, pre-occupation with one doctrine must perforce make the reader neglectful of the contemporaneous development of other intimately inter-related doctrines. Documentary sign-posts labelled, for example "Remember what we saw approximately here on Path III" or "Look for the impact of this theory of value at about this point on Path XIII" may or may not be helpful. Back and forth we must go again and again, from Plato to Pareto, from Hales to Hayek, from Solon to Sombart. Some journeys are quick, some long; some are reasonably continuous, others have thousand-year jumps. Several doctrinal paths overlap so frequently with others that much ground already crossed must be re-traversed. Yet these are the inescapable methodological difficulties that beset Professor Whittaker in his courageous attempt to follow what he calls an "ideological method."

Professor Whittaker is too good a scholar to fall into the error of assuming that ideas sprout in a vacuum. He has therefore with great care attempted to indicate the environmental forces which nurtured economic ideas. Anthropological, political, theological and philosophical evidence is interwoven with economic history in an effort to demonstrate the multiple influences at work in the evolution of economic ideas. Here Professor Whittaker shows his broad and competent scholarship and his appreciation of the all-togetherness of history. Indeed his excursions into economic history are some of the best portions of his book. Here, moreover, his literary style is not impeded by the necessity of quotations, a very real difficulty elsewhere. For Professor Whittaker has not yet mastered that very difficult art of letting his authors speak their own words within the fabric

of accomplished prose, the way Tawney does, for example, or Hollander.

Writing the history of economic thought is almost as hard as unscrambling eggs and one must not be unreasonable. Professor Whittaker feels that a concern with schools is inadequate although it "has some merit." Doctrinal journeys, I willingly concede, also have some merit. But I do feel that there is more lost than gained by fragmentizing the contributions of a writer or a school, and by distributing them among sixteen chapters. I admit, of course, that ideas on property, wealth, or even wages, may profitably be studied in their chronological enchainment. The only difficulty is that there is seemingly no way of inter-stitching these warp-threads into something that should be a fabric.

Since Professor Whittaker has chosen to write an "ideological" history, I can merely ask whether he has done as well as his methodology will permit. A chapter on national income would have been most welcome; so would one on the theory of business enterprise. Neither of these topics is neglected; some of the materials are sandwiched into other chapters. I suspect that Professor Whittaker considered the possibility of much more refined taxonomy and decided that big bundles were preferable to small. Yet, here, I think, he failed to get the best possible results from his chosen method. The real virtue of doctrinal journeys, I should think, is that they can be taken often and that they can be long or short. Are there not, for example, only a few journeys that one can take from Plato to Keynes? By contrast, are there not more and more, shorter and shorter, journeys that may be taken as the sum-total of economic knowledge grows more precise and elaborate? I should never attempt to write a history of economic thought by the "ideological" method; but if I did, I should have dozens of chapters of varying length. For economic knowledge is like the tree of knowledge; it has one trunk and many, many branches.

E. A. J. JOHNSON

New York University

An Introduction to Monetary Theory. By LESTER V. CHANDLER. (New York: Harper. 1940. Pp. xi, 216. \$1.50.)

This book is well adapted to fulfill the primary purpose for which it is designed—as an undergraduate textbook on modern monetary theories. The reviewer speaks from experience, having used it as one of three texts in an elementary course in money and banking. Even in textbooks of more than 1,000 pages, the treatment of monetary theory is generally unsatisfactory, yet undergraduates can hardly be assigned journal articles on monetary theory. This inexpensive text furnishes the answer to that problem.

Professor Chandler has a faculty for explaining complicated theories so

that students can comprehend them and understand how they relate to one another. Instead of leading the reader through a maze of conflicting views or exploring the by-paths of individual variation amongst monetary theorists, he explains in simple terms the basic principles of the leading types of modern monetary theory: both the transactions and cash-balance forms of the quantity theory, commodity theories, and the income and expenditure approach as represented by such writers as Keynes, Robertson, and the younger Swedish economists. Attention is concentrated upon the main, vital issues in a way that should also prove instructive even to graduate students and teachers of the subject.

Every chapter in the book is well done, although perhaps the chapter entitled "The income and expenditure approach and the business cycle" could have been less general and more closely integrated with other chapters. On only one debatable point would the reviewer be inclined to disagree with the author. In discussing various objectives of monetary policy, he seems to favor the point of view of Hayek rather than of Keynes, that any attempt at stabilization of the price level when "real costs" are decreasing ("real efficiency of production" is increasing) would lead to abnormal profit margins and disequilibrium. Such abnormal profits presumably must be explained by the lack of effective competition. If producers could make an abnormal rate of return on a stable price level, presumably the same set of circumstances (strategic advantage, bargaining power, competitive and monopoly position, etc.) should permit them to make a similar high rate of return on a gently falling price level. And if the existence of monopoly power is the reason for preferring a declining price level when productivity is increasing, then the objection is a practical rather than a theoretical one, and from a practical point of view labor tends to press for higher wages with increased productivity especially if costs of living are not declining.

However, Professor Chandler in this book is explaining rather than arguing or defending his own views. As an explanation of various types of monetary theory his book is an excellent piece of work.

RICHARD A. LESTER

Duke University

La Théorie Quantitative de la Monnaie. By PAUL LAMBERT. (Paris: Sirey. 1938. Pp. 271.)

This book is divided into three parts: first, research into the theory, its history and contemporary forms; second, preliminary studies on value and exchange and on the laws of supply and demand as related to money; and, third, errors and truth in the quantity theory. There is appended a good classified bibliography.

Dr. Lambert believes the need for this work lies in the fact that each quantity theorist has confined himself to some one part only, and that there is available no unified analysis of all the variants of the theory. Also, the all-pervasive character of the theory permits analysis of no economic problem whatsoever, without in some way resorting to it.

There is no one quantity theory, but rather a number of "quantitative principles," of extreme diversity and each prepared by a proponent for his own particular need. However, all the theories include one or more of the following concepts: equation of exchange, law of proportionality, passiveness of the general price level, and material, automatic and mechanical influence of the quantity of money and its velocity upon prices. Certain definite conclusions which can be drawn from an objective study of the quantity theory are: (1) the equation of exchange and the equation of real balances are identities; (2) variations in the general price level are not proportional to, although influenced by, variations in the quantity of money; (3) the general price level is never passive, therefore attempts to vary prices by varying the value of money are bound to fail; and, (4) quantity of money, velocity of circulation and metallic stock are important but not exclusive motivating factors in changing price levels, and can be modified, strengthened and even offset by other factors. Dr. Lambert concludes that there is no simple or exclusive explanation of prices—quantitative or anti-quantitative.

The quantity theory is of ancient heritage, and indeed goes back even to Xenophon and Paul. Dr. Lambert traces the significant changes, showing the introduction of the concepts of exchangeable goods and services, proportionality, general price level, unlimited demand for money, *ceteris paribus*, real goods and services, velocity of circulation, influence of psychology, chain of response from consumption goods to production goods and vice versa, and the concept of money as solely an intermediary.

Dr. Lambert defends the equation of exchange as a precious instrument for research, and develops in great detail the evolution of the equation. He accuses the *ceteris paribus* reservation of being a most fecund source of illusory solutions. A point well taken is that no one imagines a price of a single commodity to be passive, hence why should one think of as passive the general price level, which after all is the resultant of a whole series of supply-demand-price curves for individual commodities? Indeed, every element in the equation of exchange is shown to be active as well as passive, cause as well as effect; and, in addition, all the factors can be acted upon similarly or divergently by some other influence extraneous to those in the equation itself.

JAMES D. PARIS

Great Neck, New York

Idle Money, Idle Men. By STUART CHASE. (New York: Harcourt Brace. 1940. Pp. ix, 252. \$2.00.)

Mr. Chase writes well, with concreteness and simplicity. His book consists of essays generally related to each other; many of these were originally published as magazine articles; and the most important materials come from hearings of the Temporary National Economic Committee. The opening chapter discusses how federal finances would look if they were analyzed in operating and investment categories, and points out the effects of fiscal policy upon the flow of savings into investment. This is followed, usefully but not logically, by chapters on semantics and population trends. The theoretical scheme of the book, however, is found in chapters 4, 5, and 6, which summarize briefly some of the savings and investment propositions elaborated before the TNEC. These may be recapitulated as follows:

(1) All savings must currently be invested or offset if the level of national income that makes them possible is to be maintained. Since the United States is a high-savings economy, it needs a large volume of offsets to reach and maintain full employment.

(2) Business enterprises by themselves cannot sufficiently expand investment to wipe out unemployment. They have never been responsible for all our capital formation. Other offsets to saving are needed; and these must be relatively more important now than before 1929. An expanded public investment program is an indispensable supplement to private investment. Adequately planned public investment can be timed, and it can have great social productivity.

(3) The expansion of private investment involves the issuance of private securities, largely debt. The expansion of public investment likewise results in debt. Mr. Chase is not bothered by federal debt when he sees that much of it, approximately one-half in the period 1931-38, is represented by an increase in the tangible wealth of the country.

(4) Business investments in plant and equipment are largely financed from undistributed profits, and depreciation and depletion allowances. Business enterprises in general, particularly large corporations, are relatively independent of the capital markets. With the growth of life insurance companies and other financial institutions, it becomes increasingly profitable to sell the present reduced volume of corporate securities to these institutions privately instead of publicly through investment bankers. Investment bankers are suffering from technological obsolescence.

(5) "Six Modest Proposals" will help to achieve full employment. These are: a permanent PWA, a business-like federal budget, an extension of old-age pensions financed principally by progressive taxes, a flexible WPA program, and a capital credit bank along the lines suggested by A. A. Berle, Jr. Mr. Chase says these will alleviate but not cure all the nation's ills.

For the moment, spending for national defense may cure unemployment and a low level of investment. These problems may reappear when and if the rearmament boom comes to an end. In the meantime, this book is worth reading. Though it accepts many propositions which need elaboration, qualification, or proof, it states important problems. Mr. Chase sees a good part of the forest along with many trees.

O. L. ALTMAN

Washington, D.C.

NEW BOOKS

BARNES, H. E., BECKER, H., and BECKER, F. B., editors. *Contemporary social theory*. (New York: Appleton-Century. 1940. Pp. xx, 947. \$5.)

Approximately 20 authors have shared in writing this volume. Among the topics discussed are: interactions of the natural sciences and the social sciences; biological data and social theory; the cultural approach to problems of social development; and sociological elements in economic thought.

BEDDY, J. P. *Profits: theoretical and practical aspects*. (Dublin: Hodges Figgis. 1940. Pp. xi, 420. 12s. 6d.)

BELLIERI, A. *Dal naturalismo al neo volontarismo: la dottrina economica di J. C. L. Sismondo de' Sismondi*. (Milan: A. Giuffrè. 1940. Pp. 264. L. 30.)

The title of this monograph is somewhat more formidable than its content, a summary of Sismondi's economic writings and an attempt to study their subsequent influence. In the author's terminology Sismondi's "neo-voluntarism" consisted in his rejection of the classical laissez-faire policy and its "naturalistic" presuppositions, by which he means that the classical doctrine rested on the belief in the harmony of individual and social interests and the immutability of the economic laws deduced from the postulate of self-interest. That Sismondi denied these assumptions is evident enough, but it is more debatable to hold that these ideas were generally held by the classical school. The author has tried, perhaps too valiantly, to make Sismondi metaphysically deeper than he was. In emphasizing the great differences between the *Nouveaux Principes* and *De la Richesse Commerciale* he neglects to point out that long sections were bodily transferred from the earlier to the later work.

From the author's point of view the normative elements in Sismondi's work, his social ideals and proposals for immediate and ultimate reform, are more important than the purely theoretical arguments. This portion of the work is well done and should prove a corrective to the view frequently entertained that Sismondi is significant only as the originator of part of the Marxian crisis theory.

The discussion of Sismondi's influence and the literature on his work covers well known ground. An ample bibliography, with far too many errors, is cited. Probably more than half of the German citations contain mistakes of one sort or other, perhaps due to poor proof-reading, perhaps to plain ignorance of the language cited. There are factual errors which betray the author's unfamiliarity with his subject matter. Senior appears with the family name of Nassau; Carl Menger is confused with Anton; F. D. Maurice appears as Maurice Kingsley; "Earl Julius von Soden" looks strange in an Italian book; and the shade of Channing will no doubt be delighted with the style of "Padre."

This book may have a place in the Italian literature as an introductory summary of Sismondi, whose principal work, by the way, has been available in an Italian translation for many years. For non-Italian readers this study will not be worth reading, for there are works available in other languages which cover the subject more satisfactorily. In any case there can be no substitute for reading Sismondi's own writings.

HENRY J. BITTERMANN

BYE, C. R. *Developments and issues in the theory of rent*. (New York: Columbia Univ. Press. 1940. Pp. vi, 133. \$1.75.)

This book opens with a brief account of the Ricardian theory of rent, and then treats the later developments of rent as a surplus, a monopoly income, a scarcity income, an unearned income, and a price. This extension of the meaning of rent to include income other than that from land is examined at some length with a view to determining its validity. As a result the following conclusion is reached: "It becomes clear that, except for the discredited notion of consumers' surplus, the idea of rent may be considered as extending throughout the entire range of value and distribution theory. Wherever supply is not immediately responsive to altered market conditions, wherever differences in costs or abilities prevail, wherever a natural or contrived scarcity exists, wherever economic advantage and opportunity are not open to all on equal terms, wherever the forces of competition fail to play with impartiality upon all participants in the economic struggle—in short, wherever supply is lacking in complete flexibility, or wherever, for any reason, price exceeds production cost—the phenomenon of rent will emerge. It is found in the income from land, buildings, and equipment, in the prices of raw materials, fuel, and power, in the wages of labor and the profits of enterprise; it appears in the prices of innumerable consumer goods and services. From this viewpoint there is no special or unique explanation for the rent of land, nor is the use of the term rent limited to the return or hire obtained from durable goods. Instead, these forms of income are treated with all others in the general theory of prices; the concept of rent is completely generalized, and its appearance is regarded as an entirely normal concomitant of the demand and supply relationship."

Attention is given to the question whether land may be distinguished from capital, and to that of the relationship between rent and price. The issue whether land may be differentiated from capital is held to turn on two questions, differences between the economic peculiarities of natural and produced wealth, and the matter of convenience. The classical view that rent is a result of price is rejected for the equilibrium analysis in which "neither the prices of finished goods nor of production factors are wholly causes or wholly effects. Rather they are all interdependent parts of a complex process, branches of which extend throughout the entire economic organization."

The most important development in the theory of distribution is held to be the attempt to explain rent by a general principle instead of by one of special application.

In bringing together the various concepts of rent and subjecting them to examination, the author of this book has done a useful task. Despite the brevity of the treatment (106 pages plus a bibliography), a review of significant developments in the theory of rent is included. Moreover much of the analysis is good, and some is excellent. The reviewer liked particularly the discussion of Marshall's quasi-rent doctrine and its bearing on his value theory. On the

other hand, it seems to him that the question whether land may be distinguished from capital on account of economic differences depends on the point of view from which economics is regarded, and that in no event may the decision on a matter of this importance depend on expediency or convenience.

M. SLADE KENDRICK

CATHERWOOD, B. F. *Basic theories of distribution*. (New York: Barnes and Noble. 1940. Pp. 271. \$2.50.)

CHAUDHURY, N. N. *Pragmatism and pioneering in Benoy Sarkar's sociology and economics*. (Calcutta: Chuckervetty Chatterjee. 1940. Pp. 152. Rs. 3.)

DEARLE, N. B. *Economics: an introduction for the student and for everyman*. (London and New York: Longmans Green. 1939. Pp. x, 522. \$2.50.)

The best characteristic of Mr. Dearle's text is simplicity and clarity of style. It will appeal primarily to those who like a text of the orthodox, neo-classical type where recent developments in economic thought receive less attention than in many present-day texts. The author's typical method of explaining the chief economic principles is that of showing how these ideas developed historically. It does not prove to be a very satisfactory approach. In the 17-page chapter on "The theory of value" references are made to the theories of no less than 13 writers. The result will surely be to confuse the student.

The chapter on "monopoly and monopolistic competition" seems out of date. Nothing from the recent developments in these fields has crept into it; and, as in the discussion of competitive value, the cost analysis is inadequate. This arises partly from the mistake of treating diminishing returns at a later point. The chapters on money and banking, constituting almost a quarter of the book, though excellently done, raise the question whether it is not time for writers to give less attention to the functioning of an international gold standard. And why should the beginning student be bothered at all with the complex problems of bimetallism?

A few minor errors can be noted briefly: part of the description of the federal reserve system on page 406 is incorrect since it neglects the changes made by the Banking act of 1936. The statement on page 414 that goods may be imported in spite of lower costs of production at home is likely to be misleading because of failure to make clear the peculiar sense in which "cost" is used. "Favorable" and "unfavorable" as applied to the balance of trade are incorrectly defined (p. 417), and the purchasing power parity theory is inadequately qualified (p. 439).

FRANCIS A. LINVILLE

DOANE, R. R. *The anatomy of American wealth: the story of our physical assets (sometimes called wealth) and their allocation as to form and use among the people*. (New York: Harper. 1940. Pp. xxvii, 345. \$2.50.)

ECKARD, E. W. *Economics of W. S. Jevons*. (Washington: Am. Council on Public Affairs. 1940. Pp. 113. \$2.50.)

FROMAN, L. A., with the assistance of McCracken, H. L. *Principles of economics*. Vols. I and II. (Chicago: Richard D. Irwin. 1940. Pp. xii, 702; x, 752. \$2.50, each vol.)

This elementary but comprehensive text, of more than 1,400 pages, is for underclassmen. The style is simple, definitions are given explicitly and explained with care, much of the material is factual, and even the theoretical discussions are often supported by much factual illustration; and yet there is

a considerable amount of philosophical discussion. The general approach is traditional, with stress on the division into consumption, production, value and price, money, banking and exchange, and distribution; but there are several chapters on government and the economic system, two chapters on the "isms," a chapter on the history of economic doctrines, and a chapter on pure and monopolistic competition which is not only clear and readable but even to some extent original in its exposition. The author follows Chamberlin in applying the theory of imperfect competition to distribution as well as to value.

There is so much information in these two volumes that there may be a fair question whether it is humane to expect any student to learn it all. Such expanded texts always bring to the reviewer's mind a question once raised by Dr. T. J. Anderson: "How much more than the instructor should the student be expected to know?" Yet the field of economics has so expanded that no subjects seem to be treated at too great length in these volumes. Apparently we shall have to give much time to the course in elements, or we shall have to restrict it greatly, perhaps to a discussion of value alone. The latter method has the disadvantage that it does not best meet the needs of many students who take only one course in economics.

Professor Froman's books will meet criticism at a few points. The style, while generally simple and clear, lacks punch and distinction. In a few places the organization is not very good—for instance, in the discussion of monopoly in two different places. A number of quotations, excellent in themselves, are probably longer than should be included. The chapters on the "isms" should not be followed by several chapters describing capitalist institutions, but should rather come at the end. The general point of view of the author seems hardly critical enough. In the discussion of fascism, for instance, the author discusses many of the outward details of fascistic organization, but in the opinion of the reviewer, he misses much of the fundamental meaning of fascism, and therefore fails to see the gravity of its threat to civilization.

Yet it would be easy to take too critical an attitude toward a work which is generally well done. At the end of each chapter there is a list of questions, and an unusually inclusive list of references. The general make-up of the books is good, and there is no doubt that they will meet the approval of many teachers.

JOHN ISE

GRAZIADEI, A. *Le crisi del capitalismo e la variazioni del profitto*. (Milan: Frat. Bocca. 1940. Pp. xi, 225. L. 25.)

The Milan "Library of Social Sciences" series published since 1883, has had for its main task, especially after the beginning of fascism in Italy, the combating of economic errors in the doctrines of Marxism. According to the author's preface, this seventy-fourth volume is the last monograph on this purpose by Graziadei. It is a study of the cycles of crises in our capitalistic economy and of those variations of the rate of profit which are *not connected with changing wages*. The whole book deals particularly with the classical theory of a *diminishing tendency* of profit margins, which later on has been one of the pivots of Karl Marx's school and which an Italian professor of the present day is obliged naturally to refute.

Three parts of the publication under review are dedicated, therefore to an analysis of this dogma as developed in the opinions of Adam Smith, Ricardo and Marx, then to the discussion of variations of profit rates under elimination

of competition among manufacturers. Since Marx's ideas about marginal fluctuations are connected with his theories about cyclical crises, the last and most up-to-date chapters try to analyze them, too. The book enlarges especially upon *under-consumption* instead of surplus-production as a reason for crises and *economic crises of general order*, embracing all the branches of national or world activity; both are Marxist statements with which Graziadei agrees on great measure. Indeed, while the latter phenomenon apparently has been confirmed by the facts of the years 1929-1932, Marx's new conception of the origin of crises has also been proved by modern English and American economists.

PAUL UCKER

HART, A. G. *Anticipations, uncertainty, and dynamic planning*. Stud. in bus. admin., vol. xi, no. 1. (Chicago: Univ. of Chicago Press. 1940. Pp. ix, 98. \$1.)

WERNETTE, J. P. *The control of business cycles: a study of methods for achieving and maintaining prosperity*. (New York: Farrar and Rinehart. 1940. Pp. ix, 197. \$1.75.)

Cowles Commission for Research in Economics: report of sixth annual research conference on economics and statistics at Colorado Springs, July 1 to 26, 1940. (Chicago: Cowles Commission, Univ. of Chicago. 1940. Pp. 99.)

Economic History and Geography

The Triumph of American Capitalism: The Development of Forces in American History to the End of the Nineteenth Century. By LOUIS M. HACKER. (New York: Simon and Schuster. 1940. Pp. x, 460. \$3.00.)

The Dynamics of War and Revolution. By LAWRENCE DENNIS. (New York: Weekly Foreign Letter, 515 Madison Ave. 1940. Pp. xxxi, 259. \$3.00.)

Hacker writes from the standpoint of Veblen's exploitation economics (1904); Dennis from the standpoint of F. J. Turner's movement westward of the frontier (1890-1903). Dennis makes the closing of the American frontier in the decade of the 1890's the beginning of the decay of capitalism. The American immigration-restriction law, which followed in 1923, he interprets as the closing of the escape from the oppressive capitalism of Italy and Germany, resulting for those countries in the menace of perpetual unemployment. Hacker dates the triumph of American industrial capitalism from the same decade of the 1890's, but attaches little or no importance to either the closing frontier or unemployment.

Hacker mistakenly interprets Turner as holding that the western frontier was only an agricultural frontier, so that urban workers who moved West had to learn the different occupation of agriculture in order to escape. But Turner's frontier was also a mining and an urban manufacturing and mercantile frontier moving West with the agricultural frontier, so that urban workers could escape without changing their occupations. Indeed, Turner's frontier was an institutional land-ownership frontier in advance of popula-

tion, with its enormous speculative land values, both urban and agricultural, rising or slumping in value in expectation of an increase or decrease of the incoming populations. It was not, therefore, as Dennis more accurately shows, until the unemployed laborers from the western cities began to move back eastward in the capitalistic depression of the 1890's that Turner's theory of the significance of the frontier could be fully appreciated in the investigations of economists and historians.

With this naïve misapprehension of Turner's institutional view of land ownership as a kind of speculative "action at a distance" in advance of the classical economists' physical movement of population, Hacker turns to Veblen's sarcastic institutionalism of exploitation, fraud, and dishonesty. The latter triumphed in the 1890's with Carnegie's ruthless enrichment from protective tariffs and governmental opposition to labor unions, as it did also for Veblen.

On the other hand, Dennis rightly bases his entire economics on the inability of the capitalist system to maintain continuous and full employment (pp. 49-131). He analyzes mainly five factors which supported profits and interest in the past and quickly restored employment after each collapse; but during the present century they have declined one by one, and the joint disappearance of all has cumulated during the 1920's and 1930's.

The first factor was the familiar industrial revolution, beginning in the eighteenth century and continuing with temporary monopolies for almost every new industry. He defines monopoly "for practical purposes," rather than "legal purposes," as "the enjoyment of a situation in which competition is not to be feared." Although a few of these monopolistic profit-making opportunities, like aluminum or agricultural machinery, "quickly acquire a monopoly situation while millions of their consumers are on relief," yet many others in the case of "such major basic industries as agriculture, railroads, the textile trades and coal mining are in permanent decline as profit makers." Herein he controverts what he calls "a fallacy of classical economics, that of consumer sovereignty." It is not "consumer demand," he says, but "producer demand" that is sovereign, and "this producer demand is governed by changes in expectations of profit," which is the credit system.

These expectations have disappeared for various reasons, first of which is the closing of the frontiers for both America and the British Empire. Dennis reviews at length what he calls Turner's "great contribution to American social thought" in 1893 and 1903. It was the idea that "free land and lavish gifts of natural resources to exploit were the frontier's contribution to the success of private enterprise."

Third was the rapid population increase for the century and a half of the industrial revolution. This has now ceased as a dynamic factor for maintaining profits and interest on long-term investments. Herein Dennis cites

support from the recent writings of Fairchild on population, Hansen on "stagnation," the Natural Resources Committee, and J. M. Keynes. He controverts the arguments expressed by W. I. King and others of a rising standard of living creating an expansive market in place of the closing frontier. "The incentive to industrial expansion of capitalism," he says (p. 99), "is not a desire for a higher standard of living for all the people but a simple desire for interest and profits."

Again, for the whole period of the capitalistic régime, Dennis enumerates the long list of "easy wars of conquest" against populations which had only bows and arrows against machine guns. But now, at last, these easy wars are halted by the "have-not" nations of Italy, Germany, Russia and Japan with equal and even superior military equipment. Formerly also there was plenty left over for the "losers," but now "the democracies no longer have easy foreign wars to offset the disuniting forces of capitalism, which, in its maturity, is nothing but unmitigated class war."

Finally, democracy was fairly successful when only the manufacturers obtained monopolistic advantages from protective tariffs, but now when all classes, including laborers, farmers, the aged, and real estate operators, struggle for positions, and especially when they resort to progressive taxation on profits, the triumph of universal suffrage is the end of democracy and capitalism.

Hacker, in his final chapter on finance-capitalism, would counteract his exploitation economics by reverting to "the enlightenment, the American Revolution, Jeffersonianism, old radical Republicanism, populism," which, he says, are "the American tradition," which, in turn, he "firmly believes" will make us "economically secure and keep us politically free" (p. 438).

Neither Hacker nor Dennis gives attention to the most significant of the institutional developments of the twentieth century, the governmental supervision of the credit system by a Federal Reserve Board and a Securities Exchange Commission, nor the amazing growth of private corporations and labor unions, with the accompanying systems of governmental arbitration and administrative supervision as the modern forms of organized democracy, all of them in process of overthrow elsewhere by totalitarian governments.

JOHN R. COMMONS

Fort Lauderdale, Florida

Histoire Economique de la France. Tome I. Le Moyen Age et l'Ancien Régime. By HENRI SÉE. (Paris: Armand Colin. 1939. Pp. xxv, 453. 70 fr.)

M. Armand Rébillon explains the posthumous publication of M. Henri Sée's book as follows:

Quand Henri Sée s'éteignit, le 11 mars 1936, le second volume de sa *Fran-*

zoësische Wirtschaftsgeschichte dans la collection *Handbuch der Wirtschaftsgeschichte* de G. Brodnitz, venait tout juste de paraître, six ans après le premier. L'ambition de mon regretté maître était alors de publier la version française d'une oeuvre qu'il avait grandement déploré d'avoir dû donner d'abord dans une collection étrangère. Sa veuve a tenu à réaliser ce vœu. C'est une entreprise qui devra valoir à Madame Henri Sée ainsi qu'à son fils, M. Daniel Sée, la gratitude des étudiants et professeurs français qui vont avoir enfin à leur disposition, pour la première fois, un ouvrage général de cette ampleur et de cette valeur sur l'histoire économique de leur pays.

Remotely, the volume stems from M. Henri Hauser, who recommended M. Sée to Professor Brodnitz for the German series. But another writer played an even more important rôle in publication of the present book. For by the invitation of Madame Henri Sée, M. Robert Schnerb prepared M. Sée's original French manuscript for publication, wrote a lengthy *avant-propos* which is a brief survey—largely bibliographical in nature—of French economic history before the tenth century. Also to each chapter of M. Sée's manuscript, M. Schnerb has added an appendix, usually of a bibliographical nature, but occasionally interpretative as well, in an effort to supplement M. Sée's chapter, to present other points of view, or to bring the chapter abreast of the latest writings. With such literary midwifery, the French version of M. Sée's book has been brought into the world.

It is an important synthesis of materials gathered from scores of monographs and some unpublished sources, obviously the fruit of M. Sée's long and active study of the economic history of France. But as it rests largely upon monographic materials already published, it contains little information that is new. Indeed, the paucity of primary sources cited and the almost complete lack of pertinent statistical data, are obvious weaknesses of the book. Yet the volume pulls together in well connected and excellently coordinated form the recent researches of hundreds of scholars—French, German, English, American, Spanish, Italian, Swedish, and Dutch—whose monographs and articles are embraced within M. Sée's scholarly grasp.

M. Sée wrote economic history after the manner of the old days when "economics" was "political economy." Accordingly, his book is much more than economic history, for he weaves in political interrelations and social implications so that his book becomes almost a history of the French monarchy from the late Middle Ages until the French Revolution. The rôle of the rising monarchy is constantly before us, at first because the French kings were elevated to power and opulence upon the shoulders of a well cultivated and coöperative *bourgeoisie* and later because the mercantilist policies of absolute Valois and Bourbon monarchs so greatly determined the course of French economy. M. Sée spends relatively little time with French feudalism. In reality, the book begins with "La renaissance du commerce" (chapter 2), with the rise of cities, of guilds, of trading companies, of Italian banking activities in France, and of the emergence

of new classes of society, especially the small but powerful bourgeoisie. The paralyzing effects of the One Hundred Years' War played an important part, in M. Sée's opinion, in the break-up of feudal estates, the slow rise of a large land-owning peasant group, and in the "nationalizing" of French commerce. Later, in discussing land-ownership in the "Old Regime," M. Sée inclines toward a conservative estimate of the relative proportion of lands held by the nobility and clergy. But, according to M. Sée, though peasants possessed a large proportion of French land in the eighteenth century, only a small number held farms large enough—with their obsolete husbandry and farming methods—to support themselves. Government policies, especially regulation of the grain trade, hampered agriculture still further. Throughout the early modern period, in M. Sée's view, French internal commerce was unimportant by comparison with foreign trade, and commerce as a whole developed more rapidly than industry. The book is particularly good in describing the nature and direction, though not the extent, of French foreign commerce. But it gives only superficial treatments of French trading companies, of internal industrial developments, of the lack of commercial and industrial enterprise of the French privileged classes, and of the serious economic maladjustments of the Old Régime as evidenced by the widespread beggary, idle lands, stagnant internal trade, and decadent corporations. Can it be that the burdensome fiscal policies of the monarchy constituted the sole cause of all these economic ills, as M. Sée suggests?

Everything considered, in the opinion of the present writer, M. Sée's book is both welcome and disappointing. It is welcome as a synthesis of materials by an able, judicious, mature scholar; it is disappointing because of its lack of illustrative detail drawn from primary sources, its too frequent tendency toward generalities without getting down to statements of "Voici, par exemple. . . ." Nevertheless, M. Sée left a challenging legacy in this truly great interpretative work. Perhaps a later generation of French scholars will discover what really made pre-revolutionary French economy tick.

RAYMOND P. STEARNS

University of Illinois

The Industrialization of Japan and Manchukuo, 1930-1940: Population, Raw Materials and Industry. By G. C. ALLEN, M. S. GORDON, E. F. PENROSE and E. B. SCHUMPETER. Edited by E. B. SCHUMPETER. (New York: Macmillan. 1940. Pp. xxviii, 944. \$7.50.)

This large and somewhat heterogeneous volume is unusually difficult to review. As is indicated in the preface, the research investigation of which it is the outcome was begun some years ago as "an account of the depreciation of the yen and its influence on Japanese trade and prices with certain

digressions on living standards, public finance and the balance of international payments," but, "after much material on these points had been collected, it seemed best to shift the emphasis to population, raw materials and industrial development with special reference to the strategic possibilities of the Yen Bloc." The result of this shift of emphasis is not a unity. The book falls, in fact, into four monographic divisions though the editor has written introductory and concluding chapters.

Professor Penrose has written a very careful and convincing analysis of population developments between 1920 and 1936, choosing the former year as that in which the first adequate census material became available and the latter apparently as the latest year for which material was available when he wrote. His analysis is a model of precise definition, analytical skill and clear concise statement. One could wish that his conclusions, particularly in regard to population and raw materials, had been developed further; but his whole succinct analysis is contained in 125 pages supported by 65 pages of tabular matter. Eschewing doubtful estimates of future population and pointing out that pre-1920 data are not comparable with those after 1920—a point which Mrs. Schumpeter does not stand upon in the introductory chapter—his main conclusion seems to be that increasing birth-control may still be offset in large measure by increasing death-control in Japan. This is particularly true of female mortality. Food and raw material supplies, however, were increasing relatively to population up till 1936, and population pressure was a subjective feeling rather than an objective measurable reality.

Professor Allen's study of the organization and development of Japanese industry is equally workmanlike in its careful classification, arrangement and analysis. After differentiating the main types of industrial organization—the traditional trades, the newer small-scale trades, the large-scale textile industries and the heavy industries—Professor Allen offers an analysis of the concentration of economic power in Japan. This, he points out, in a passage that will bear reflecting upon (p. 626) is due to "the scarcity of capital and entrepreneurial ability in a country with great political ambitions." This whole analysis of the power of great economic groups and their connection with small trades on the one hand and government on the other is sober and judicious. On the whole the situation as Professor Allen describes it does not leave an impression of economic strength and resilience, despite the marked industrial progress of Japan in recent years. Professor Allen's story of course stops short at 1937 when Japan entered a period of war economy; but readers of his subsequent work¹ will remember that he has since drawn attention to the risks of unbalancing the economic structure as a result of the war.

¹ G. C. Allen, *Japanese Industry: Its Recent Development and Present Condition*. I. P. R. Inquiry Series, New York, 1940.

Mrs. Schumpeter's contributions to this volume are concerned mainly with the most recent developments, not of the Japanese economy alone, but of the whole yen bloc. For these developments statistical measurements are scarcer. There is therefore more reference to Japanese journals and particularly the publications of the South Manchurian railway (which seem so often to have a promotional tinge) and to plans and percentages. These chapters are, in consequence, more diffuse than the rest of the book, less convincing in their arrangement of the argument and more repetitious. This is perhaps inevitable where hopes rather than achievements, plans rather than facts, potential rather than actual figures are discussed. It is probably too soon to appraise the economic viability of an autarchic yen bloc by precise statistical measurements. Mrs. Schumpeter makes a case for it mainly on two grounds, the resources of Manchukuo and improved technical processes, and points out that in any case it may be an alternative forced on Japan by the breakdown of international trade. One would expect her argument to have the same appeal in Japanese circles as Mr. Guillebaud's somewhat similar book had in German circles.² Now Manchukuo, unlike some other recent imperialist ventures, is no desert. It has rich and varied resources. And chemical engineering has made great strides in recent years. But most economists are likely to feel that Mrs. Schumpeter has given the benefit of the doubt at almost every difficult point to the somewhat optimistic Japanese estimates now available. If needs must, the Japanese Empire will develop as a closed bloc within its new imperial frontiers. Whether that can be done without capital losses and lowered living standards, and whether better results for the people as a whole can be so achieved is at least not proven. Up till now, despite closing trade outlets, Japan, like Germany before September, 1939, has been greatly dependent upon the outside world and could not have pushed her industrial development so rapidly in strategic directions without access to raw materials and markets. These she may substitute in some measure, but it requires greater faith than the reviewer can summon in the "potential resources" of even an enlarged empire, to conclude that such substitution will not entail heavy losses and probably economic disorganization. Mrs. Schumpeter has made her analysis in quantitative terms. The monetary, financial and exchange complications of a great investment boom financed by expansionist monetary policies have been deferred for later consideration. It is possible that new methods of price control, rationing and rationalization may forestall the necessity of choosing between checking the boom or allowing the inflation to get out of control; but the possibility has not yet been demonstrated.

² C. W. Guillebaud, *The Economic Recovery of Germany from 1933 to the Incorporation of Austria in March 1938*, London, Macmillan, 1939.

Mention must be made, finally, of the appendix in which Mrs. Gordon outlines briefly the major trends of the Japanese balance of payments from 1904 to date. This rather brief but competent essay, apparently arising from the original plan of the project, is worthy of more extended analytical treatment.

J. B. CONDLIFFE

University of California

German Economy, 1870-1940: Issues and Trends. By GUSTAV STOLPER.
(New York: Reynal and Hitchcock. 1940. Pp. xx, 295. \$3.00.)

Dr. Stolper's review and interpretation of 70 years of the Germany economy should be valuable to every westerner who has been puzzled by the ease with which the National Socialist system has become entrenched in the territory of the Reich. The explanation lies in the essentially traditional nature of state control, of which the existing totalitarian system is merely one manifestation. Even in the early history of Prussia "the state was everything," not because of a preconceived philosophy but because it was the only creative force. When the new Reich was formed in 1870 German liberalism, never very deeply rooted even in western and southern Germany, sold its soul to the principles of Prussian state power. "Thus," the author continues (page 12), "Germany acquired a strange cant that began to irritate and, increasingly, to terrify the world."

In the preface Dr. Stolper says that although he has no thesis to prove, every chapter discloses an amazing continuity of the underlying trend, the ascendancy of the state over the economic life of the nation. Without this long preparatory work Hitler and National Socialism would not have been possible. The exposition of the continuity is thus the major part of the writer's task. For its accomplishment, which is of course far more illuminating than the usual amazed and admiring factual account of Germany's remarkable industrial growth since 1871, Dr. Stolper has an excellent background. He was for many years the editor of the important economic weekly, *Der deutsche Volkswirt*, and the Berlin correspondent of the London *Economist*. For several years before the Hitler revolution he was a liberal member of the Reichstag for the Free City of Danzig and a member of the budget committee. He is now an American citizen.

Viewed superficially, the present volume is an excellent account of the economic growth of Germany in four periods: "Toward Industrial Power," from the formation of the Reich to 1914; the World War; the Weimar Republic and the Third Reich. All the necessary supporting factual material is given. But the unusual value of this study lies elsewhere than in the historical survey of German economic progress. It lies in the puncturing of the major western illusion that Hitler imposed a totalitarian system

upon an uncomprehending and unwilling liberal, democratic population, and in the equally skillful demolition of a dozen minor illusions common beyond the North Sea and the Atlantic. Dr. Stolper shows, for instance, that German inflation was not a post-war phenomenon, but that it began with the war and had exceeded any previous experience by the time the war ended. The "stab-in-the-back" legend of German collapse in the autumn of 1918, so dear to Hitler and to western apologists, which has already met much adverse evidence from the time of the publication of Ludendorff's two-volume account in 1919 to the present day, now receives the attack of the story of German military, economic and physiological degeneration before the autumn set in.

The puncturing of illusions continues. The Dawes plan aspect of the "Diktat" of Versailles is shown to have initiated "a period of recovery unparalleled in scope and intensity"; or "seven fat years [in which] a new Germany was built up." The Weimar Republic, with its manifold social reforms, left to the National Socialist state the easily absorbed heritage of an economic system that could properly be called "State Socialism." Economic depression was not, as is commonly believed, the cause of the growth of National Socialism; for that growth began when the Rhineland had already been evacuated, when Germany was a member of the League of Nations on an equal basis with the other great powers, when reparations had been reduced; and growth became rapid when reparations were virtually abolished by the Lausanne Conference in 1932. It is useless for friend or foe to emphasize a coming financial collapse in Germany, for there will be no financial collapse unless the whole state goes down. "When a government has complete control over the man power and the material resources of a country, the only limit to the expansion of production is precisely this man power and these natural resources (page 256)." Incidentally, however, there have been useful windfalls: the virtual expropriation of foreign creditors, the seizure of the gold and foreign exchange of conquered territories, and the confiscation of Jewish property.

Dr. Stolper regrets, as many of his readers also regret, the fact that the practically crash-proof German economic system was not used for peaceful construction. He realizes that the same methods could have produced residences instead of fortifications, automobiles instead of tanks, fertilizer instead of gunpowder, and exports to buy butter instead of guns. Almost his last word is: "What was and still is at stake is political, not economic issues"; a thought which western readers must digest, together with the contents of Peter Drucker's *The End of Economic Man*, before they can even begin to understand the conflict across the Atlantic.

ALZADA COMSTOCK

Mount Holyoke College

A History of Chicago. Vol I. *The Beginning of a City, 1673-1848*. Vol. II. *From Town to City, 1848-1871*. By BESSIE LOUISE PIERCE. (New York: Knopf. 1937; 1940. Pp. xvii, 455; xiii, 547. \$5.00, each vol.)

These two volumes are about one-half of a definitive history of Chicago, a task which was initiated in 1929, at the University of Chicago, by a committee on the history of Chicago made up of representatives of the various social science disciplines of which Professor Charles E. Merriam was the guiding spirit. For the task of gathering the material and interpreting it Professor Pierce was invited to the university a decade ago. In these two volumes Professor Pierce presents "an interpretation of the rise and development of the most modern of great modern cities," which is "not only the history of a single urban community, but an interpretation of a cross-section of a century of the history of America, particularly that of the Middle Empire."

With the help of a staff of research assistants who have gone through a tremendous amount of data of all kinds, indicated by a thoroughly footnoted text and elaborate bibliographies, the work is a veritable encyclopedia. In Volume I every aspect of the growth of the city and its environment has been dealt with from the French exploration in the seventeenth century to the coming of the railroad in 1848. Its rise in the speculative pioneer era, its growth in importance as the center of national transportation, its politics and economics, its social matters, religion and culture—all are recorded and discussed. Volume II carries on the story with treatment of the structure of society, the highways of trade and commerce, the growth of banking and finance, the rise of labor consciousness, the mold of politics, the Civil War and its effects, the form of government, the church, the coming of a metropolitan city and the passing of the old Chicago with the devastating fire of 1871.

For the economic historian and economist there is much of special interest in the chapters on the speculative era, labor, trade, banking and transportation. Perhaps because of the present reviewer's own experience in Chicago industry, the chapter on "The coming of a metropolitan economy" seemed one of the most significant because it gave a picture in 40 pages of the dramatic and swift rise of all the various industries on which the economic greatness of the city was built. But there is a wealth of information for any student.

As a definitive work of reference, this strikes one as competent and highly worth while completing. One has a feeling of entire confidence in the accuracy of the data presented. The cartoons, illustrations and maps are well chosen and helpful. However, one has also a feeling that some of the chapters are too long, that too much has been crowded into them, and that a more careful selection of material and a greater emphasis on literary presentation would have made a more distinguished history. Per-

haps a purely "literary" history of Chicago of all cities would not have seemed in the best taste! And one must not seem ungrateful for a work of vast labor, careful interpretation, and historical accuracy in what is a new kind of history—the story of the youngest of the new metropolitan cities of our day, symbols of technology.

RUDOLF A. CLEMEN

American University

The Economics of Ancient Greece. By H. MICHELL. (New York: Macmillan. Cambridge, England: Univ. Press. 1940. Pp. 415. \$4.00.)

In spite of the stimulating chapters on economics in Sir Alfred Zimmern's *Greek Commonwealth*, there has been up to the present no comprehensive treatment written originally in English of the economic life of the Greek city states before the Macedonian conquest. This lack is now well filled by Professor Michell's scholarly work which is based solidly upon ancient sources while giving due consideration to the best modern research. In an introductory chapter, the author discusses certain broad questions fundamental to his task—the geography of Greek lands, the attitude of the Greeks toward manual labor, population, Greek economic thought—and arrives at the rather inescapable conclusion that the city states collapsed because of their failure to develop sound political and economic policies.

The following chapters are devoted, in sequence, to a detailed treatment of the principles and practices of agriculture, mining and minerals, labor, industry, commerce, trade, money and banking, and public finance. In this survey we do not find any sensational reconstructions, nor indeed any views that are particularly new, but rather a careful judicious attitude which avoids alike the error of treating the Greeks as supermen and that of regarding their achievements as insignificant because of the slender economic resources at their command. With respect to slavery, the writer does well to stress its sinister aspects as a good corrective to Zimmern's emphasis upon its favorable features, but he goes too far in the reviewer's opinion when he concludes "that we can almost say that had there been no slaves there would have been no Greeks" (p. 168). The foundations of Greek civilization were laid and the main lines of its future development apparent before either industrial or agricultural slavery became powerful factors in Greek economic life. There is also a salutary discussion of the deleterious effects of the Athenian system of compensations for public service where it degenerated into a "dole" for the poorer classes in general.

The book is open to minor criticisms and corrections, only some of which can be mentioned here. The style lacks polish, and in some places the meaning is not obvious; there are contradictory statements with respect to the purpose of the Athenian expedition to Sicily in 415 B.C. (pp. 221

and 260); since it is generally accepted that the Hittite empire in Asia Minor had collapsed well before 1,000 B.C., the view that it lasted into the beginning of the first millenium B.C. should be buttressed by some authority; the prosperity of Roman Corinth seems to contradict the idea of Leaf (p. 237) that, after Rome's defeat of Carthage, Corinth was commercially sidetracked; on p. 247, 1. 2, surely "Sybaris" should be read for "Cumae"; the treatise of the Carthaginian Mago on agriculture is not extant (p. 304); on p. 331 "pre-Solon" coins should be "post-Solon," see p. 319; "Xenophon" on p. 148 should be Pseudo-Xenophon as on p. 234; it should have been pointed out that no pay was given for attending the Athenian assembly prior to the close of the fifth century B.C.; and the Athenian administrative committees with their changing personnel do not conform to our ideas of "permanent civil servants" (p. 369). The select bibliography is very good, but it might have included C. J. Bullock, *Politics, Finance and Consequences*, Cambridge, 1939, and J. A. O. Larsen, "Roman Greece" in volume IV of Tenney Frank, *Economic Survey of Ancient Rome*, Baltimore, 1938.

A. E. R. BOAK

University of Michigan

An Economic History of Modern England. By E. A. J. JOHNSON. (New York: Nelson. 1939. Pp. viii, 230.)

This little book is written primarily for college students; it pretends to be no "contribution to knowledge" other than a kind of literary mosaic made up of bits borrowed from monographic materials and from articles which have appeared in learned journals: ". . . to ask students of economic history to go to the secondary sources on dozens and dozens of topics before some general condensation has first been offered," is, in Mr. Johnson's opinion, "scarcely cricket." The present book is intended as such a "general condensation," and should therefore be judged more from a pedagogical standpoint than from that of scholarly criticism.

Mr. Johnson does not contend that such a general book as this should displace monographs in students' reading lists. "Actually," he writes, "the purpose of the general book should be just the reverse: it should indicate the imperative need of going not only to secondary but to primary sources. With this constantly in mind, I have documented pretty heavily, not to impress critics, but to indicate to college undergraduates precisely where they can find further material on the manifold segments of Britain's economic history." In the opinion of the present writer, a good syllabus of readings placed in the hands of students would fulfill Mr. Johnson's aim better than his book, especially as his footnotes contain references to practically no primary sources whatever.

However Mr. Johnson has produced a readable brief survey that is, as

he states, "pretty much an economic history of nineteenth century Britain, with something of a background and something of a projection." The first two of seven chapters furnishes the "background"; the "projection" is mostly in the form of prophecies strewn through the last chapter—prophetic hints that economic competition between England on the one hand and Germany and Japan on the other might lead to such a conflagration as exists in the world today. Of British economic history in the nineteenth century, Mr. Johnson presents a thoroughly orthodox account compounded of Clapham, the Webbs, Lord Ernle, Usher, the Hammonds, Lipson, Jenks, G. D. H. Cole, and Gilbert Slater. Some other materials are cited, of course, but there is a curious lack of reference to Halévy, Marriot, the wealth of autobiographies, letters, and memoirs available, and the *Parliamentary Papers* and other publications of His Majesty's Stationery Office usually at hand. These and other obvious materials are equally lacking in Mr. Johnson's treatment of English economic developments since 1900. In this phase of British history, however, the pattern is more original, and Mr. Johnson has done well in condensing the vast literature of the era since 1914 into a meaningful interpretation of the perplexing recent acts and events of English industrialists, bankers, shippers, and statesmen.

RAYMOND P. STEARNS

University of Illinois

The Incorrigible Idealist: Robert Dale Owen in America. By ELINOR PANCOAST and ANNE E. LINCOLN. (Bloomington, Ind.: Principia Press. 1940. Pp. 150.)

This is a valuable addition to the history of nineteenth century social reform. Thus far we have known this son of Robert Owen chiefly from his charming memoir, *Threading My Way*, which, however, only took him through his early and yeasty years as a participant in the New Harmony experiment of his father, and as one of the co-leaders with Frances Wright of the working-class movement of New York. It is the great merit of the present biography that it traces his activities and development during the subsequent forty-five years until his death in 1877, and that it does so from original sources.

After the departure of Frances Wright for Paris and the death of her sister Camilla, Robert Dale Owen decided that wholesale utopian plans for a sweeping transformation of American life were impossible of fulfillment. He set himself to work therefore as a cultivated provincial in the field of Indiana politics and was three times elected to the legislature of the state and also to the Constitutional Convention of 1850. Here he became the real founder of the public school and library systems of Indiana and, as an advocate of woman's rights, secured for wives control over their

property together with easier divorce, thus freeing them from some of the male tyrannies.

He was twice elected to Congress as a Democrat and to him was due the refounding of the Smithsonian Institution. Having had his dose of utopianism, he kept aloof from the wave of associationism which was flourishing in the early forties and, unlike his father, during this period confined himself to reforms which could be achieved. He was not even an abolitionist, but nevertheless the memory of his early economic wild oats, his unorthodox religious views, and his championship of women's rights all prevented him from being chosen United States senator, a position for which he was eminently fitted. Appointed minister to Naples by Franklin Pierce, he spent four years at this corrupt and autocratic court, where his experiences strengthened his faith in the democratic way of life. Here occurred the extraordinary and amusing exchange of letters with his father over the request of the latter for an advance of £500.

After burying his father and publishing a book on spiritualism, Owen returned to the United States on the eve of the Civil War. Though at first in favor of compromise with the South, the attack on Fort Sumter caused him to rally to the Union. He was appointed purchaser of munitions for the Indiana troops and carried through his job with conspicuous integrity and in welcome contrast to what was happening in the war department under Simon Cameron. Finally, convinced that emancipation was not only ethically desirable but necessary in order to win the war, he was one of those who urged Lincoln to free the slaves and it is possible that he thus played an important part in Lincoln's final decision.

Active in offsetting the Copperhead and Secessionist movements in Indiana, he was appointed by Secretary Stanton to the Freedmen's Commission, in connection with which he drew up plans for complete emancipation by congressional action with compensation to those owners who had been loyal. He also drafted a projected Fourteenth Amendment to protect the civil rights of negroes and to grant them the suffrage. Unfortunately, at the last minute the amendment drafted by Bingham and Conklin with its due process clause was substituted for this. Our constitutional history would have been happier had Owen's original draft prevailed.

After the war Owen interested himself in spiritualism. He died in 1877 at Lake George. Sixty years later his remains were transferred to New Harmony, the scene of his father's experiment and the place where he and his brothers had lived useful lives for nearly half a century.

This biography with its scholarship and insight, its style and unfailing good taste, is a model of excellence.

PAUL H. DOUGLAS

University of Chicago

Family and Community in Ireland. By CONRAD M. ARENSBERG and SOLON T. KIMBALL. (Cambridge: Harvard Univ. Press. 1940. Pp. xxix, 322. \$3.50.)

The authors of this work are committed to the view that the theoretical formulations of a scientific sociology and social psychology (these comprising for them a unitary discipline) must be derived from an extensive series of objective inductive studies of contemporary social behavior, both modern and primitive. Existing folk cultures of literate societies constitute a rich and relatively unexploited field for such studies, since they enable the investigator to amass data on the essential features of a social system without becoming involved in all the complexities of civilized society. Thus, this investigation of the Irish peasant was inspired by a purpose similar to that of Thomas and Znaniecki in studying the Polish peasant.

But aside from this point there is only a superficial resemblance between the two. Thomas and Znaniecki employed an elaborate methodology, and their theoretical generalizations ranged far and wide over the whole field of human behavior. The present work is almost ascetic in methodological simplicity and its generalities are narrowly confined to the central problem and supporting facts. The basic approach is that developed by anthropologists of the "functional school," and the theory of causation closely follows Pareto's notion of the equilibrium of a social system, or factors in a state of mutual dependence.

The focus is on the distinctive culture of the small farmers of Eire, most of the field work being done in County Clare. After a brief statistical review to establish the small farmer class and characterize the nature and scope of its economic activities, the treatment centers on the family groups dwelling on the land and following the rhythmic cycles of an ancient mode of life. The rural familial economy with its division of labor between the sexes and between age groupings, the patterns of uniformity which govern the status and control the relations of family members, the system of kinship, the interplay of demographic and familial factors, the operation of the social mechanism of match-making as it affects family continuity and the dispersal of members, the position and problems of the aged, the mores of sex, and the social and economic bonds that weld families into the community, all are systematically described and given perspicacious analysis. Ethnographic literature contains few better accounts of a familial system.

With the major conclusion which designates familism rather than economic factors as the prime force affecting decline in natural increase, emigration, and other demographic trends, there will be strong disagreement in some quarters. But economic determinism must reckon with the evidence presented in this case.

In a work otherwise so excellent, one surprising flaw appears. It is the

absence of maps or cartographic devices for making clear demographic comparisons and ecological relationships. Since these aspects are treated in considerable detail, the patience of the reader is strained by having to wade through pages full of obscure place names and other geographic data which a few maps would vastly clarify. In contrast, statistical materials are conveniently summarized by graphs and tables.

CARROLL D. CLARK

University of Kansas

NEW BOOKS

CUMMINGS, R. O. *The American and his food: a history of food habits in the United States.* (Chicago: Univ. of Chicago Press. 1940. Pp. xi, 267. \$2.50.)

Mr. Cummings in studying the history of the American ice industry found diet, apart from separate foods, a subject neglected by historians. From "widely scattered sources including travel accounts, health literature, cook books, periodicals, newspapers and government documents" he has attempted to build up a picture of food consumption. The first third of the book dealing with seventeenth and eighteenth century food habits will stimulate greatest interest; although those unfamiliar with contemporary literature on food will also find information of value throughout the book that in its later parts takes the reader through the depression and introduces him to "federal feeding programs." Dietary habits are pictured as a product of technology, science of nutrition, social organization and other factors that shape consumption.

A reader cannot fail to be impressed with the range and quantity of facts compressed into the book. There is, however, little attempt at economic analysis; and in certain sections the economist is likely to feel strongly moved to rearrange facts and present further evidence in order to prevent the drawing of incorrect inferences.

MARGARET G. REID

FAHS, C. B. *Government in Japan: recent trends in its scope and operation.* (New York: Inst. of Pacific Relations. 1940. Pp. xv, 114. \$1.)

FEIS, H. *The changing pattern of international economic affairs.* (New York: Harper. 1940. Pp. x, 132. \$2.)

This collection of lectures delivered at Columbia University by Dr. Feis is an excellent and convenient, though brief, survey of the changes that have come in international economic relations within recent years. After a summary of neo-classical theory and a description of the changes that have come since 1914, two chapters are given to the effect of the present war and the position of the United States, with a final chapter on some current problems and a few suggestions about future possibilities. The author, of course, speaks only for himself and not for the Department of State whose economic adviser he has been for nine years. Presumably he is somewhat less specific on many points than he would otherwise be, but in many instances he has written with a commendable directness and frankness.

His description of "orthodox" theory and of its inadequacy as an accurate statement of the nature of present international economic relations calls for the comment that the changes which impair the theory go further back than

1914 and that the first World War was perhaps in part due to those changes, even though the dislocations it brought were in turn a cause of further disruption. The reviewer would suggest that, though the theory must be extensively modified and perhaps some of it discarded, there is much that probably should and will be retained.

Special attention should be called to the observations by Dr. Feis in his concluding chapter where he emphasizes the implications of our closer trade relations with Latin American countries. If agreements or "some general and more comprehensive agreement" should be elaborated, and "if their application should cause sudden and substantial loss or displacement to producers within this country, suitable safeguards or compensation will be required for those bearing the loss." The implications of this and many other observations by Dr. Feis are not yet appreciated by most business-men or even economists. "Should necessity dictate, neither novelty of method nor preconceived notion, nor unusual difficulties of administration, nor large initial expense should be permitted to defeat the purpose."

ERNEST MINOR PATTERSON

FRAENKEL, E. *The dual state: a contribution to the theory of dictatorship*. Translated from the German by E. A. SHILS and others. (New York: Oxford Univ. Press. 1941. Pp. 264. \$3.)

GRATZ, G., editor. *The Hungarian economic year book*. (Budapest: Grill's Bookshop. New York: Columbia Univ. Press. 1940. Pp. 162. \$2.)

Edited by the former Hungarian Minister for Foreign Affairs, this volume is a valuable reference book on the economic and financial situation of that country. The chapter on commercial policy makes clear to the reader the methods of the German economic penetration into Central Europe.

J. C. ROCCA

HAAS, W. H., editor. *The American empire: a study of the outlying territories of the United States*. (Chicago: Univ. of Chicago Press. 1940. Pp. xi, 408. \$4.)

This series of factual studies of the outlying possessions of the United States has greater unity and balance than is usually found in coöperative volumes. All the chapters on individual areas are well done, especially that on Hawaii. Alaska, the author of that chapter believes, has much greater possibilities than current developments indicate. The Philippines are presented as a problem both to the United States and to their own people. American policy may well be to be rid of the islands if possible. In the Caribbean region the Canal Zone is our greatest interest and a keystone in national defense. The Virgin Islands are a bad investment and Puerto Rico is a problem in overpopulation for which there seems to be no solution. Taken as a whole, the economic advantages brought to the United States by the offshore possessions are slight and only the Caribbean holdings may contribute to the national defense. The closing chapter on "'Manifest destiny' in greater America" is a realistic analysis which deserves careful reading by critics of the so-called American imperialistic adventures.

CHESTER LLOYD JONES

HANCOCK, W. K. *Survey of British commonwealth affairs*. Vol. II. *Problems of economic policy, 1918-1939*. (London: Oxford Univ. Press. 1940. 15s.)

HARPER, S., and others. *The Soviet Union and America*. Round table broadcast no. 142. (Chicago: Univ. of Chicago. 1940. Pp. 28. 10c.)

HUNTINGTON, E., and others. *Principles of economic geography*. (New York: Wiley. 1940. Pp. 725. \$4.)

JAMESON, J. F. *The American Revolution considered as a social movement*. (Princeton: Princeton Univ. Press. 1940. Pp. 100. \$1.75.)

KEMMERER, D. L. *Path to freedom: the struggle for self-government in colonial New Jersey, 1703-1776*. (Princeton: Princeton Univ. Press. 1940. Pp. xvi, 384. \$3.75.)

This book provides a painstaking analysis of the interplay of political and economic forces which marked the development of New Jersey from 1664 to 1776. It is based upon a wealth of little used source materials which have been gathered critically and objectively to illuminate with decisive thoroughness the major factors tending to promote the break between England and her American colonies, particularly as they worked themselves out in New Jersey.

The central theme of the study is the constant struggle for political power between the tax-controlling assembly and the governor cloaked with royal authority. This is supplemented and clarified by an analysis of paper-money schemes and loan-office proposals, the influence of land speculation and title difficulties, as well as by a discussion of the attitude and aims of the English home authorities and the various colonial groups.

Although concerned primarily with the affairs of New Jersey, the work is given greater breadth not only by its consideration of the mutual relations between New Jersey and nearby colonies, but by the clarity with which it reveals the development of colonial attitudes which led to the Revolutionary War.

WILLIAM C. BAGLEY, JR.

LUMPKIN, K. D. *The South in progress*. (New York: Internat. Pubs. 1940. Pp. viii, 256. \$2.50.)

The author examines the South during the last ten years and finds that there has been progress in the various aspects of its life. The heritage of share-cropping, low wage level, race discrimination and disfranchisement, restriction of civil liberties, and poverty, she sets forth with force and frankness; but she sees hope in the development of labor organizations, in the work of progressive groups such as the Interracial Commission and the Southern Conference for Human Welfare, and in the New Deal. The work is based on a knowledge gained through southern nativity and residence and by an examination of various books, pamphlets, and newspapers.

E. MERTON COULTER

MARK, I. *Agrarian conflicts in colonial New York, 1711-1775*. (New York: Columbia Univ. Press. 1940. Pp. 237. \$3.)

Dr. Mark has studied the divers agrarian elements on the Upper Hudson. He sets forth the conflicts between the tenant and his landlord, the small owner and the larger landlord, the settler and the land speculator, the debtor and the creditor. He shows how Indians were tricked out of their rights to the land and how officials were fooled or bribed by selfish and land-hungry individuals to the point of making grants of enormous holdings.

New England republicanism entered to play a part on the New York

frontier, but many small farmers were Tories. The situation was confused; and no author could make it clear and simple, no matter how diligently he searched the records. The scholarly contribution of the author lies in the critical examination of the complicated land and social system rather than in fresh conclusions.

N. S. B. G.

MITCHELL, K. and HOLLAND, W. L., editors. *Problems of the Pacific, 1939*. Proceedings of meeting of Inst. of Pacific Relations at Virginia Beach, Virginia, Nov. 22-Dec. 2, 1939. (New York: Inst. of Pacific Rel. 1940. Pp. viii, 299. \$3.50.)

P., D. M. W. *France faces fascism*. Res. ser. no. 52. (London: Gollancz and Fabian Soc. 1940. Pp. 27. 6d.)

PEFFER, N. *Prerequisites to peace in the Far East*. (New York: Inst. of Pacific Rel. 1940. Pp. xi, 121. \$1.)

SMITH, R. S. *The Spanish guild merchant: a history of the consulado, 1250-1700*. (Durham: Duke Univ. Press. 1940. Pp. xii, 167. \$2.50.)

SMITH, J. R. and PHILLIPS, M. O. *North America: its people and the resources, development, and prospects of the continent as the home of man*. 2nd ed. (New York: Harcourt Brace. 1940. Pp. xiii, 1008.)

This volume of economic geography is a revision of a book of the same title published first in 1925. Recognizing changes since the year of first publication, the authors suggest that "in view of these cold, hard facts, the acute problem confronting this generation and the next is to bring about parallel changes in men's minds." But one doubts that this conception of the change is adequate. Thus, "time is required for the national mind, accustomed for generations to think in terms of endless opportunity, to realize that 'go West, young man, go West,' is no longer good advice. . . ." The reviewer will only remark that such terms as "the days of the frontier are over," however appropriate for land economics, are not suited to describe the spirit of the new industrial age in which "frontiers" are not in land surface but in endless research into the deeper recesses of natural forces for the purpose of discovering therein new, and perhaps greater, opportunities.

The book is divided into 48 chapters, separated for the most part into regional studies, a chapter covering resources and industries of given areas. As compared with the former edition, old chapters have been practically rewritten and new chapters added. Although the reviewer cannot agree with much of the philosophy of the volume, he finds the exposition both entertaining and instructive.

I. LIPPINCOTT

SPROUT, H. and SPROUT, M. *Toward a new order of sea power: American naval policy and the world scene, 1918-1922*. (Princeton: Princeton Univ. Press. 1940. Pp. xiii, 332. \$3.75.)

THOMPSON, R. T. *Colonel James Neilson: a business-man of the early machine age in New Jersey, 1784-1862*. (New Brunswick: Rutgers Univ. Press. 1940. Pp. xiii, 359. \$3.75.)

This is a careful biography of a leading business-man in a small city during the American Industrial Revolution. "His activities and interests formed an interesting microcosm of the history of the nation as well as of his own community during the half century before 1860" (p. 12).

Neilson had a versatile business career in New Brunswick, New Jersey, engaging at one time or another in banking, insurance, real estate, textile manufacturing, farming and transportation, but mainly the last. Engaged in transport between New Brunswick and New York, he helped organize a combination of companies when, after the case of Gibbons *versus* Ogden, competition between rival steamship companies became severe. The locally famous "Napoleon Company" enjoyed a profitable monopoly from 1831 to 1847. The company had numerous subsidiaries, including the barge business on the Delaware and Raritan canal which, to avoid railroad competition, combined with the Camden and Amboy railroad in what was known as the "Joint Companies." Related companies exploited water power and operated a sawmill and a cotton goods factory. Decline came when the canal was enlarged and the water power available declined, and when the grain business moved west and the shipping to New York.

The book is full of interesting details of economic history, and should be especially valuable to historians of American corporate development. There is a complete bibliography, a map inside the cover, and appendices showing wages and other costs in the cotton textile industry and a list of the chief stockholders of the Delaware and Raritan canal.

I have but two adverse criticisms. One is the author's zeal in including insignificant details. The other is that the author rarely relates happenings in the city of New Brunswick to developments in the United States as a whole.

DONALD L. KEMMERER

WALKER, E. R., assisted by ANDERSON, D. L. *The Tasmanian economy in 1939-40: a survey prepared on behalf of the government*. Stud. of Tasmanian econ. no. 11. (Hobart: Govt. Printer. 1940. Pp. 31.)

WILLCOX, W. B. *Gloucestershire: a study in local government, 1590-1640*. (New Haven: Yale Univ. Press. 1940. Pp. xvi, 348. \$3.)

Brazil, 1939/40: an economic, social and geographic survey. (Rio de Janeiro: Ministry of Foreign Affairs. 1940. Pp. 383.)

The economic almanac for 1940. (New York: Nat. Industrial Conf. Board. 1940. Pp. 384. \$5.)

Agriculture, Mining, Forestry, and Fisheries

World Trade in Agricultural Products: Its Growth; Its Crisis; and the New Trade Policies. By L. B. BACON and F. C. SCHLOEMER. (Rome: Internat. Inst. of Agric. 1940. Pp. xix, 1102. L.60.)

This study was conceived by Dr. H. C. Taylor when he was the delegate of the United States at the International Institute of Agriculture at Rome in 1934. The work on it was begun under his guidance in Rome, and has been carried on over the years since, partly in Rome and partly at Chicago. The two authors had the advice of the staff of the Institute of Agriculture in handling the data, and particularly of the delegates of several of the countries in checking their analyses. The German Statistical Office made an important contribution to it by calculating for 92 countries the values (in reichmarks) of the imports and exports of 79 materials of "agricultural origin" for the nine-year critical period of 1929-37.

The authors in their preface define their objectives as "to draft a general picture of the evolution undergone by world trade in agricultural products during a decade of intense governmental activity which profoundly changed agricultural markets, re-directed trade, and deeply influenced agricultural production." They have achieved exactly this result with great care and thoroughness. Thus chapter 16 on "The United Kingdom" has 67 large pages devoted to describing the trade in agricultural products of this country in the pre-war period, the years 1909-13 being taken as the datum point, in the war and post-war decade, and in the depression years 1929-37. Tables presented in parallel form enable one to compare the shifts in trade product by product. The depression period is analyzed in much more detail than the two earlier ones. There is traced for these latter years the United Kingdom's changes in trade policy and the measures of government aid to agriculture, and their effects on trade, production and prices. This is done for all the important products separately, and then in indexes of imports and exports for all combined (1929 = 100). A final table gives values of imports and exports by years from 1929 to 1937 for each of the 79 items.

A series of seven chapters following present in parallel form the material for Germany, France, Italy, and the United States; for the European exporters of agricultural products; for Argentina, Australia and Canada; and for the Asiatic exporters. This makes up Part II of the book. Part I develops the subject separately for a list of 12 products ranging from wheat to rubber and silk. Here one will find much more detail by products, and yet scarcely anything that is repeated in Part II. Each part has a summary chapter.

The analysis is handled with scrupulous apparent objectivity. Nevertheless, the attempt to relate changes in trade with the control measures adopted calls for considerable evaluation. Merely to illustrate, in the chapter on cotton one finds the sentence: "United States exports dropped, owing in good part to the relief measures for cotton growers, whereas Brazilian exports in particular rose amazingly" (p. 415). Some in this country hold to the contrary view that most of our losses in cotton exports would have come anyway. The reviewer believes that most persons reading in this volume the full account of the control measures and their effects in different countries will be inclined to agree with the authors.

The following statement from the authors' preface seems well substantiated by the evidence presented:

But almost everywhere the impression imposes itself that an outstanding motive which impelled governments to embark on depression legislation was the desire to halt the headlong fall in prices by putting a bottom in the market and to secure remunerative prices and returns to agricultural producers. . . . In their

post-war agricultural and commercial policies, statesmen also gave great weight to an extended conception of what one of the old masters of economic science called "the first duty of the sovereign, the protection of the society from violence and invasion."

The different countries considered, each and all, one after another set about price-restraining measures for farm products with the onset of the depression. They were somewhat more expeditious about it in some countries than others—perhaps a little slower in those with a free-trade heritage, like Denmark. The controls were the more inflexible in the totalitarian-minded countries.

The chapter which seems least purely objective is the one on Germany; yet considering that it was prepared by a German citizen, it is a remarkable achievement in this regard. Perhaps a German would consider Dr. Bacon's treatment of the problem for her country, the United States, as slightly indoctrinated.

This book was printed in Rome in a limited edition. Yet for any economics library to be without it would be unfortunate.

JOHN D. BLACK

Harvard University

Food Production in Western Europe: An Economic Survey of Agriculture in Six Countries. By P. LAMARTINE YATES. (London: Longmans Green. 1940. Pp. xvi, 572. \$6.00.)

This study deals directly with the agriculture of Denmark, the Netherlands, Belgium, France, Switzerland, and Germany, as it was before the invasion of Poland. Indirectly, it deals also with Great Britain, for throughout the book comparisons both qualitative and quantitative are framed in terms of British agriculture.

Parts 2 to 7 treat *seriatim* the six countries considered, between 60 and 98 pages being devoted to each. The schematic outline of each part is substantially "Crops and stock" (natural environment, crops, livestock); "Farms and farmers" (farm sizes, land tenure, inheritance, agricultural population, capital, farm income, housing, health, education, coöperation, organization); and "State agricultural policy" (land settlement and reclamation, tariff policy, commodity controls, retail food prices, burden on consumers, etc.).

Parts 1 and 8 respectively pose and answer two general questions: How far has it been advantageous in the experience of continental countries to keep a large proportion of their population engaged in farming? How can agriculture be so regulated and organized and, if necessary, remoulded as best to serve the public interest in a more consciously planned future? These are questions in the field of state policy; and policy, particularly compara-

tive agricultural policy, is indeed the focus of interest throughout the book. Mr. Yates's summary reviews of agricultural policy in each country in Parts 2 to 7, and his comparative analytical survey in Part 8, are first-class contributions—condensed but comprehensive, illuminating but not overburdened with detail.

The answer to the first major question is broadly that the public interest was best served by a free-trade policy operating under conditions of relatively easy absorption of surplus labor by domestic industry or by emigration (Denmark, Great Britain); next best, by a free-trade policy operating under conditions of agricultural over-population (Netherlands, Belgium, Switzerland); worst, by a policy of protectionism (France, Germany). The answer to the second question is that "... any reasonable agricultural policy is impossible in the environment and under the assumptions which up till the present have prevailed. The old policies will continue to hold the field until nations no longer run the risk of starvation in a war and until they realize that it is no longer necessary or possible to keep a large proportion of their populations working on the land" (p. 562). But if the environment should change, Mr. Yates thinks that need would remain for agricultural policy stressing (1) some degree of "... controlled imports, guaranteed prices and some check on over-production . . . administered for the benefit of the nation as a whole . . . ;" (2) consolidation of strips and of small holdings; and (3) "... thorough application of modern agricultural science to farming practice" (pp. 563-64). To those who agree that "On the whole those countries succeed best which most exploit their natural advantages" (p. 550), the conclusions are readily acceptable in their broader aspects. Disagreement might have arisen if questions had been raised concerning what and how much control of imports, guarantee of prices, check upon over-production, might best be exercised.

The discussions of "Crops and stock" and "Farms and farmers" in each country suffer a little from the obvious necessity to condense; this is particularly true with regard to the largest countries, France and Germany, where diversity is of course most prominent. The problem of explaining relative levels of crop yields per acre in different regions is rather more complex than Mr. Yates's discussions might lead a reader to suppose. Precise citations to sources of important statistical evidence are sometimes missing. But these defects are minor ones, and the merit is great of encompassing in one well written volume a generally sound and reliable study of comparative agriculture and comparative agricultural policy in so populous and important an area as western Europe.

M. K. BENNETT

*Food Research Institute,
Stanford University*

Milk Distribution as a Public Utility. By W. P. MORTENSEN. (Chicago: Univ. of Chicago Press. 1940. Pp. xviii, 221. \$2.50.)

The author starts out with a chapter outlining the historical background of the various attempts to control milk prices. This includes a brief discussion of the milk price plans developed by the collective bargaining associations of the 1920's, and then a discussion of the development of the numerous state milk control boards of the 1930's. The first chapter concludes by pointing out that the goal of reduced margins between producers and consumers is to be attained by greater efficiency in milk distribution and that the adjustments necessary to attain this end call for more regulatory power than the present boards have or are willing to use.

The second chapter deals with the characteristics of a public utility, which for his purposes he defines (p. 14) as "a business having certain economic characteristics, and one in which only those may engage who have been granted a franchise by the government (federal, state, or a department of the state)."

Apparently, however, the author means to include in his discussion government owned and operated systems as well as those privately owned but publicly controlled, for he points out that from the standpoint of operation, the two would be similar in that either would permit the economic savings which might arise from unified operation. Furthermore, chapter 7 is devoted to a discussion of public ownership and the legal and economic problems involved in that approach.

Part II (chapters 3, 4, and 5) deals with the costs of milk distribution and the possibilities through unification of a distribution system. This section is of particular interest because it uses cost data collected from a group of Wisconsin milk companies covering an eleven-year period as a means of ascertaining what gains may be expected of a unified system.

Parts III and IV deal respectively with "Legal considerations of control," and "Methods and difficulties of regulation." The three chapters here included will appeal particularly to administrators and legislators. Part V, "Economic effects of regulation," answers the question, "what groups would gain under a unified distribution system?"

The author points out that while no positive and final answer can be given, "it would, however, seem clear that the short-run effect will be to pass any savings resulting from a decrease of the distributors' margins on to the consumer" (p. 173), who would probably be able to hold most of them. As for producers, the bargaining position of those now well organized might be reduced, although if a unified system decreased costs, it would lead to increased fluid milk consumption and so would benefit producers. However, "the key question with regard to both producer and consumer benefits depends largely upon whether the unified system would be

operated with the high efficiency which such a setup makes possible" (p. 180).

The author states his conclusions in cautious terms. The possible gains from an efficiently operated unified system under conditions similar to those in the markets studied should be something like $1\frac{1}{2}$ to $2\frac{1}{4}$ cents per quart. But this assumes management with prudence, honesty, efficiency, and freedom from political influence. He frankly recognizes that there will be opposition from present distributors, laborers associated with them who might lose some of their present bargaining power, and some producer groups. In spite of relatively modest prospective gains and considerable difficulties, he would like to see a few cities try the experiment.

The book represents a careful job of a sort that is headed directly at a problem. Its brevity increases the likelihood of a wide reading. At the same time, its brevity may have restricted analysis or perspective. For example, the historical sketch leaves one with the idea that proposals for making milk distribution a public utility grew out of the failure of the recently established control boards. As a matter of fact, the present reviewer, writing on the subject in 1920, found a dozen or more similar proposals in as many cities between 1914 and 1919.

H. E. ERDMAN

University of California

NEW BOOKS

- BERCAW, L. O., HANNAY, A. M. and LARSON, N. G., compilers. *Corn in the development of the civilization of the Americas: a selected and annotated bibliography*. Agric. econ. bibliog. no. 87. (Washington: U. S. Bur. of Agric. Econ. 1940. Pp. 195.)
- BLAISDELL, D. C. *Government and agriculture: the growth of federal farm aid*. (New York: Farrar and Rinehart. 1940. Pp. 230. \$1.50; college ed., \$1.)
- DALTON, J. E. *Sugar and national defense*. Reprinted from proc. of 12th Boston conf. on distribution, 1940. (Boston: Boston Conf. on Distribution. 1940. Pp. 7.)
- DAVIS, J. S. *The world wheat situation, 1939-40: a review of the crop year*. Wheat stud., vol. xvii, no. 4. (Stanford University, Calif.: Food Research Inst. 1940. Pp. 145-220. \$1.25.)
- DUMMEIER, E. F. and HEFLEBOWER, R. B. *Economics with applications to agriculture*. 2nd ed. (New York: McGraw-Hill. 1940. Pp. xii, 752. \$3.75.)
- ELLIOTT, C. N. *Conservation of American resources* (Atlanta, Ga.: Turner E. Smith. 1940. Pp. 683. \$1.80.)
- GADGIL, D. R. and GADGIL, V. R. *A survey of farm business in Wai Taluka*. Pub. no. 7. (Poona, India: Gokhale Inst. of Pol. and Econ. 1940. Pp. xvi, 136. Rs. 2-8.)
- GAUS, J. M. and WOLCOTT, L. O. *Public administration and the United States Department of Agriculture*. (Chicago: Public Admin. Serv. for the Committee on Public Admin. of the Soc. Sci. Res. Council. 1940. Pp. x, 534.)
- HANNAY, A. M., compiler. *Price fixing by government in foreign countries*,

- 1926-1939: a selected list of references on direct price fixing of agricultural products by foreign governments. Agric. econ. bibliog. no. 86. (Washington: Supt. Docs. 1940. Pp. 639, mimeographed.)
- HARE, A. E. C. *The anthracite coal industry of the Swansea district*. Pamphl. no. 5. (Swansea: Univ. Coll. of Swansea. 1940. Pp. 84. 1s.)
- HERB, M. I., compiler. *Food and cotton stamp plans: a selected list of references*. Econ. lib. list no. 18. (Washington: U. S. Bur. of Agric. Econ. 1940. Pp. 26.)
- HOOS, S. and WORKING, H. *Price relations of Liverpool wheat futures, with special reference to the December—March spread*. Wheat stud., vol. xvii, no. 3. (Stanford University, Calif.: Food Research Inst. 1940. Pp. 101-142. \$1.)
- MACLEISH, K. and HENNEFRUND, H. E., compilers. *Anthropology and agriculture: selected references on agriculture in primitive cultures*. Agric. econ. bibliog. no. 89. (Washington: U. S. Bur. of Agric. Econ. 1940. Pp. xi, 134.)
- MEYERS, A. L. *Agriculture and the national economy*. Investigation of concentration of economic power monog. no. 23. (Washington: Temporary Nat. Econ. Committee. 1940. Pp. vii, 48.)
- MITCHELL, L. S., BOWMAN, E. and PHELPS, M. *My country 'tis of thee: the use and abuse of natural resources*. (New York: Macmillan. 1940. Pp. xv, 335. \$3.50.)
- PARKER, G. L. *The coal industry*. (Washington: Am. Council on Public Affairs. 1940. Pp. 197. \$3.)
- SHUMAN, R. B. *The petroleum industry: an economic survey*. (Norman: Univ. of Oklahoma Press. 1940. Pp. 311. \$3.)
- SPENCER, V. E. *Production, employment, and productivity in the mineral extractive industries, 1880-1938*. Rep. no. S-2. (Philadelphia: WPA, Nat. Res. Project. 1940. Pp. xviii, 168.)
- THOMPSON, S. H. *Economic trends in livestock marketing*. (St. Louis: John S. Swift. 1940. Pp. 181. \$2.50.)
- Agrarian China: selected source materials from Chinese authors*. Rep. in internat. research ser. (Chicago: Univ. of Chicago Press. 1939. Pp. xviii, 258. \$2.50.)

This interesting and enlightening volume has been compiled by the secretariat of the Institute of Pacific Relations from papers, most of them previously published in Chinese journals, by Chinese scholars. To quote from Mr. R. H. Tawney's introduction, "The four sections in which they have been grouped necessarily overlap, but each has its central theme. The first is principally concerned with the distribution of landed property; the second with farm management and allied topics; the third with marketing and finance. The principal subject of the fourth is the present position of the rural handicrafts."

Though the contents consist mainly of brief research studies, the book gives a surprisingly deep insight into the critical agrarian problems of China, and so by reflection into the disordered economic foundations of Chinese civilization. The book will also call to the attention of American scholars the fact that China is raising a numerous body of competent young economists who are not only engaged in broad programs of research but are intelligently applying their minds to interpretation of China's social crisis and to search for the means of improvement.

Agricultural credit in Germany. (Washington: Farm Credit Admin. 1940. Pp. 98. 15c.)

Comisión Nacional de Granos y Elevadores: memoria correspondiente al año 1939. (Buenos Aires: Com. Nac. de Granos y Elevadores. 1940. Pp. 453.)

Mexico's oil: a compilation of official documents in the conflict of economic order in the petroleum industry, with an introduction summarizing its causes and consequences. (Mexico City: Govt. of Mexico. 1940. Pp. lii, 881.)

Exhaustive analysis of Mexico's policy.

Minerals yearbook, 1940. (Washington: Supt. Docs. 1940. Pp. x, 1514. \$2.)

Report of the Secretary of Agriculture, 1940. (Washington: Supt. Docs. 1940. Pp. iv, 184.)

Manufacturing Industries

The Economic History of Steelmaking, 1867-1939: A Study in Competition. By D. L. BURN. (New York: Macmillan. Cambridge, England: Univ. Press. 1940. Pp. x, 548. \$6.50.)

For the American reader the subtitle of this book, "A study in competition," is misleading. The competition which Mr. Burn uses as the central theme for his scholarly history of the British iron and steel industry is foreign competition. Hence there is brought together in this volume a discussion of the economic development of the steel industry in the United States and on the Continent as well as in England. Analysis of the relationship between the internal competitive situation of the industry and successful penetration of foreign markets is not, however, neglected. In fact, for the economist the most interesting chapters are those which deal with the structure of the English industry in contrast to the pattern of development of the steel industry in Europe and in the United States.

Mr. Burn treats his thesis chronologically but divides the volume into three books to give proper emphasis to changes in economic policy and developments in the British industry. The fact that such arrangements of subject matter did not facilitate the task of making valid comparisons with developments abroad was probably recognized by the author.

In general Mr. Burn is critical of the British steelmakers for their refusal until the 1930's to attempt to gain the benefits of rationalization which he identifies in several passages with "horizontal amalgamation." Considerable emphasis is given to the large number of small non-integrated or imperfectly integrated concerns in comparison with the small number of large integrated steel producers found in Germany and the United States. This failure to copy the structure of the American steel industry impresses Mr. Burn as the principal cause of the competitive weakness of the British steel industry in world markets. It is unfortunate that in his discussion of the steel industry during the decade of the 1930's, Mr. Burn had to admit that he "was insufficiently in touch with the most recent developments overseas to write of them in detail." At least he would have sensed a growing doubt on the part of some economists that a "fewness of numbers" in

the steel industry is an unmitigated economic blessing. Perhaps it is pertinent to add that economists here who would find a solution to our own difficulties by greatly increasing the number of competitive concerns should read this treatise on the development of the steel industry in Great Britain.

In the final chapters of his book Mr. Burn presents a most informative and stimulating discussion of the functioning of the industry under the British Iron and Steel Federation with its independent chairman. Despite modifications in policies and procedures caused by the war, this experiment in industrial self-government by a great industry can be studied with profit whether or not one agrees with Mr. Burn's sympathy with its objectives and his criticisms of its operation.

Mr. Burn has succeeded in writing a comprehensive, well documented and thoroughly scholarly history of steelmaking in Great Britain. His interpretations of the economic developments which he so ably records may well provoke dissent from those economists who are less certain than Mr. Burn that rationalization, even under government supervision, is the panacea for unprofitable industry.

SAMUEL SOMMERVILLE STRATTON

Harvard University

NEW BOOKS

BIDWELL, P. W. *If war comes . . . mobilizing machines and men*. Pamphl. no. 48. (New York: Public Affairs Committee. 1940. Pp. 32. 10c.)

FABRICANT, S., with the assistance of SHISKIN, J. *The output of manufacturing industries, 1899-1937*. (New York: Nat. Bur. of Econ. Research. 1940. Pp. xxiii, 685. \$4.50.)

PARADISO, L. J. *Capital requirements: a study in methods as applied to the iron and steel industry (computed as of 1939)*. (Washington: Nat. Resources Planning Board. 1940. Pp. v, 54. 20c.)

Chemical facts and figures: annual statistics of the American chemical industry. (Washington: Manufacturing Chemists' Assoc. 1940. Pp. iii, 219.)

Commodities in industry: the 1940 commodity year book. (New York: Commodity Research Bur. 1940. Pp. 708. \$7.50.)

In these troubled times, thoughts concerning essential commodities sometimes reflect panic with resulting chaos in the commodity market. The sound, rational discussion of war and commodities which introduces this book is therefore significant. Other factors of general importance which are discussed as an introduction to the study of specific commodities include: "Trends in per capita commodity consumption;" "Are synthetics replacing raw material in industry?" "Weather forecasting;" and "Weights, measures and conversion factors."

In addition to information gathered from readily available sources, useful material has been secured through the coöperation of trade associations and large individual industrial enterprises. The statistical information presented is rendered more valuable with a step-by-step description of the methods whereby each of the 75 raw materials is converted to its finished form. In

most cases time series covering the last ten years and treating production, sales, inventories and prices are provided for the United States and, where foreign trade is important, for a selected list of other countries.

GERALD B. TALLMAN

Transportation and Communication

The Road and Rail Transport Problem. By OSBORNE MANCE. (New York: Pitman. 1940. Pp. xiv, 166. \$3.00.)

Relatively little fundamental thinking has been done as to the division of function between rail and highway carriers. Although conditions are somewhat different in Great Britain as compared with the United States because of the far-reaching consolidation of railroads throughout Great Britain, the proper distribution of traffic between these two types of carriers is an acute problem in both countries. The possible systems which may be applied to the relationship between rail and highway transport are reduced to the following alternative solutions: (a) unrestricted competition; (b) combined monopoly of road and rail transport; (c) coördination of competing monopolies; (d) controlled competition between road and rail; and (e) a combination of some of the foregoing.

The criterion of a solution is necessarily the public interest. The Royal Commission on Transport referred to the objective of road and rail coördination as "a state of affairs . . . whereby every passenger who traveled and every ounce of goods was consigned by the most economic route and form of transport." Unrestricted competition which involves complete freedom to both rail and road transport as regards rates and service would unquestionably weaken the financial stability of transportation agencies and would sooner or later affect to the detriment of the public interest the efficiency of the service. A combined monopoly of road and rail transport is questioned because it would tend toward the loss of incentive to progress and would require strong safeguards so as not to subordinate unduly road transport to railway influence. It would also involve an increase of state interference in matters of transport.

England is following in general the policy which has been established in the United States—that of controlled competition. This is easier to accomplish in England, however, because the central government has complete jurisdiction over both rail and road carriers. In this country that jurisdiction, especially over highway carriers, is divided between Washington and the several states. The author believes that in order to make such a scheme of control function properly there must be some form of monopoly in each of the two fields of transport. In the field of road transport there may have to be established an association which will be responsible for the

individual operators. It is obvious that the final solution as to the relations of road and rail has not yet been discovered. The objective has to be determined and the procedure of attaining this objective must be gradually worked out.

HENRY R. TRUMBOWER

University of Wisconsin

NEW BOOKS

HETTINGER, H. S. editor. *New horizons in radio*. Annals, vol. 213. (Philadelphia: Am. Acad. of Pol. and Soc. Sci. 1941. Pp. ix, 253. \$2.)

DAGGETT, S. *Principles of inland transportation*. 3rd ed. (New York: Harper. 1941. Pp. xxv, 906. \$4.)

Investigation of railroads, holding companies, and affiliated companies: additional report of the Committee on Interstate Commerce pursuant to S. Res. 71 (74th Congress), resolution authorizing investigation of interstate railroads and affiliates with respect to financing, reorganizations, mergers, and certain other matters. Chicago, Milwaukee and St. Paul Railway Company, 1925-1928 receivership and reorganization. Parts 18-21. (Washington: Supt. Docs. 1940. Pp. 23; 23; 22; 22. 5c., each part.)

Trade, Commerce, and Commercial Crises

The Reconstruction of World Trade. By J. B. CONDLIFFE. (New York: Norton. 1940. Pp. 427. \$3.75.)

This survey of international economic relations is based upon studies undertaken in preparation for a conference on "Economic Policies in Relation to World Peace" which was to have met at Bergen on August 27, 1939. But the survey is not confined to the conference materials and is "essentially a personal interpretation." The volume falls into three parts. The first analyzes the restrictive policies which led to the breakdown of the international trading system after 1931; the second examines the transformation of these policies from instruments of defense against depression into offensive weapons in the hands of aggressive states; the third surveys the difficulties which must be faced in the reconstruction of world trade after the present war.

The author decides that the type of international reconstruction attempted after the last war was based upon a false assumption, the assumption that a world of independent sovereign states great and small would be able to find means of reconciling the principle of nationality with the necessity of world-wide specialization and exchange. Nationalism expressed through tariff barriers, import quotas, exchange controls, clearing agreements and other restrictive measures effectively wrecked the international trading system. There is little hope that these nations will be able to restore

the commercial relations which prevailed during the latter part of the nineteenth and the beginning of the twentieth centuries. The trend toward state control of economic life will frustrate all efforts to reconstruct the system on the pre-war model. What is more likely to happen, according to the author, is the disappearance of economically independent nations and the formation of great regional blocs dominated by the monetary policies of powerful states. He foresees the emergence of metropolitan regions surrounded by satellite areas enjoying varying degrees of political autonomy but essentially dependent upon the financial, monetary, and economic strength of the dominant power.

In such a world, what are the conditions necessary to the restoration of multilateral trading? There are six principal conditions. The first is the failure of Germany to win the present war. A German victory will lead to the formation of autarchic empires whose economic and political rivalry will lay the foundations of ever more devastating wars. The second condition is the willingness of the British Commonwealth to give up the immediate strategic and economic advantages of victory for the larger security and opportunity of participation in a world exchange economy. The third is the willingness of the United States to take a large share of permanent responsibility for the maintenance of economic world order. The fourth condition is that the dominant powers which will emerge after the war shall be willing to abandon government operation of economic activity. Mr. Condliffe believes that centralized quantitative control of international trade is incompatible with the development of international economic coöperation. Such coöperation, indeed, is the fifth condition necessary to the restoration of multilateral trade. In the latter part of the book there is a brief discussion of the lines along which coöperative action might be developed; and emphasis is laid upon the necessity of collaboration for the stabilization of exchange rates. The sixth condition is the attainment of some kind of world peace organization. "Moreover, no system of economic or financial coöperation can be effective for long unless it is firmly based on political security, which means collective security. In assuring collective security, the United States must assume a large share of responsibility and make far-reaching political and military commitments. It is simply unrealistic to blink this fact" (p. 394).

This is a useful book. The reviewer finds little ground for criticism in the analysis of the effects of the restrictive policies of recent years. As to the future, the author's prognosis seems at least as reasonable as any other. Some of Mr. Condliffe's views may not find universal acceptance; for example, his opinion as to the impracticability of monetary nationalism in the form of flexible exchange rates, and his view that quantitative controls are incompatible with multilateral trade. But his main thesis that inter-

national commerce cannot be revived in a world divided by political animosities will meet with general agreement..

RALPH E. FREEMAN

Massachusetts Institute of Technology

National Welfare and Business Stability: The Permanent Functions of Public Spending. By JOHN BAUER. (New York: Harper. 1940. Pp. xi, 182. \$2.00.)

This book represents a popular plea for compensatory spending as a method of achieving full employment and maintaining economic stability. As such it presents, in an interesting non-technical manner, the now well known material which has grown out of the depression and the New Deal attempts to achieve recovery. The author rightly emphasizes fiscal rather than monetary policy as the more efficacious means of promoting recovery. He endorses public spending but believes the amounts expended have been too small. He pleads for a system of governmental accounting which will distinguish capital expenditures from current operating costs. The proper functions of private enterprise and of government production are distinguished and criteria established for determining which needs of society should be met by the price-enterprise method and which needs by the tax-government method. Bauer argues effectively that government spending in its proper field is as productive as private spending in its field and minimizes fear of an increase in public debt.

He expresses the conviction that a program of public spending to balance private spending is not only feasible in a capitalistic democratic system but is necessary if democracy and free enterprise are to be saved. The problem of financing public expenditures is dismissed with little analysis since, in the author's opinion, the attainment of permanent stability and full employment would eliminate the need for continuing deficits. The book closes with an appeal to all the important elements in the economy—business, labor, and agriculture—to coöperate in their own interest and obtain the adoption of his program. An appendix contains a draft of "The National Development act," the enactment of which, in Bauer's view, will bring about the desired stability and full employment.

For the layman, this book is useful in helping him to see through the traditional arguments offered for the return to the "good old days" when government assumed little responsibility for economic affairs. For the professional economist, however, this book makes no new contribution to the subject. In fact, it repeats some of the misconceptions and faulty theorizing frequently encountered in discussions of public spending. The difficulties involved in the timing and direction and the shifts in direction of public spending are ignored. Too great a faith is pinned on the stabilizing possi-

bilities of government spending. As government expenditures increase in importance, any significant change in volume or in direction will affect profit anticipations and make difficult the nice balancing of public and private expenditures envisioned by Bauer. Full employment brought about by public spending does not in itself imply stability; nonfiscal measures, such as price and inventory controls, may be required for stabilization.

CORRINGTON GILL

Washington, D.C.

NEW BOOKS

BENHAM, F. *Great Britain under protection*. (New York: Macmillan. 1941. Pp. xvi, 271. \$2.50.)

BONNELL, A. T. *German control over international economic relations, 1930-1940*. Stud. in the soc. sci., vol. xxvi, no. 1. (Urbana: Univ. of Illinois Press. 1940. Pp. 167. \$2.)

BÜCHNER, R. *Einzelhandel und Mittelstandspolitik*. (Zürich: Schulthess. 1940. Pp. 91. Fr. 2.85.)

This little monograph is concerned with the problem of the small, independent enterprise in retail trade. The author approaches the subject historically minded in the spirit that no one form of enterprise is absolutely and uniquely desirable, but that changing social needs require changing retail methods. The statistical material concerning developments in Switzerland leads him to reject the contention that unaided small business cannot compete with large-scale, capitalistic enterprise. Where intelligently managed, and where taking advantage of coöperative and other forms of private organization, he claims, small business in retail trade does hold its own. Further on he surveys various governmental policies regulating retail trade, in particular special taxes and restricted permits for department and chain stores in France, Germany, and Switzerland. He finds that in these measures fiscal and socio-political aims are often at cross-purposes, and altogether favors instead self-help through coöperation between the private organizations of retail traders, big and small—a somewhat anachronistic suggestion, it seems, to come at this time out of totalitarianized Middle-Europe. Appended are comprehensive bibliographies in French, German, English, and Italian, and nine tables, six concerning developments in retail trade in Switzerland, and three showing results of retail-trade taxation in France and Germany.

JOHN V. SPIELMANS

DIETRICH, E. B. *Far Eastern trade of the United States*. (New York: Inst. of Pacific Relations. 1940. Pp. xii, 116. \$1.)

GILBERT, M., DICKENS, P. D. and others. *Export prices and export cartels (Webb-Pomerene Associations)*. Investigation of concentration of econ. power monog. no. 6. (Washington: Temporary Nat. Econ. Committee. 1940. Pp. xiii, 310.)

HAIGHT, F. A. *A history of French commercial policies*. (New York: Macmillan. 1941. Pp. xvii, 285. \$2.50.)

SPURR, W. A. *Seasonal variations in Nebraska business*. Nebraska stud. in bus. no. 47. (Lincoln: Univ. of Nebraska Coll. of Bus. Admin. 1940. Pp. iv, 49. 50c.)

Twelfth Boston conference on distribution, 1940: a national forum for problems of distribution. (Boston: Boston Chamber of Commerce. 1940. Pp. 103. \$3.75.)

Approximately 30 brief addresses covering trade practices, new processes, price behavior, fashions, and the government and business.

Accounting, Business Methods, Investments, and the Exchanges

NEW BOOKS

ALEXANDER, R. S., SURFACE, F. M., ELDER, R. F. and ALDERSON, W. *Marketing.* (Boston: Ginn. 1940. Pp. vi, 794. \$4.)

The original plan of the authors to fuse actual business observations and experiences with academic findings and theories partially failed to materialize. But Professor Alexander, in his difficult assignment of completing and editing the manuscript, has produced a lucid, descriptive book. This text emphasizes structural forms of organization and operating techniques in its analysis of markets. The historical background of trade is by contrast minimized, and only brief statements of theory are presented on the moot questions pertaining to needed reforms, trends in institutional development, and fundamental economic doctrines affecting market distribution.

A few chapters are stuffy with not too useful statistics. Chapter 13 cannot be considered authoritative in the treatment of the principles of coöperative organizations. There is an excellent bibliography, but the index is rather brief. For the convenience of some teachers, there are listed, by chapters, 55 pages of propositions, exercises and problems. Many teachers will discover in this book an excellent reference, and others an elementary text well suited to a one-semester course.

HENRY H. BAKKEN

BABSON, R. W. *Business barometers and investment.* (New York: Harper. 1940. Pp. xii, 270. \$3.)

Combines the essentials of two of the author's previous volumes: *Business Barometers* and *Investment Fundamentals*.

BARKER, C. W. and ANSHEN, M. *Modern marketing.* (New York: McGraw-Hill. 1939. Pp. viii, 326. \$2.75)

The reason that the authors give for "one more book on marketing" (p. v) is that they have found it expedient to develop a new approach to the subject. This approach constitutes a presentation of the *why* of marketing procedure, not the *what* nor the *how*. The volume gives particular attention to the general theory of marketing with little illustrative and factual material.

The book is divided into four parts. Part 1 (34 pages) deals with the economic importance of marketing and the position of the consumer. Part 2 (120 pages) describes the channels of distribution, marketing institutions, and their operations as they might look if treated as a continuous process. Part 3 (75 pages) presents a cross-section of marketing from a functional point of view, describing the specialized functions of selling and buying, transportation and storage, finance and risk. Part 4 (50-odd pages) contains a discussion of some basic marketing problems—price, competition, cost of marketing, and

the legal aspects. The final chapter, "Marketing: laws and men," gives a good discussion of the legal framework of marketing.

The book has the merit of a dynamic approach, treatment of developments under recent legislation, social viewpoint, a good theoretical presentation, and stimulating exposition.

J. S. ROBINSON

BLANKERTZ, D. F. *Marketing coöperatives*. (New York: Ronald. 1940. Pp. 502. \$4.)

BURT, F. A. *American advertising agencies*. (New York: Harper. 1940. Pp. 292. \$3.)

CAMPBELL, P. *Consumer representation in the New Deal*. (New York: Columbia Univ. Press. 1940. Pp. 298. \$3.25.)

CHILDS, J. F. and WOODBRIDGE, F. *A practical introduction to public utility security analysis*. (New York: Barron's. 1940. Pp. 119. \$1.50.)

DODGE, C. J. and SULLIVAN, J. F. *Estate administration and accounting*. (New York: Clark Boardman. 1940. Pp. 872. \$8.)

FELDMAN, H. *Stabilizing jobs and wages through better business management*. (New York: Harper. 1940. Pp. 349. \$3.50.)

FICHTNER, C. C. editor. *Faculty personnel: a directory of the instructional staffs of the member schools, 1940, American Association of Collegiate Schools of Business*. (Fayetteville, Ark.: Univ. of Arkansas. 1940. Pp. ii, 339. \$3.)

GRANGE, W. J. and QUAT, J. *Real estate*. Rev. ed. (New York: Ronald. 1940. Pp. 557. \$5.)

HATFIELD, H. R., SANDERS, T. H. and BURTON, N. L. *Accounting principles and practices: an introductory course*. (Boston: Ginn. 1940. Pp. vi, 599. \$3.75.)

A group of eminent authors has prepared a new introductory text designed not only for students taking the first of a series of accounting courses, but for those taking only one year of accounting. The approach is the common one through the balance sheet. There are included over 100 pages of laboratory problems and two practice sets, as well as questions at the end of each chapter. One chapter is devoted to business papers used in accounting.

W. P. FISKE

HAVEN, T. K. *Investment banking under the Securities and Exchange Commission*. Michigan bus. stud. vol. ix, no. 3. (Ann Arbor: Univ. of Michigan. 1940. Pp. 154. \$1.)

The underlying purpose of the author's monograph is to see if the public's critical attitude toward investment banking is justified. To this end data made available by the Securities and Exchange Commission, as well as other sources, are examined. *Inter alia*, the author finds banking commissions to be in line, little abuse of options, and firm commitments to justify the same underwriting spread as best effort commitments.

Selling group commissions on the average are found to be 50 per cent of the total underwriting commission with variations due to various qualities, markets, etc. The rate of return on invested capital (8 per cent of invested capital) indicates to the author that there is an inherent risk of loss, a conclusion paralleling the previous one that underwriting spreads are not excessive. On the whole, direct negotiations are concluded to be as advantageous as competitive bidding in the marketing of securities, the reduction of costs, and the elimination of continuous relations between investment bankers and

corporate officers. Private placements are considered as a threat to the usual methods of investment banker distribution.

The author suggests as devices for meeting public criticism the issuance of more complete information, the establishment of professional standards, self-regulation of investment banking firms, minimizing of state Blue Sky law requirements, and a revision of the Securities and Exchange act to facilitate administration.

ORBA F. TRAYLOR

HOAGLAND, H. E. *Real estate principles*. (New York: McGraw-Hill. 1940. Pp. 511. \$4.)

In this book, Professor Hoagland presents the latest developments in the wide range of private practices, professional rules and government regulations that affect the real-estate business, in a manner not surpassed in its field for realistic approach and clarity of expression. It is an excellent introductory text. The veteran real-estate appraiser, however, can most fully appreciate the good qualities of this volume.

Real-estate principles are derived from many of the social sciences, such as the geography of city location, the sociology of urban growth, the law of real-estate titles and the economics of taxation and business cycles. At every turn there is the temptation to expand the legal, the geographic or the professional real-estate phases of the subject. The author, however, has maintained an admirable balance.

For the economist, this volume presents a series of illuminating market phenomena. The process of determining the value of any economic factor with a future income stream can be profitably examined from the point of view of the real-estate appraisal. The new techniques of the Federal Housing Administration, discussed by Professor Hoagland, reveal the numerous factors involved in rating any specific residence. While the author is justly wary of devices to reduce the natural heterogeneity of real estate to precise mechanical units and recognizes ample scope for the exercise of the art and the informed judgment of the skilled appraiser, real-estate valuers will find in the book many implicit appraisal rules and practices that have not hitherto appeared in books. They will also discover principles of economic theory and of business cycles which have been sadly lacking in many of the appraisals of the late lamented nineteen twenties.

Professor Hoagland, out of the range of his broad and specialized experience as professor of real estate, an amateur operator and a member of the Federal Home Loan Bank Board, has produced that rarity, a textbook that enlightens the beginner and that advances the theory of the subject to its latest and most improved form.

HOMER HOYT

KESTER, R. B. and INGRAM, H. A., editors. *Corporate financial statements*. (New York: Columbia Univ. Press. 1940. Pp. 185. \$2.)

LANSBURGH, R. H. and SPIEGEL, W. R. *Industrial management*. 3rd ed. (New York: Wiley. 1940. Pp. 677. \$4.50.)

LONG, C. D., JR. *Building cycles and the theory of investment*. (Princeton: Princeton Univ. Press. 1940. Pp. xvi, 239. \$2.50.)

Among the data on the building industry included in Dr. Long's book are: a monthly index of building in a sample of United States cities, 1868-1940;

yearly indexes from 1868 of detached dwellings, multi-family dwellings, public building, private non-residential, and alterations; total residential and total non-residential back to 1856 on a yearly basis; number of families accommodated in 16 localities, yearly 1871 to 1935. The most important new information is on residential building and its divisions, because of the admirable breakdown presented and because the data are based on building permits which represent residential better than they do other divisions. The timing of the various types of building are found to be quite similar over the long cycles, but residential is found to have much the widest amplitude. Reliance is placed not only on the indexes, but on the similarity of movement of the various cities included.

The discussion of reasons for long cycles and similarity between them is useful. Dr. Long has collated other opinions, and has offered fertile suggestions and stimulating analytical solutions of his own. The long cycles are accounted for largely by many of the forces usually accepted as responsible for the business cycle. Central emphasis is placed on inducement to invest, which occupies so much attention in business-cycle analysis. The Keynes-Harrod terminology is used throughout, and occasionally leads to obscurity. The elasticity concept is employed and measures are even attempted, although in the last analysis other forces are usually appealed to in explaining cyclical movements. Isolation of forces appears to be carried too far at times, as for example, when changes in interest rates are concluded to be relatively unimportant compared to changes in production costs, although the correlated movement of these two factors is of major importance. A great deal is made of the stability of depreciation charges, following Fabricant, although no mention is made of Vatter's data (*Chicago Journal of Business*, vol. 10, pp. 126-46) which appear to prove the opposite.

The study would have been improved by more extensive comparisons with other estimates. Long's estimate of residential building (27-city series) shows the following relative movement from 1915 to 1920: 100, 113, 50, 19, 119, 84; while Chawner's series (*Domestic Commerce* series no. 99, pp. 12, 18) for the same years shows a very different relative movement: 100, 120, 95, 73, 164, 164. The war period undoubtedly is a very difficult one to measure, and the reviewer does not infer that Long's figures lack value. On the contrary, they represent an important contribution; but they must be used with caution.

ELMER C. BRATT

McKEE, J. editor. *Marketing organization and technique*. (Toronto: Univ. of Toronto Press. \$2.50.)

MAYNARD, H. H., WEIDLER, W. C. and BURLEY, O. E. *An introduction to business management*. 3rd ed. (New York: Ronald. 1941. Pp. xvii, 698. \$3.75.)

MONTGOMERY, R. H. *Auditing theory and practice*. 6th ed. (New York: Ronald. 1940. Pp. viii, 692. \$6.)

MURPHY, M. E. *Internal check and control for small companies*. (Washington: Public Affairs Press. 1940. Pp. 52. \$1.)

RECTOR, H. B. and RINCKHOFF, W. A. *Modern foremanship and supervision under New Deal legislation*. (Cincinnati: Law Research Serv. 1940. Pp. 163. \$4.50.)

ROUSSILLE, G. V. *What's a good investment?* (New York: Barron's. 1940. Pp. 107. \$1.)

SATTGAST, C. R. *The administration of college and university endowments*. (New York: Bur. of Pubs., Teachers Coll., Columbia Univ. 1940. Pp. 125.)

In his highly interesting and timely contribution, Dr. Sattgast analyzes the pressing problem confronting the endowed colleges and universities today, and presents fundamental principles necessary for the proper administration and investment of funds. The material was secured from 45 American institutions selected to provide a representative sample, covering their portfolios for the years 1929, 1933, and 1936.

It was found that a higher rate of income and a minimum amount of fluctuation in income were associated with colleges and universities having the following pattern in their investment operations: (1) investment committees made up of "specialists" in finance, as against laymen (the difference being a yield of 4.01 per cent as against 2.38 per cent); (2) facilities for doing investment research; (3) funds in excess of \$1,000,000; (4) classifiable as privately supported non-church related institutions; (5) funds managed by committees who maintain reserves against losses in principal; (6) endowment funds not used as collateral to secure loans; (7) portfolio properly diversified by giving careful consideration to quality, irrespective of the size of the fund. The analysis revealed a predominating trend toward a reduction in the percentage of bonds with an increase in the holdings of common stocks, with favorable results in significantly higher rates of income to institutions that followed this policy. The conclusion and recommendations of the author should be helpful to administrators of college endowments.

The investment policy Dr. Sattgast suggests should *also* take into account the fact that interest rate fluctuations in the future will depend on the course of uncertainties which now hamper a normal revival of capital demand. Universities and colleges, like other institutions, still hold a substantial volume of old securities bearing relatively high yields. As these mature or are called for repayment and are replaced by low-rate issues, the income problem will become acute.

The uncertainties to be faced are numerous and serious: falling interest rates, defaults in principal and interest, lack of new outlets for funds from matured or called bonds, new revenue legislation and the limit placed by the national government on tax-free gifts that may be made out of income. In deciding to divert funds from high-grade bonds into selected second-grade bonds and common stocks with earnings vitality and high excess profit tax exemption, the need for expert guidance and advice is obvious, as constant vigilance is vitally necessary for observation of growth indications, as well as for *timing* to buy on recessions. In view of all the uncertainties it is gratifying to have the problems presented clearly and thoroughly. The book should carry its important message to a wider audience of financial trustees.

ROMAN S. GORSKI

SAUNDERS, A. G. and ANDERSON, C. R. *Business reports: investigation and presentation*. 2nd ed. (New York: McGraw-Hill. 1940. Pp. xii, 468. \$3.50.)

TOSDAL, H. R. *Introduction to sales management*. 2nd ed. (New York: McGraw-Hill. 1940. Pp. xiii, 526. \$4.)

American Association of Collegiate Schools of Business: proceedings of the 22nd annual meeting, School of Business Administration, University of Texas, April 18-20, 1940. (Hanover, N.H.: Am. Assoc. of Collegiate Schools of Business. 1940. Pp. 136. \$1.25.)

Millinery Stabilization Commission, Inc.: second report, August 1st, 1937, to December 31st, 1939. (New York: Millinery Stab. Comm. 1940. Pp. 106, mimeographed.)

National Association of Cost Accountants year book, 1940: proceedings of the twenty-first international cost conference, St. Louis, Missouri, June 23-27, 1940. (New York: Nat. Assoc. of Cost Accountants. 1940. Pp. iv, 372.)

Capital and Capitalistic Organization

The Bottlenecks of Business. By THURMAN W. ARNOLD. (New York: Reynal and Hitchcock. 1940. Pp. xi, 335. \$2.50.)

In one of our journals of opinion an editorial reviewer voices the surprise which all must feel that this book could come from the same pen as *The Folklore of Capitalism*. In the earlier work the author had been "cynical, witty, detached, amused, and slightly bored, bored most of all with earnest reforming people." He had viewed the campaign against trusts "with a satirist's eye," as a futile crusade against one of society's numerous hypocrisies, deserving only of ridicule. Since then, it is said sarcastically, he has hit "the sawdust trail" and has become "evangelical" on behalf of the Sherman anti-trust act.

Equal surprise was felt when the author was appointed as Assistant Attorney General in charge of the enforcement of the Act. That seemed to portend the scuttling of the policy of the Act, a prospect which evoked very diverse feelings. To those believing that the preservation of the competitive system is the "most forlorn of lost causes," it "seemed a brain trust prank" with merely cynical implications. To others it was an occasion of national mourning.

The present book evidences the falsity of both these predictions. The author has seen a great light on the road to Damascus. He now believes that the maintenance of a free economic system is a necessary condition for political freedom, and that the Sherman act is an efficient instrument to that end. He preaches the gospel of enforcement to consumers in support of the policy of the anti-trust laws.

How is this remarkable change to be explained? One agreeing with the author's former (not with his later) view puts the matter thus: "The book's fervor illustrates one of the earlier Thurman Arnold's favorite themes, the personality that institutions impress upon those called into their service." And again: "The institution, as Arnold would have predicted, proved bigger than the man." But why were none of Mr. Arnold's sluggish predecessors so impressed by the "institution" that they were aroused as is he to his present action? If his advent in Washington March 18, 1938, did not cause, it closely coincided with, a remarkable change in the Department of Justice from a policy of indifference to one of vigorous anti-trust

law enforcement. A different explanation of his conversion is called for; the man seems to have proved bigger than the institution.

The Folklore of Capitalism, it is rumored, was scribbled as a *jeu d'esprit* on scraps of paper when the author was traveling or waiting between trains. It should be read as it was written, not ponderously, but with a saving sense of humor. Its author was not too well informed regarding actual monopolistic practices and problems, as often is the case with those who discuss the subject. Consequently, his plentiful wit and wisdom were not always unmingled with bits of irresponsible folly, as he now virtually confesses.

When Mr. Arnold entered the Department of Justice, official Washington was still suffering with the headache following the spree of the NRA, and had not yet found a remedy. A half-century of malpractice in the pretense of enforcing the anti-trust laws without economic counsel had been ended by the employment of economists who could tell "a hawk from a handsaw." Not least important, three months after his arrival the Temporary National Economic Committee was created, June 16, 1938, and his first major task was to put his whole anti-trust law division to studying the organization and workings of our much bedeviled competitive system. Never before had there been at the command of anyone such a mass of information on the subject of monopoly and the bottlenecks of business. Mr. Arnold's mental processes are not slow; he is honest—precious qualities in his present office. His education therefore progressed apace. In a few months he knew more about the real nature and possibilities of his job than he or his predecessors had ever dreamed of. He was not miraculously converted, he was rationally convinced. He came to scoff and he remained to pray. So, at least, it appears to detached observers in Washington.

It is a puzzling question how an Assistant Attorney General seriously striving to enforce the anti-trust laws could have survived two years in the fetid atmosphere of special privilege which always hangs over the District of Columbia—and not less under the New Deal. Group pressures, increasing through the years, have loaded our staggering capitalistic system (ostensibly one of free enterprise) with a crushing burden of subsidies, bounties, and gifts, to tariff favorites, farmers, coal producers, sugar growers, silver miners, labor groups, and what not. Our national economic system is honeycombed with these monopolistic elements. In much of his exposition the author leaves the impression that he is a thoroughgoing liberal of the type of Adam Smith, opposed to all monopoly; but the reader soon senses a difference. Adam Smith recognized the existence of monopoly resulting from the private seizure of power, but his main purpose was to destroy mercantilism, which was an aggregation of public grants of monopoly. Not so, Mr. Arnold. He strongly reverses the emphasis; he

ignores the public and assails only the private sources of monopoly. He sees that his only chance of being allowed to enforce the Sherman act is to draw a sharp line between what he calls the private and "the public seizure of power over the market" (p. 97), and to leave the latter severely alone. In principle, the public seizure of power is just as incompatible with his argument for free markets as is the private seizure, but he has found an ingenious *modus vivendi* by which he may prosecute private monopoly and still live at peace with the other New Dealers. His practical philosophy is indicated by this comment: "Senators who fail to get elected cannot vote on any legislation at all" (p. 108). He even makes a virtue of muddle-headedness, saying: "In fact, economic theories are always a confusion of inconsistencies." (What he manifestly means is that the behavior of practical politicians is a "confusion of inconsistencies" when guided only by political expediency and not by any clear economic theory.) Again reverting to the cynical mood, he tries to justify his own policy in the present matter, while at the same time admonishing idealistic reformers that public seizures of power (New Deal bureaucracy?) should be accepted without protest or struggle "as one of the incidents" of "a democratic government." This seems to say that private monopoly is death to democracy, but that grants of public monopoly to selfish groups whose votes are needed by the administration are democracy's very life blood.

Nevertheless we guiltily wish complete success to Mr. Arnold's campaign of righteous duplicity. If he can succeed in defeating private seizures of power, there may be some hope of then curbing the equally vicious public seizures—and probably not till then. At present we are the victims of both, and the survival of a genuine capitalism becomes ever more precarious.

All in all, this is a very human and a very significant book. As a rallying cry to the consumers of the nation, it should have a wide influence. It is more than exhortation; it is filled with facts and illustrations of business practices and frustrations of fair competition little known to the public and to many students of economics. It might well, with certain cautions, be made required reading for anyone wishing to be informed, or assuming to have an opinion, on the merits of the Sherman act.

FRANK ALBERT FETTER

Princeton, New Jersey

Wartime Control of Prices. By CHARLES O. HARDY. (Washington: Brookings Inst. 1940. Pp. x, 216. \$1.00.)

The volume is divided into two main parts together with an introductory chapter which attempts to relate the issues of price control to the larger problem of economic mobilization in a war-time program. Part 1 then attempts an analysis of the problems of "Price control in time of war,"

while Part 2 is a review and appraisal of "Price control in the United States during the World War."

The author states that rising prices during a war spring from two essentially different causes which need to be distinguished. First, there are specific price increases in particular commodities due to abnormally heavy demand or abnormal shortage of supply. Second, there is the general increase in prices extending to all or nearly all commodities in greater or less degree and also to wages, rents, etc. This latter is the phenomenon commonly known as inflation.

The first of these causes, *viz.*, price increases in specific commodities, requires some kind of direct or indirect control of prices or of the factors of demand and supply. Among these are such things as the coördination of purchases of public or semi-public agencies, the stimulation of production through negotiation with producer or through the fixing of guaranteed minimum prices on margin, the fixation of prices either on the basis of bulk-line production or some other method, etc. These were the kinds of price control utilized during the World War by the War Industries Board, the Food Administration, the Fuel Administration, etc. The specific method of control has to vary according to the type of commodity, the character of its production and distribution and the particular circumstances at the time.

In this connection, Dr. Hardy devotes chapter 6 of his book to an exposition of the proposal for a "price-ceiling" advocated particularly by Mr. Bernard Baruch in his book *Taking the Profits Out of War* and elsewhere. The basic idea of this plan is to freeze all prices at the levels prevailing at the outbreak of a war or at the average for some other definite period. Transaction at any higher level would be prohibited except as some price-control authority might authorize increases for individual commodities.

The reviewer agrees whole-heartedly with Dr. Hardy that such a plan would prove to be wholly inadequate, unjust and impossible of administration. In the first place, it does not touch the real cause of inflationary price increase which it is obviously designed to control; second, it would result in serious dislocation of supply and demand and would prove to be impossible to administer and enforce.

The second of the two general causes of war-time price rises is that of inflation. This, the author points out, involves an expansion of the total money income of the nation without a corresponding increase in the volume of production of consumable goods or services. Parenthetically, we might point out that exactly this is likely to happen in our present rearmament program where a considerable proportion of our population will be engaged in producing war material which cannot be consumed by individuals. The increased purchasing power by those engaged in this work will be used to buy consumable goods and unless there is a corresponding increase in the

latter there will be increases in prices which as Dr. Hardy points out is the essence of inflation.

Dr. Hardy further points out that the proper control of inflation is for the government to finance the war or war preparation entirely out of taxation or by taxes and borrowing from current income (not bank loans). By these measures the author contends that the spendable income is reduced so that the extra demand for consumable goods is kept within bounds.

Dr. Hardy also states that the proper measure of the government's credit and fiscal policy, if inflation is to be controlled, is not the size of the government deficit or the amount of the debt, but rather the movement of the price level particularly as measured by the cost-of-living index.

In Part 2, Dr. Hardy gives a fair, although relatively brief, review and analysis of the World War price-control efforts. In this he recognizes that this was the first serious experiment in our history with centralized control of prices. It was inevitable that there should have been some mistakes and some experiments which later had to be changed. In general, however, the program worked satisfactorily and the experiences gained represented positive contributions which, if a similar emergency should arise in the future, might well serve as a basic guide.

The reviewer, having had some experience in the war-time agencies, believes that Dr. Hardy has not given sufficient weight in his appraisal to the contributions made by business executives who served during the World War emergency. Much of the success of the control by the Food Administration and the Fuel Administration was due to the fact that the administration was by men who thoroughly understood the intricacies of the industries or trades they were administering. The success attained (which Dr. Hardy admits) would have been much less in the reviewer's opinion had the control been attempted by men with only theoretical training in our economic processes.

FRANK M. SURFACE

New York City

The Economics of War. By HORST MENDERSHAUSEN. (New York: Prentice-Hall. 1940. Pp. xiv, 314. \$2.75.)

This timely book is primarily addressed to the general reader and to undergraduate students. Dr. Mendershausen combines the rare gift of lucid theoretical analysis with the ability of presenting the factual material in an interesting manner. The book is divided in four parts: economic war potential, war economy, international economics of war, and post-war economics. Certain matters of arrangement and detail are, of course, open to question. There is no discussion whatsoever of the economic causes of war. This omission, while justifiable on the grounds of logic, limits the usefulness of the book for those who are convinced of the great educa-

tional value of this aspect of the matter. There is also no discussion and, as it seems, no mention of the concept of total war. This want is not important in itself but indicative of the emphasis which the author places upon experiences and examples taken from the first World War. It must, however, be admitted that the general scepticism with reference to the tenability of projecting trends and tendencies of World War I has grown with the progress of World War II during the last few months, and the author cannot be blamed for not having anticipated this development.

Similar considerations apply to the discussion of the ways and means of diverting productive energies from production for civilian consumption to production for the purpose of war. Here the author shows much sound judgment and complete mastery of recent advances in economic theory. His position with reference to the three wartime policies of borrowing, taxation, and regulation is as follows. There should be borrowing only as long as unemployment persists in the essential industries; but then it ought to be applied. For the later stages of the war effort the author prefers "some reasonable system of outright taxation" combined with regulation, but fails to outline such a system, which would have to be both adequate and psychologically practicable. Since no such system seems to be in existence, all major wars in recent history have been carried out by means of some degree of inflation, a fact which might be deplorable but still is a fact. However, the argument of the author is consistent, and he advocates the establishment of price controls "at the earliest possible moment and over as wide a field as is technically feasible." The price control is to be implemented by a system of priorities and by rationing consumers' goods.

The author is aware of the disastrous course of post-war deflation, and proposes public works and the use of "effective machinery for the maintenance of full employment (monetary policy, public investments, or subsidization of consumption," p. 294). He also discusses the bearing of war economics upon post-war economics (pp. 121 ff.), but does not develop a financial war policy which would make it easier to cope with the post-war problems.

Being the first text in the field of war economics, the book meets a real need and merits the attention of every teacher of economics.

H. W. SPIEGEL

Duquesne University

The Structure of the American Economy. Part I. *Basic Characteristics.* Part II. *Toward Full Use of Resources.* (Washington: Supt. Docs. 1939; 1940. Pp. vii, 396; v, 48. \$1.00; 15c.)

In this report, prepared by the industrial section of the National Resources Committee under the direction of Gardiner C. Means, "an effort is made to bring the major aspects of the national economy into focus so as to

emphasize the organic character of the process whereby the Nation's resources are employed to provide useful commodities and services." After describing the structure of wants and the structure of resources, the report outlines the structure of production, first in terms of its geographical characteristics, then in terms of the functions performed, and finally in its financial aspects. The last three chapters deal with the organizing influences that knit the parts of the structure together—the market mechanism, the price system, and various "nonmarket controls" such as corporate management, trade associations, and labor unions. Much of the material has been drawn from earlier publications of the National Resources Committee and other governmental bodies, as well as from the prior work of individual members of the technical staff.

The first part of the report is designed to supply the public with the background necessary to an understanding of the problem of unused resources. Since it deals with the structural and not the operating characteristics of our economy, it does not provide a basis for conclusions as to what is wrong with the economic system, nor does it enable the reader to discover what policies should be adopted to ensure full employment. But it does set forth in a clear and interesting fashion some of the more significant structural characteristics which must be taken into account in any analysis of the system. In marshalling the factual material, many tables, charts and maps are used, not only throughout the body of the report, but also in the appendices which comprise more than half the volume. The economist may use it as a convenient source of data, or as a valuable adjunct to teaching. The reviewer has introduced it with some success as background reading for students in elementary economics.

The National Resources Committee, while preparing the first part of the report, became involved in questions that went beyond an analysis of the structure of our economy into the area of its operating characteristics. Some of these questions are discussed in the second part. The principal contributors are Mr. Gardiner C. Means, Mr. Mordecai Ezekiel, Professor J. M. Clark and Professor Alvin H. Hansen. Mr. D. F. Montgomery in a short paper suggests that other methods of analyzing structure should be added to those employed in the first part of the report. But even the principal contributions are brief. Part II is slight in comparison with Part I.

Mr. Means discusses the three interrelated problems of full, balanced, and efficient use of resources. After explaining why he believes that the problem of full employment is the most pressing one, he outlines various points of agreement and disagreement among those who are seeking a solution of this problem. Professor Clark lists a number of "indicated remedies" and points out that, though the government must assume a leading part in dealing with the under-utilization of resources, there may be a

practicable limit set by the unfavorable reaction of public policies on private investment.

Professor Hansen concentrates on prices, emphasizing the importance of the distinction between structural and cyclical flexibility. Cycle policy should seek to minimize price dispersion not by making rigid prices cyclically flexible, but by preventing a decline of income and effective demand. To achieve this end, chief reliance must be placed on monetary and fiscal policies. Mr. Ezekiel presents a long-term program which includes a redistribution of the national income, public investment in self-liquidating activities, anti-trust action to restore competition in industries with a large number of individual concerns, and economic planning in industries where a few large concerns dominate the market.

RALPH E. FREEMAN

Massachusetts Institute of Technology

Private Enterprise and Democracy. By CHARLES E. CARPENTER. (New York: Longmans Green. 1940. Pp. xii, 217. \$2.50.)

This is a lively "tract for the times." The author, a professor of law in the University of Southern California, is better read in economics than most members of his profession. He believes that a positive program of liberal economic reform can be formulated and made effective in the United States through democratic processes, that this, in fact, must be done if we are to preserve the substance of democracy. Expressions like "free capitalism," "our laissez-faire economy," and "legitimate individual liberty" are somewhat freely used without being very carefully defined. It is a bit startling to read (p. 18) that "our laissez-faire economy . . . has completely broken down and business under its aegis has left one-third of the American people stranded without a livelihood." Fortunately this kind of looseness in thought and expression is not characteristic of the book. When one really gets into it one is rewarded with a lively and sometimes trenchant analysis of the defects in the American economic system, and ultimately with a series of interesting recommendations in the field of public policy.

The author finds seven principal defects in our present system: (1) "oversaving" due to gross inequality in the distribution of incomes; (2) lack of balance between industries; (3) inefficient and complicated corporate organizations, management, and control; (4) industrial strife, largely a consequence of our "wage system"; (5) inflexible prices in some industries and bitterly competitive prices in others; (6) inflexibility of debts, taxes, rent, and wages; (7) a faulty system of taxation in which the principal burden rests on consumer purchasing power thus tending to "paralyze" exchange.

The analysis of the savings-investment process does not avoid all the numerous theoretical pitfalls in which that area of thought abounds. The

author is inclined to exaggerate the importance of the Brookings "discovery" that capital growth in the United States has occurred not during periods of low consumption but rather when consumption has been high. But it is greatly to his credit that he finds the remedy for "oversaving" to lie in converting the American economy to a higher consuming level rather than in the prevalent cart-before-the-horse remedy of trying to find "investment outlets" (or "savings offsets") through "restoration of private confidence," public "investing," etc. His own principal remedy is a drastic revision of our tax system. He would sweep away the numerous levies on consumption, placing the burden instead on incomes, inheritances, capital gains, and gifts. Stockholders' shares in corporate incomes would be taxed to the stockholders, whether distributed or retained. Consequently corporate incomes would not have to be taxed.

Professor Carpenter does not, of course, contend that even radical tax reform can remedy all the important defects he finds in our present system. He, therefore, proposes the development of a new form of business organization, a kind of super-coöperative in which both profits and control are shared among employers, employees and consumers. In his enthusiastic discussion of this device and what it could do to promote industrial peace, price flexibility and expanded production he sometimes takes a great deal for granted. The paper device from the armchair becomes a bit too easily the actuality in the field. It is not always clear whether all parts of some industries are to take the new form, or merely a part of all (or most) industries is to be so organized, this part constituting a "yardstick" (or birchrod!) for the remainder. Insufficient attention is given to the complex structures of industries, their marketing processes, and the interrelated effects of their price policies on volume of sales. (Incidentally students of the "organization and control of industry" should devote at least some of their time every now and then to trying to formulate a precise definition of what they mean by "an industry.") Occasionally Professor Carpenter falls into the common error of assuming that there is a "cost of production for the efficient producer" which *can* be accurately calculated, and which having been calculated, constitutes the "right" market price for an article or service (pp. 101, 109-10, 111, and 169).

Despite such particular flaws in the author's economic analysis it can still fairly be said that he has formulated a general program of economic reform which if backed in 1933 by the same tremendous energy and drive actually given to N.R.A. and price "reflation" might have accomplished something substantial and lasting in the way of liberal economic reform. Its taxation reform proposals should still be pondered carefully in Washington.

PAUL M. O'LEARY

Cornell University

NEW BOOKS

- ANDERSON, B. M. *Some essentials of an efficient preparedness programme—economics and politics; and value and price theory in relation to price-fixing and war finance.* Address before California State Chamber of Commerce, Dec. 6, 1940, and address before American Economic Association, Dec. 29, 1917. Econ. bull. vol. ii, no. 2. (Los Angeles: Capital Research Co. 1940. Pp. 41.)
- BACKMAN, J. *Wartime price control.* Contemp. law pamph., ser. 4, no. 5. (New York: New York Univ. School of Law. 1940. Pp. 50.)
- BEARD, C. A. and SMITH, G. H. E. *The Old Deal and the New.* (New York: Macmillan. 1940. Pp. 294. \$2.)
- BERLE, A. A., JR. *New directions in the new world.* (New York: Harper. 1940. Pp. xi, 141. \$2.)
- BERNAYS, E. L. *Speak up for democracy: what you can do—a practical plan of action for every American citizen.* (New York: Viking. 1940. Pp. xiv, 127. \$1.)
- CUSACK, SISTER M. T. *The significance of a changing concept of ownership in social and economic planning.* A dissertation. (Washington: Catholic Univ. of America Press. 1940. Pp. x, 146.)
- DIMOCK, M. E. and HYDE, H. K. *Bureaucracy and trusteeship in large corporations.* Investigation of concentration of econ. power monog. no. 11. (Washington: Temporary Nat. Econ. Committee. 1940. Pp. ix, 144.)
- HAASE, H. J. *The economic democracy.* (New York: Orlin Tremaine. 1940. Pp. 406. \$2.25.)
- HAMILTON, W. H. *The pattern of competition.* (New York: Columbia Univ. Press. 1940. Pp. vi, 106. \$1.25.)

This volume is one of a new series of lectures on the economics of public policy given at the summer session of Columbia University. The series is to provide distinguished scholars with "an opportunity to summarize the recent work in their respective fields and relate this work to other phases of the social sciences." Professor Hamilton does not attempt to summarize all of the recent materials in the field which may be roughly characterized as monopolistic competition or industrial price policy, but rather confines himself to those sectors in which he himself has made significant contributions.

In the first of four chapters he holds up to scorn the theoretical economist's "Newtonian," "mechanical" "dogma" of perfect competition as a rationalization of the dominant interests in the commonwealth. Here, the author is largely pushing against open doors. The second chapter attempts to portray the richness of variety of patterns which prevail in various industries—automobile, cigarette, dress, cottonseed, gasoline, cinema, milk, glass, etc. Short selected summaries are given of case studies published in the author's *Prices and Price Policies*.

To the professional economist the most interesting section is that dealing with the history of the anti-trust movement and with the difficulties, legal and otherwise, which confront the Antitrust Division of the Department of Justice. The poverty of the Division (until recently), the unwieldiness of the grand jury as an instrument of analysis, and the hampering effect of the judicial ritual have each been important factors explaining the relatively unsuccessful history of anti-trust legislation. Improvement lies in the direction of the consent decree, advisory opinion, and the further development of the administrative process, with an independent industrial court of legal resort, subordinate only to the United States Supreme Court. Even with these improvements it will

remain true that "the task of keeping industry the instrument of the commonwealth is as arduous as it is everlasting."

Though Professor Hamilton envisages the possible need of removing some industries from the coverage of the anti-trust policy, he has abandoned the scepticism toward the general policy which he has in times past expressed, especially in Handler's *Symposium*.

PAUL A. SAMUELSON

HAMILTON, W. and TILL, I. *Antitrust in action*. Investigation of concentration of econ. power monog. no. 16, (Washington: Temporary Nat. Econ. Committee. 1940. Pp. vii, 146.)

HART, A. G. *Economic policy for rearmament*. Pub. policy pamph. no. 33. (Chicago: Univ. of Chicago Press. 1940. Pp. v, 36. 25c.)

JAMES, C. L., assisted by WELSH, E. C. and ARNSON, G. *Industrial concentration and tariffs*. Investigation of concentration of econ. power monog. no. 10. (Washington: Temporary Nat. Econ. Committee. 1940. Pp. x, 326.)

LENTZ, G. G. *The enforcement of the orders of state public service commissions*. Stud. in the soc. sci., vol. xxv, no. 3. (Urbana: Univ. of Illinois Press. 1940. Pp. 159. \$2.)

NELSON, S. and KEIM, W. G. *Price behavior and business policy*. Investigation of concentration of econ. power monog. no. 1. (Washington: Temporary Nat. Econ. Committee. 1940. Pp. xxv, 419.)

PAGE, R. F. *Security and recovery: a program for completing our defense preparations by making our economic system really work*. (West Los Angeles: Author, 11419 Rochester Ave. 1940. Pp. 28.)

ROBBINS, L. *The economic causes of war*. (New York: Macmillan. 1940. Pp. 124. \$1.35.)

SCHARFF, M. R., and others. *Depreciation of public utility property*. (New York: Burstein and Chappe. 1940. Pp. 326. \$3.50.)

SIMPSON, F. R. and SCHMIDT, E. P., editors. *Leading judicial interpretations on public utility regulation*. (St. Louis: Swift. 1940. Pp. iii, 115.)

WHITE, C. H. *Adjusted capitalism*. (Boston: Christopher. 1940. Pp. 66. \$1.25.)
Economic mobilization. (Washington: Am. Council on Public Affairs. 1940. Pp. 43. 75c.)

Chapters on "Financial aspects," by H. S. Bloch; "Economic aspects," by Oscar Lange; "Industrial and labor aspects," by F. H. Harbison; "The outlook," by H. G. Lewis.

Labor and Labor Organizations

Labor Problems. By GORDON S. WATKINS and PAUL A. DODD. 3rd ed. (New York: Crowell. 1940. Pp. xiii, 1128. \$3.75.)

This volume, entitled a third edition, is in reality a complete rewriting of Dr. Watkins' earlier *Introduction to the Study of Labor Problems* which appeared in 1922 and of his *Labor Problems* which appeared in 1929. Dr. Dodd's collaboration in this work begins with this edition. That there should have been such a complete overhauling rather than simply minor amendments and additions was necessary because of the changes which

there have been in institutions, laws, and public interest since the second edition appeared eleven years ago.

The new volume contains up-to-date statistical and factual material on all the subjects traditionally covered in a labor problems textbook. The volume is most readable and students using the text report their interest is maintained throughout. In this it makes marked advances over other current texts in the field which are weighted down with excessive amounts of statistical data and factual minutiae through which students find the going very slow.

The present edition employs that organization which is being used with increasing frequency in labor problems texts today. It gives first a consideration of the problems facing workers, then the approaches made to these problems by employees' organizations, by employers and their organizations, and finally, by society through the agency of government.¹

While this pattern has much to commend it, certain questions about it may be raised from a pedagogical point of view. If the same pattern is followed in teaching a course, one must, for example, say in effect to a group of students, "We have now considered the social and economic problems connected with child labor; some weeks hence we shall consider what different legislative groups have done in an attempt to solve some of these problems. Then, a week or so after that, we shall consider what the courts have done with respect to these legislative efforts." The instructor can, of course, assign for reading at one time all sections in the text relating to child labor, but if that is the best approach, one may ask why texts are not organized in that fashion in the first place.

A few errors which appear to be of a typographical nature will undoubtedly be corrected before another printing is made. One of the most serious of these (on p. 551) would give to the reader the impression that it was not until 1936 that John L. Lewis, Philip Murray, Sidney Hillman, and others became convinced that organization along industrial lines should be promoted. Since the C.I.O. was formed in November of 1935, after much agitation for industrial organization in both the 1934 and 1935 conventions of the A. F. of L., this slip is unfortunate.

The section dealing with the employers' approach to labor problems is considerably enlarged as, indeed, is the entire work. This section draws considerably on the material presented more fully in another excellent work by these two collaborators, *The Management of Labor Relations* (McGraw-Hill, 1938). The chapters dealing with social insurance are also considerably expanded, and reflect Dr. Dodd's interest and research in this field, particularly in health insurance.

¹ Other texts using this same organization are Carroll R. Daugherty, *Labor Problems in American Industry* (Boston, Houghton Mifflin, 1938) and Stein, Davis and others, *Labor Problems in America* (New York, Farrar and Rinehart, 1940).

The revision gives to teachers and students of the subject a work which, in spite of the minor defects noted, supplies in a clear and unbiased fashion a broad familiarity with the various aspects of this controversial field.

MORRISON HANDSAKER

Occidental College

NEW BOOKS

BAKKE, E. W. *Citizens without work: a study of the effects of unemployment upon workers' social relations and practices.* (New Haven: Yale Univ. Press for the Inst. of Human Relations. 1940. Pp. xi, 311. \$3.)

———. *The unemployed worker: a study of the task of making a living without a job.* (New Haven: Yale Univ. Press for the Inst. of Human Relations. 1940. Pp. xvi, 465. \$4.)

BOONE, G., McCANDLISH, N. and PHINIZY, L. *Labor laws of Virginia.* (Charlottesville: Bur. of Pub. Admin. 1940. Pp. vi, 90. \$1.)

BROWN, D. V., DUNLOP, J. T., MARTIN, E. M., MYERS, C. A. and BROWNELL, J. A. *Industrial wage rates, labor costs and price policies.* Investigation of concentration of econ. power monog. no. 5. (Washington: Temporary Nat. Econ. Committee. 1940. Pp. xxvi, 172.)

DAWSON, M. *Problems of workmen's compensation administration in the United States and Canada.* Bull. no. 672. (Washington: Supt. Docs. 1940. Pp. v, 229. 25c.)

DOBBS, F. *Trade union problems.* (New York: Pioneer Pubs. 1940. Pp. 43. 10c.)

GARMAN, P. L., and others. *Conciliation and coöperation in collective bargaining.* Personnel ser. no. 44. (New York: Am. Management Assoc. 1940. Pp. 48. 75c.)

HARRELL, W. *Testing the abilities of textile workers.* State Engineering Exp. Station bull. vol. ii, no. 2. (Atlanta: Georgia School of Tech. 1940. Pp. 14.)

HAWKINS, E. D. *Dismissal compensation: voluntary and compulsory plans used in the United States and abroad.* (Princeton: Princeton Univ. Press. 1940. Pp. xvii, 390. \$4.)

Part 1 is devoted to company plans in the United States. Over 500 American firms have paid dismissal compensation on their own initiative at some period prior to January 1, 1940. Details are given about the plans of 329 concerns, employing some two and a half million persons. Summary treatment is devoted to such topics as reasons for adoption, types of plans, amount of compensation, eligibility requirements, administrative problems, method of payment, and effects of the recent social security legislation. Provisions of selected plans may be found in appendix A of the book. The dismissal compensation program is critically analyzed. Limitations are revealed, for instance, inadequacy of payments and coverage.

Part 2 treats largely of trade-union activity in the United States and in foreign countries to secure dismissal compensation for members through voluntary joint agreement. The strength of trade unionism abroad has meant that the compensation plans are more likely to be the result of collective action or agreements than of company-initiated measures. About two-thirds of the American trade-union treatment concerns the 1936 Washington agreement between the standard railroad unions and the carriers—the first attempt to

provide for dismissal and transfer compensation for an entire industry. Details of this agreement are contained in appendix B.

Part 3 is headed "Compulsory plans." Here may be found a summary of foreign legislation in the field of dismissal compensation. Such laws in numerous countries play the major part which in the United States is taken by voluntary plans. At least 40 countries have passed laws, mainly since World War I, providing notice or compensation for workers.

Dr. Hawkins thinks well of dismissal compensation plans, despite their inadequacies. He believes that intelligent use of these plans, although not a panacea, will do much to meet the problems connected with technological changes and post-war industrial dislocations. The book possesses high merit as a careful research report analyzing an extensive body of basic original data.

JOSEPH M. O'LEARY

KIRSHBAUM, L. *America's labor dictators*. (New York: Industrial Forum Pubs. 1940. Pp. 158. \$1.)

MYERS, C. A. *Employment stabilization and the Wisconsin act*. Employment security mem. no. 10. (Washington: Social Security Board. 1940. Pp. viii, 149.)

PERLMAN, J. *Hourly earnings of employees in large and small enterprises*. Investigation of concentration of econ. power monog. no. 14. (Washington: Temporary Nat. Econ. Committee. 1940. Pp. xv, 94.)

RIEGEL, J. W. *Wage determination*. (Ann Arbor: Univ. of Michigan Press. 1940. Pp. 138. \$1.)

SHALLCROSS, R. *Should married women work?* (New York: Public Affairs Committee. 1940. Pp. 31. 10c.)

SLICHTER, S. H. *Union policies and industrial management*. Pub. no. 85. (Washington: Brookings Inst. 1941. Pp. xiv, 597. \$3.50.)

STEBEN, J. *Labor in wartime*. (New York: Internat. Pubs. 1940. Pp. 159. \$1.50.)

Study of policies during the first World War.

WIECK, E. A. *The American Miners' Association: a record of the origin of coal miners' unions in the United States*. (New York: Russell Sage Found. 1940. Pp. 330. \$2.)

Commonwealth of Massachusetts: annual report of the Department of Labor and Industries for the year ending November 30, 1939. Pub. doc. no. 104. (Boston: State House. 1940. Pp. 170.)

Handbook of federal labor legislation. Bull. 39, pt. 1. (Washington: U.S. Dept. of Labor. 1940. Pp. 86. 35c.)

Labor policy and defense production. Stud. in econ. of nat. defense no. 8. (New York: Nat. Industrial Conf. Board. 1940. Pp. 10.)

Labour organization in Canada: twenty-ninth annual report for the Calendar year 1939. (Ottawa: H. M. Stationery Office. 1940. Pp. 250. 50c.)

National Labor Relations act: hearings, 76th Cong., 2nd sess., pursuant to H. Res. 258 (76th Cong.), creating a select committee to investigate the National Labor Relations Board. Vols. 2, 4-12. (Washington: House Spec. Committee to Investigate NLRB. 1939; 1940. Vol. 2, 25c.; vols. 4-12, 20c. each.)

National Mediation Board: sixth annual report, including the report of the National Railroad Adjustment Board, for the fiscal year ended June 30, 1940. (Washington: Supt. Docs. 1940. Pp. v, 124. 15c.)

Problems and policies in industrial relations in a war economy: selected references.

- Suppl. Nov. 15, 1940. (Princeton: Princeton Univ. Industrial Rel. Sect. 1940. Pp. 11.)
- Railway Labor act and the National Mediation Board.* (Washington: Nat. Mediation Board. 1940. Pp. 76. 15c.)
- Subject index of the library of Industrial Relations Section, Princeton University.* Rev. Nov., 1940. (Princeton: Princeton Univ. Industrial Rel. Sect. 1940. Pp. 44.)
- Union wages, hours, and working conditions in the building trades, June 1, 1939.* Bull. 674. (Washington: Bur. of Labor Statistics. 1940. Pp. 87. 15c.)
- Union wages, hours, and working conditions of motortruck drivers, June 1, 1939.* Bull. 676. (Washington: Bur. of Labor Statistics. 1940. Pp. 54. 10c.)
- Year-book of labour statistics.* 5th yr. of issue. (Geneva and Washington: Internat. Labour Office. 1940. Pp. viii, 175. \$2.)

Money, Prices, Credit, and Banking

The International Gold Standard Reinterpreted, 1914-1934. By WILLIAM ADAMS BROWN, JR. Vols. I and II. (New York: Nat. Bur. of Econ. Res. 1940. Pp. xxx, 730; 731-1420. \$12.00, two vols.)

Now that the gold standard, even in name, has disappeared in all countries of the world and serious doubts exist as to whether a return to a sound international currency system will be possible, the present volumes not only are timely but may be considered as the outstanding history of the operation of the gold standard in the post-war period. The two volumes are divided into four parts, namely, "Breakdown" (1914-1918); "Restoration" (1919-1925); "Experimentation" (1925-1931), and finally, "Disintegration" (1931-1934).

In the first section, the author finds that not only did the war greatly undermine the position of London as an international financial center, but it brought about such great dislocations in international trade and the balance of payments of the individual countries that the gold standard really could not work. In discussing the collapse of the pre-war gold standard, the author makes the apt observation that what was destroyed in 1914 "was the high degree of centralization of the world's credit system in London, which, in combination with the strong international creditor position of Great Britain, made the pre-war gold standard essentially a sterling exchange standard system."

The section dealing with the restoration of the gold standard reaches the sound conclusion that this restoration was merely a façade that masked the true nature of the economic problems. "It promised escape from radical economic readjustments by making hard and intractable problems appear transitory and transitional. It was a false sign post that made dangerous ways seem safe." During the restoration period, the world at large was too much influenced by the habits and thoughts that prevailed before the war, which "made it impossible for the stabilization problem to be conceived

in terms of replacing an international convention that had become obsolete." Had the statesmen and leaders of finance during the early 1920's faced the economic and financial problems such as reparations and war debts, tariffs, etc., squarely, the collapse of the international currency system and possibly the present plight of the world could have been avoided. In spite of the general return to gold, the unsolved economic problems after the return were greater than those during the war.

The most interesting part of the two volumes is embodied in book 3, covering the period of experimentation. The already existing data have been carefully sifted, and a great deal of material not generally available has been brought together. The various conflicts that developed during this period between London and New York, and London and Paris, are presented in an impartial way. The author, however, is inclined to be a little more lenient toward the effects of the world-wide introduction of the gold-exchange standard than is usually the case.

Part 4, "Disintegration," pays a great deal of attention to the various foreign-exchange problems that have arisen and the policies adopted to deal with them. In this final section, the author reaches the sound conclusion that the long-run objectives of the three currency policies which have received so much attention in recent years—namely, internal monetary management with fluctuating exchanges, the maintenance of fixed rates by an international gold standard, and exchange control—are identical in one important respect. "All aim to achieve maximum stability externally and internally. If all major economic powers follow a policy of internal price stability, relatively stable exchange rates are both a consequence of that policy and an aid in its execution."

The two volumes are an outstanding achievement and will be of great value to every student of currency. They ought to be of particular help to those who will be charged with the duty of restoring an international currency system in the future, for the careful study of these volumes will help to avoid many pitfalls. The volumes not only make use of the exhaustive literature on the subject, but also contain much information received from interviews with leading bankers and economists throughout the world. The discussion dealing with techniques of the gold standard and credit and currency policies followed by the individual countries is amply complete. Some, however, may think that too little emphasis was placed on the dislocations of international trade and the balance of payments brought about by the war and the nationalistic policies adopted in the post-war period. Also, somewhat more attention could have been directed to the unsound international financial position of the United States, which has become the foremost international creditor nation of the world and yet refused to be paid in the only way possible—namely, commodities.

The book was finished after the outbreak of the European war; and sound

judgment is evidenced by the author when he does not endeavor to discuss the possible rôle of gold in the period after the present war. Under present war conditions, such a discussion would be futile.

MARCUS NADLER

New York University

Exchange Control in Central Europe. By HOWARD S. ELLIS. Harvard econ. stud. 69. (Cambridge, Mass.: Harvard Univ. Press. 1941. Pp. xiv, 413. \$4.00.)

Few studies have appeared since the publication of Bresciani-Turroni's *Economics of Inflation* that could be said to approach the standard set by that masterpiece of applied economic analysis. Professor Ellis' *Exchange Control* emphatically is such a study. The choice of the countries analyzed was a happy one: in Part 1, *Hungary* serves as an example for the large number of control countries dependent on agricultural exports (chapter 3), *Austria* typifies the post-war European debtor country as well as serving as an example (alas the only one) of a gradual return to freedom in exchange transactions (chapter 2). In Part 2, *Germany* is shown to have used exchange control as "a device by which a dictatorship achieves and continues to exercise control over the economic and political destinies of the populace" (chapter 1). The theoretical analysis is concentrated at the beginning and the end of the descriptive bulk of the study. The introduction (Part 1, chapter 1) contains a useful classifying note on causes and types of control systems, the conclusion (Part 2, chapter 2) some new material on the theoretical effects of bilateralism.

The chief criticism that could be made of Professor Ellis' study is one of form rather than of substance. Too often the reader finds himself overwhelmed by a mass of factual detail whose relevance would have been brought into clearer relief had the author more frequently announced the broad trend of his theoretical reasoning. Concerning the substance, some will be reluctant to go the full length with Professor Ellis in condemning exchange control and exchange clearing. For example, is it not much more likely that without modification of control systems the volume of international trade would have come to an equilibrium at a lower level rather than falling to zero (page 18)? Second, the absence of a substantial improvement in Germany's terms of trade during the period under consideration does not seem to rule out the possibility that in a later period her policy of bilateral monopolistic and monopsonistic exploitation may have been more successful, nor does it show that such methods in general are as incapable of practical success as the author appears to believe (pages 211 *et seq.*). Third, cannot a good word be said for clearings between control countries at the bottom of a depression when all are afraid to expand because of the threat of an adverse balance of payments? On the other

hand, Professor Ellis' concentration on the *existence* of over-valuation in the control countries appears to have caused him to underrate the perpetuation of disequilibrium as the result of the measures themselves rather than outside changes, such as depreciation of free currencies. One need think only of an internal rise of prices caused by the expenditures of domestic hoards when the alternative of exporting such funds is no longer open.

For all those who are too easily impressed by the outward success of some of the new trading methods and who expect heaven on earth from the use of exchange controls and clearings, Professor Ellis' study will be wholesome medicine. The author's more than ordinary familiarity with the domestic conditions of, and the specific psychological determinants operative in, the countries chosen for analysis enabled him to impart a welcome realism to his findings. His scholarly analysis of concurrent international developments saved him from the temptation of attributing all relevant changes in prices and production to the operation of exchange control.

H. K. HEUSER

Fletcher School of Law and Diplomacy

Monetary Management under the New Deal: The Evolution of a Managed Currency System—Its Problems and Results. By ARTHUR WHIPPLE CRAWFORD. (Washington: Am. Council on Pub. Affairs. 1940. Pp. x, 382. \$3.75.)

This study gives an account of the monetary developments under the New Deal by one whose "first-hand knowledge of policies and actions in Washington was supplemented by attendance at the World Monetary and Economic Conference at London in 1933." It is divided into three parts. In Part 1 the author gives a brief account of monetary trends during the Hoover administration, and of the way in which monetary issues were handled during the Presidential campaign of 1932. In Part 2 he describes the evolution of the various parts of the New Deal's monetary program under the impact of the economic and political pressures which were being applied to the Roosevelt administration. In Part 3 he undertakes the task of appraisal and judgment. In this part, attention is given to the problems arising from the division of monetary powers among the President, the Treasury, and the federal reserve system, to the objectives of monetary policy and the instruments of monetary control, and to the problems of gold, silver, and exchange stabilization.

The chief merit of the book lies, perhaps, in the author's ability to place the monetary developments of the New Deal in their proper political setting. In giving the reader a clear picture of the political background against which the drama of monetary evolution or revolution has been played during the past eight years, he has made a definite contribution to

our understanding of this period of monetary history. On the other hand, its principal defect appears to be a lack of perspective in those chapters where the author attempts to appraise and evaluate the results of the New Deal's monetary program.

In his discussion of the problems of monetary management, the author pays little attention to recent developments in monetary theory other than the price theories of Warren and Pearson. At one point (p. 235) he makes a casual reference to the fact that "deficit-financing has been regarded by a school of economists conspicuous in the New Deal as a highly desirable method of increasing the supply of credit and currency in actual use with a view to promoting more favorable conditions for trade, industry, and agriculture." At another point (p. 231) it is mentioned that "in its easy money policies the administration has followed the theory of John Maynard Keynes, who holds that employment depends upon the amount of investment and that this can be influenced by a low rate of interest or by government spending." This fleeting reference to the monetary theories of Mr. Keynes is especially surprising in view of the author's conclusion that "the most distinctive achievement of monetary management under the New Deal undoubtedly is the establishment of an unprecedented condition of monetary ease" (p. 350).

The author is equally sparing in his references to the theory of central banking, which are almost exclusively confined to extracts taken either from the annual reports of the board of governors of the federal reserve system or from testimony offered at congressional hearings. There is, then, no adequate explanation of the rôles which monetary and central banking policy might be expected to play in promoting economic stability. Hence, it is difficult to see how the reader can be expected to reach any significant conclusions regarding the merits or defects of some of the most important parts of the New Deal's monetary program.

E. GORDON KEITH

University of Pennsylvania

Inflation and Revolution: Mexico's Experience of 1912-1917. By EDWIN WALTER KEMMERER. (Princeton: Princeton Univ. Press. 1940. Pp. xiv, 173. \$2.50.)

This analysis deals not with the usual experience of an administration which, once started on a program of financing government expenditures through the printing press, runs the gamut of inflation. It is the story of monetary developments in a period of civil war in which the old government and various revolutionary factions issue "money," one of these latter in the end winning control, throwing out all mediums of exchange but its own and then finding it impossible to continue its paper in circulation. The course of development is also interesting because Mexico, except at the

beginning of the revolution, could not temper the effects of the paper money issues by resort to floating domestic or foreign loans.

Almost the full range of currency expedients was retried in Mexico in the twelve years ending in 1916. The gold standard, an incipient gold exchange standard, a dual gold and silver standard, a silver standard, symmetallism, bank notes and a wide range of unredeemable government and private paper money issues had their day at different times and in different districts.

The period of greatest monetary irregularities ran from the middle of 1913 to the end of 1916. In these years first gold vanished, then the pre-revolutionary bank note issues underwent rapid depreciation in value, then fiduciary silver pesos went out of circulation followed by fractional coins. Huerta resorted to exploiting the banks to secure funds but was still unable to finance the war. Carranza meanwhile was collecting what he could in areas under his control, taking over the local banks and issuing his own paper money.

Capture of the capital by the Constitutionalists made the paper money of the opposition valueless but did not give the Carranza issues stability. An effort to that end and to bring order among the various Constitutionalist issues was made in the emission of new paper known as the infalsificables or uncounterfeitable. These bills were introduced by exchanging them for previous issues and receiving them for taxes, at rates arbitrarily fixed. But the government proved unable to give the new paper a stable value. The new pesos sank so rapidly in value that the administration was forced to demand certain taxes in gold to keep going. The infalsificables presently ceased to circulate and commerce fell to a barter basis.

Then at the end of 1916 occurred a remarkable phenomenon. Within a few days commercial transactions, without action by the government, returned to the gold basis. "The paper money died in its tracks and coins came out of hoards to perform the task of carrying on the country's monetary work." Carranza was thus, through no effort of the public authorities, presented with conditions which allowed the formulation of a currency program on a more conservative basis. To keep the record clear, the government proceeded to "retire" the infalsificables by requiring payment in them of certain surtaxes. This expedient removed them as a part of the public debt without their formal repudiation.

The latter part of the book reviews the effect of the confusion in the exchange medium on the economic life of the republic. Satisfactory statistics are seldom at hand for periods of economic confusion such as these, and they were not available in this case. Dr. Kemmerer has succeeded nevertheless in assembling materials which demonstrate again the highly irregular rise in commodity prices which accompanies inflation, the lag in adjustment of wage levels, falling of tax yields and the difficulties of

adjustments in long-time contracts. These reviews make his volume a valuable case study of the far-reaching damage to economic life which accompanies increasing reliance on paper currencies.

CHESTER LLOYD JONES

University of Wisconsin

NEW BOOKS

BRADFORD, F. A. *The legal status of branch banking in the United States*. (New York: Am. Economists Council for the Study of Branch Banking. 1940. Pp. 32. Gratis.)

COPPOCK, J. D. *Government agencies of consumer instalment credit*. Stud. in consumer instal. finan., 5. (New York: Nat. Bur. of Econ. Research. 1940. Pp. xxii, 216. \$2.50.)

DUNKMAN, W. E. *Questions on money and banking*. (New York: Columbia Univ. Press. 1940. Pp. viii, 97. \$1.)

A useful list, compiled by a professor of economics at the University of Rochester. The questions are arranged under 28 topics. In the appendix is a short list of essay topics.

FOSTER, M. B. and RODGERS, R., editors. *Money and banking*. Rev. ed. (New York: Prentice-Hall. 1940. Pp. xviii, 733. \$5, trade; \$4, school.)

Courses in money and banking are progressing toward a more vital study of finance as the counterpart of production, transportation and distribution—economic activities which have been studied largely without financial interpretation in the first course in economics. The concept that an understanding of the financial activity is a short cut to an orderly understanding of conditions in agriculture, industry and trade is relatively new. The textbook by Foster and Rodgers has not wholly bridged the gap from the older, conventional course; but in each chapter there are indications that the authors are aware that the course in money and banking is undergoing evolution.

Few economists, however, realize the extent to which they have come to talk in a conventionalized language which fails to convey more than a modicum of meaning to the layman. Foster and Rodgers have written a text from which the student who lacks financial background may glean a fair understanding of the financial world. It does not adequately introduce the types of financial statistics and charts which are used to gauge conditions in the country and in the particular industries, or problem material wherewith to assess the effects of government financial policy. The authors have, however, broken away from the deadly precedents of the past, and they have written in a refreshing style. The book is typical of a period of transition.

DONALD M. MARVIN

HALES, C. A. *The Baltimore Clearing House*. (Baltimore: Johns Hopkins Press. 1940. Pp. xiii, 347. \$3.)

This study describes the Baltimore Clearing House as it is today and traces its history with the aid of the records and minutes of the Clearing House. Problems of membership clearing for non-members, action during crises and banking regulations are treated. Special interest attaches to the detailed account of the actions during financial crises, including a separate chapter on the banking crisis of 1933. There is also an account of the Baltimore plan for currency

ments since September, 1939, to control the exchanges and to mobilize foreign assets, as well as a review of the part played by central and commercial banks in government financing. As usual, there is an accurate and complete summary of the monetary policy of the United States; of special interest is the information on capital movements and on the fluctuations in prices of government bonds.

J. C. ROCCA

Sixteenth census of United States, 1940: sales-finance companies and banks' holdings of retail installment paper, with supplemental data on other types of consumer indebtedness. (Washington: Census Bur. 1940. Pp. 56. 10c.)

Small loan laws of the United States. 3rd ed. Pamph. 37. (Newton: Pollak Found. for Econ. Research. 1940. Pp. 23. 10c.)

Public Finance, Taxation, and Tariff

NEW BOOKS

ALLEN, H. K. *Control of expenditures in the local governmental units of Illinois.* Univ. of Illinois bull. no. 61. (Urbana: Univ. of Illinois. 1940. Pp. 58.)

That Professor Allen should accord budgeting, accounting, auditing, reporting, and purchasing first place and negative fiscal gadgets such as tax-rate and debt limits a weak second will enlist the sympathy of most students of financial administration. He also urges synchronization of fiscal years, as affecting both budgetary and tax administration. This monograph, however, is not the sort of work an administrator might have written; rather it has all the earmarks of the professional scholar's handiwork. This, rather than any bias on the part of the author, seems to explain the relatively strong faith in *fiscal machinery* as distinguished from administrative practice.

Little examination is undertaken to find out what *kind* of planning, recording, publicity, and legislative check-up is appropriate to each variety and size of local unit. The importance of state assistance in technical fiscal processes is definitely understressed.

JAMES W. MARTIN

ANDERSON, H. D. *Taxation, recovery, and defense.* Investigation of concentration of econ. power monog. no. 20. (Washington: Temporary Nat. Econ. Committee. 1940. Pp. xviii, 374.)

FRASURE, C. M. *British policy on war debts and reparations.* (Philadelphia: Dorrance. 1940. Pp. 188. \$2.)

HARRISS, C. L. *Gift taxation in the United States.* (Washington: Am. Council on Public Affairs. 1940. Pp. vi, 175. \$3.)

HOWARD, M. S. *Principles of public finance.* (Chicago: Commerce Clearing House. 1940. Pp. vii, 438. \$5.)

HUGHES, J. E. *Federal payroll tax.* (Chicago: Flood Co. 1940. Pp. 250. \$5.)

LASSER, J. K. *Your income tax.* 1941 ed. (New York: Simon and Schuster. 1940. Pp. 128. \$1.)

MCGEE, C. *The finances of the City of New York.* (New York: R. W. Pressprich. 1940. Pp. 285. \$5.)

MAGILL, R. and MAGUIRE, J. M. *Cases on taxation.* 3rd ed. (Chicago: Foundation Press. 1940. Pp. 1069. \$7.)

MONTGOMERY, R. H. *Federal tax handbook, 1940-1941.* Vols. I and II. (New York: Ronald. 1940. Pp. xii, 1176; iv, 1179-2331. \$17.50, the set.)

a result of the latter Act the gold standard could not be maintained in 1928-1929, and also how the general collapse of world finance in 1931-1933 emphasized the need for more centralized financial control in Canada. The book is particularly useful to the student in the United States because it includes much material not readily accessible elsewhere, including the text of the Bank of Canada act of 1934 and of the amendments of 1936 and 1938, excerpts from the *Canada Gazette*, and the by-laws of the Bank of Canada.

KENNETH LEWIS TREFFTZ

WALSH, J. J. *Early banks in the District of Columbia, 1792-1818*. A dissertation. (Washington: Catholic Univ. of America Press. 1940. Pp. viii, 183.)

The author has given the factual history of the earliest commercial banks of the District, an area which at that time included Alexandria, Virginia. The details are relatively full for three of the thirteen institutions, none of which were of the wild-cat variety. Their experience helped to form precedents of organization and operation for the rapidly expanding system of chartered commercial banks. With few exceptions their capital subscriptions were well backed by specie, their note circulations were restrained, their services to the federal government were substantial. The study is a useful addition to the growing historical knowledge of banking in the United States.

V. J. WYCKOFF

WESTERFIELD, R. B. *Selected bibliography of money, credit, banking and business finance*. (Cambridge: Bankers Pub. Co. 1940. Pp. 136. \$1.50.)

The books listed in this bibliography are arranged under 75 headings. For each book is given the author, title, date of publication and publisher. It contains an alphabetical list of authors with numerical references to all of their books listed and a list of the names and addresses of all publishers. At the end of each subject list is a blank space for pencilled notations of new books as they may appear.

WOOLFSON, A. P. *Money, banking and finance*. (Cambridge: Brady Pub. Corp. Pp. 465. \$2.50.)

Il controllo dei cambi nei vari paesi. Quaderni ix. (Rome: Assoc. fra le Soc. Italiane per Azioni. 1940. Pp. 144.)

This is a useful summary of foreign-exchange control measures adopted in various countries since 1929. An introductory section outlines the motivation for and the diverse nature of the controls. There follow brief descriptions of measures applied in each of 49 countries. The United States is not included. The chief means are found to be: monopolization of foreign-exchange markets, influences on the supply of exchange, influences on the demand.

CARL T. SCHMIDT

Export-Import Bank of Washington: hearings, 76th Cong., 3rd sess., on H. R. 10212 superseded by H. R. 10361, to provide for increasing the lending authority of the Export-Import Bank of Washington, and for other purposes, Aug. 6-14, 1940. (Washington: House Banking and Currency Committee. 1940. Pp. 141. 15c.)

Money and banking, 1939-40. Vol. I. *Monetary review*. (Geneva: League of Nations. New York: Columbia Univ. Press. 1940. Pp. 101. 75c.)

This volume contains a description of the measures adopted by the govern-

ments since September, 1939, to control the exchanges and to mobilize foreign assets, as well as a review of the part played by central and commercial banks in government financing. As usual, there is an accurate and complete summary of the monetary policy of the United States; of special interest is the information on capital movements and on the fluctuations in prices of government bonds.

J. C. ROCCA

Sixteenth census of United States, 1940: sales-finance companies and banks' holdings of retail installment paper, with supplemental data on other types of consumer indebtedness. (Washington: Census Bur. 1940. Pp. 56. 10c.)

Small loan laws of the United States. 3rd ed. Pamph. 37. (Newton: Pollak Found. for Econ. Research. 1940. Pp. 23. 10c.)

Public Finance, Taxation, and Tariff

NEW BOOKS

ALLEN, H. K. *Control of expenditures in the local governmental units of Illinois.* Univ. of Illinois bull. no. 61. (Urbana: Univ. of Illinois. 1940. Pp. 58.)

That Professor Allen should accord budgeting, accounting, auditing, reporting, and purchasing first place and negative fiscal gadgets such as tax-rate and debt limits a weak second will enlist the sympathy of most students of financial administration. He also urges synchronization of fiscal years, as affecting both budgetary and tax administration. This monograph, however, is not the sort of work an administrator might have written; rather it has all the earmarks of the professional scholar's handiwork. This, rather than any bias on the part of the author, seems to explain the relatively strong faith in *fiscal machinery* as distinguished from administrative practice.

Little examination is undertaken to find out what *kind* of planning, recording, publicity, and legislative check-up is appropriate to each variety and size of local unit. The importance of state assistance in technical fiscal processes is definitely understressed.

JAMES W. MARTIN

ANDERSON, H. D. *Taxation, recovery, and defense.* Investigation of concentration of econ. power monog. no. 20. (Washington: Temporary Nat. Econ. Committee. 1940. Pp. xviii, 374.)

FRASURE, C. M. *British policy on war debts and reparations.* (Philadelphia: Dorrance. 1940. Pp. 188. \$2.)

HARRISS, C. L. *Gift taxation in the United States.* (Washington: Am. Council on Public Affairs. 1940. Pp. vi, 175. \$3.)

HOWARD, M. S. *Principles of public finance.* (Chicago: Commerce Clearing House. 1940. Pp. vii, 438. \$5.)

HUGHES, J. E. *Federal payroll tax.* (Chicago: Flood Co. 1940. Pp. 250. \$5.)

LASSER, J. K. *Your income tax.* 1941 ed. (New York: Simon and Schuster. 1940. Pp. 128. \$1.)

MCGEE, C. *The finances of the City of New York.* (New York: R. W. Pressprich. 1940. Pp. 285. \$5.)

MAGILL, R. and MAGUIRE, J. M. *Cases on taxation.* 3rd ed. (Chicago: Foundation Press. 1940. Pp. 1069. \$7.)

MONTGOMERY, R. H. *Federal tax handbook, 1940-1941.* Vols. I and II. (New York: Ronald. 1940. Pp. xii, 1176; iv, 1179-2331. \$17.50, the set.)

NEWCOMER, M. *Taxation and fiscal policy*. (New York: Columbia Univ. Press. 1940. Pp. vi, 89. \$1.25.)

This is a series of five lectures delivered during the summer session of Columbia University. It is a synthetic summary of public finance for laymen, spiced with original thought and considerable philosophy that will prove stimulating to specialists.

The five chapters treat "Rising cost of government," "Tax systems," "Tax justice," "Competition and coöperation among tax authorities," and "Government fiscal policies and business fluctuations." The fourth of these, covering a field in which the author has done much original work, is especially good.

These lectures are livened with considerable excellent popular illustrative material. For example take this choice description of the sales tax: "In short, the advice found in the Code of Manu, dating back nearly two thousand years, to gather taxes little by little, 'as the leech, the calf and the bee take their food' is still good."

An example of an original analysis, at least new to the reviewer, is that which traces the effect of the tax system on the pattern of investment. The tax system, while through tax-exempt securities it makes corporate bonds less attractive than they otherwise would be, at the same time adds to the attractiveness of stocks since the latter carry with them the privilege of using "the corporation as a savings bank," that is, of avoiding the personal income tax through corporate reinvestment.

The author is sceptical of continuing deficits and courageously recommends an early attempt to balance the budget.

Exception can be taken here and there. On so controversial a point, more evidence is needed than the figures which show a heavy deficit in the balance between taxes lost and interest saved through tax-exempt securities (p. 56). Also, one might have hoped that the last chapter would include something of the philosophy and accounting of public investment as a solution for chronic unemployment.

In general, the treatment is fair and well balanced; the style vigorous and clear; the point of view sensible.

HAROLD M. GROVES

PAUL, R. E. *Studies in federal taxation*. 3rd ser. (Cambridge: Harvard Univ. Press. 1940. Pp. 566. \$6.)

SCHULZE, O. *Der "New Deal" und seine Einwirkung auf die Finanz- und Steuerpolitik der Vereinigten Staaten von Amerika*. (Jena: Fischer. 1940. Pp. xvi, 148. RM. 6.)

SHATTUCK, L. A., JR. *Municipal indebtedness: a study of the debt-to-property ratio*. Stud. in hist. and pol. sci., ser. lviii, no. 2. (Baltimore: Johns Hopkins Press. 1940. Pp. 145. \$1.25.)

This useful study describes how, in spite of legislative efforts to check the swelling tide of local debt, by limiting the total debt to a fixed percentage of the property valuation, defects of administrative practice have weakened the check. Much of the illustrative material was collected in New Jersey, where, in spite of its debt-to-property limitation, many defaults occurred in the last decade. One of the faults found in many states was the accumulation of overlying indebtedness, such as county, ordinarily not restricted by law. Another was the readiness of legislatures to permit loans outside the limit, as in the case of loans that were expected to be self-supporting but were not.

Since borrowing only puts off taxation and increases the amount that must eventually be paid, the author recommends borrowing only in the case of irregular capital expenditures. A comparison of Massachusetts cities of different sizes reveals that regularity of capital expenditure increases with the size of the city, thereby giving less justification for borrowing in the larger municipality. Recent mishaps have accelerated the movement for greater state control. New Jersey, for example, in 1938 created the "state department of local government" with broad powers over the finances of municipalities failing to conform to certain standards. While the author believes that some sort of debt limit should be retained, as one of the basic principles of control, he would not allow this limit to be so inelastic as to hamper a central administrative commission in the exercise of its own judgment.

CHARLES P. HUSE

TARASOV, H. *Who pays the taxes? Allocation of federal, state, and local taxes to consumer income brackets.* Investigation of concentration of econ. power monog. no. 3. (Washington: Temporary Nat. Econ. Committee. 1940. Pp. vii, 55.)

TAY, M.C. *Das Finanz- und Steuerwesen Chinas unter besonderer Berücksichtigung der Einkommensteuer.* (Jena: Fischer. 1940. Pp. viii, 98. RM. 1.50.)

THALHEIM, K. C., and others. *Probleme der Kriegsfinanzierung.* (Jena: Fischer. 1940. Pp. v, 154. RM. 6.)

WATSON, P. B. *Our national debt.* (Boston: Author, 50 State St. 1940. Pp. 38.)

WILLCOX, W. R. B. *The curse of modern taxation.* (New York: Fortuny's. Pp. 140. \$2.)

Written by an architect from a single-tax viewpoint.

Cigarette tax law, Article 20 of the tax law, and departmental regulations: State of New York. (Albany: State House. 1940. Pp. 17.)

The cost of municipal government in Massachusetts: thirty-third annual report on the statistics of municipal finances for the year ending December 31, 1938. Pub. doc. no. 79. (Boston: State House. 1940. Pp. xxxiii, 297.)

Excess profits taxation, amortization, and suspension of Vinson-Trammell act: joint hearings, House Ways and Means Committee and Senate Finance Committee, 76th Cong., 3rd sess., Aug. 9-14, 1940. (Washington: Supt. Docs. 1940. Pp. 458. 60c.)

Excess-profits taxation and defense. Stud. in econ. of nat. defense no. 9. (New York: Nat. Industrial Conf. Board. 1940. Pp. 12.)

Fiscal facts concerning the City of New York: a 20 year statistical summary of the city's finances. (New York: Citizens Budget Commission. 1940. Pp. 90. \$2.50.)

National Association of Assessing Officers: papers presented at the seventh national conference on assessment administration held at Baltimore, Maryland, September 9 to 12, 1940. (Chicago: Nat. Assoc. of Assessing Officers. 1940. Pp. 74.)

National Association of Assessing Officers: report of the committee on assessment organization and personnel. (Chicago: Nat. Assoc. of Assessing Officers. 1940. Pp. 28.)

Personal income tax law of New York (Article 16 of the tax law) and tax on unincorporated business (Article 16A of the tax law) with 1940 amendments. Manual 40-A. (Albany: State House. 1940. Pp. 54.)

Report of the Special Committee on Taxation of Governmental Securities and Salaries, pursuant to S. Res. 303 (75th Cong.). Sen. Rep. 2140, pt. 1 (Washington: Supt. Docs. 1940. Pp. 73. 10c.)

Revenue act of 1940: hearings, 76th Cong., 3rd sess. on H. R. 10413, to provide revenue, and for other purposes, Sept. 3-5, 1940. Rev. print. (Washington: Supt. Docs. 1940. Pp. 479. 50c.)

Stock transfer taxes: report of the committee for the study of federal and state stock transfer taxes, together with the report of Paul Studenski, director of research for the committee. (New York: Committee for Stud. of Fed. and State Stock Transfer Taxes. 1940. Pp. xi, 155.)

Taxation of governmental securities and salaries: views of the minority of the special committee on taxation of governmental securities and salaries created by S. Res. 303 (75th Cong.). 76th Cong., 3rd sess. (Washington: Supt. Docs. 1940. Pp. 43.)

Taxation of intangibles. Business stud. no. 97. (Denver: Univ. of Denver Bur. of Bus. and Soc. Research. 1940. Pp. 23. \$1.)

The author gives a partial survey of the theory and American practice of taxing intangible personal property. The stated purpose is to make an appraisal of low-rate taxes on such property. Much of the study seeks to prove that a proposed Colorado constitutional amendment to authorize a low-rate intangibles tax ought to be defeated. In this connection the work of Professor Lutz demonstrating the limited application of the *double taxation* objection is overlooked. The survey of experience is based almost wholly on secondary sources, and the author commits unfortunate factual errors (e.g., the Kentucky intangibles rate, though correctly stated at one point, is used erroneously at another; the same state's revenue yield is misstated by about a third of a million dollars; and the application of one rate is totally misunderstood). However, the facts are presented with sufficient accuracy to result for the most part in a clear impression of the character and results of such taxes. The conclusions go considerably beyond the evidence.

JAMES W. MARTIN

Population and Migration

NEW BOOKS

COOK, S. F. *Population trends among the California mission Indians.* (Berkeley: Univ. of California Press. 1940. Pp. 56. 50c.)

GLOSS, D. V. *Population, policies and movements in Europe.* (New York: Oxford. Pp. 496. \$6.)

WARNER, R. A. *New Haven negroes: a social history.* (New Haven: Yale Univ. Press for the Inst. of Human Relations. 1940. Pp. 323. \$3.50.)

WILLCOX, W. F. *Studies in American demography.* (Ithaca: Cornell Univ. Press. 1940. Pp. xxx, 556. \$4.50.)

Colombia: censo general de población, 1930. Tomo I. *Departamento de Antioquia.* Tomo II. *Departamento de Atlantico.* Tomo III. *Departamento de Bolivar.* (Bogotá: Contraloria Gen. de la Republica, Sección de Censos Nacionales. 1940. Pp. xxxvi, 435; xxxi, 139; xxvi, 299.)

Guam: population composition and characteristics; home tenure. 16th Census of U. S. (Washington: U. S. Bur. of the Census. 1940. Pp. 18.)

Interstate migration: hearing, 76th Cong., 3rd sess., pursuant to H. Res. 63 and H. Res. 491, resolutions to inquire into the interstate migration of destitute

citizens, to study, survey, and investigate the social and economic needs and the movement of indigent persons across state lines. Part 1. New York City hearings, July 29-31, 1940. (Washington: House Select Committee to Investigate the Interstate Migration of Destitute Citizens. 1940. Pp. 398. 35c.)

Population trends and programs of social welfare: papers presented in the section on population trends and programs of social welfare at the eighteenth annual conference of the Milbank Memorial Fund, April 2-3, 1940. Reprinted from Milbank Memorial Fund Quart., vol. xviii, nos. 3 and 4. (New York: Milbank Memorial Fund. 1940. Pp. 99. 25c.)

Contains papers on "Outstanding population trends affecting problems of social welfare," by W. S. Thompson; "Population trends and future problems of child welfare," by K. F. Lenroot and R. J. Myers; "Population trends and problems of education," by Newton Edwards; "The aging population and programs of security," by Ewan Clague; "Population trends and problems of public health," by G. S. J. Perrott and D. F. Holland; "Adapting programs of social welfare to a changing population," by Philip Klein.

Social Problems and Reforms

Rural Life in Process. By PAUL H. LANDIS. (New York: McGraw-Hill. 1940. Pp. xviii, 599. \$3.75.)

"Once rural life was relatively static, the ebb and flow of similar events growing deeply into channels of custom; today rural life is dynamic, changing, a mixture of the old and the new." With this initial statement Paul Landis plunges into a description of rural life today and a discussion of the changes that have taken place in rural life in recent years. He "deals with rural society and its functional, processual, psychological, interactive aspects, viewing the rural drama in the cultural perspective of American civilization."

The book is divided into five parts: 1. "The structure and organization of rural life in the United States"; 2. "Social experience and personality formation"; 3. "Interaction processes of a dynamic society"; 4. "Social institutions in a changing culture"; 5. "Emerging problems of a dynamic society."

The nearly 600 pages of the book are packed with information. Data are presented that the author obtained from books, bulletins, magazine articles, census reports, and his own research studies. Many statements made in the text are supplemented with tables, and others are illustrated with maps and graphs. Hundreds of citations are given in the footnotes. A list of references suitable for collateral reading is given at the end of each chapter, together with lists of questions for review and discussion. The author is seldom content with presenting one point of view upon a mooted question. He usually gives a well-rounded discussion.

A few statements made in the book are of doubtful accuracy. For example, on page 537 it is stated that "in normal times extreme specialization is more profitable than the types of diversification which seem to have kept

farmers off relief during the depression." This may be true in some limited areas, but farm management surveys furnish fairly conclusive evidence to the contrary as the more general experience.

Various matters of opinion are subject to question. Mr. Landis is undoubtedly more optimistic about coöperative farming than present results justify, if account is taken of many failures of projects aided with federal funds. Not all landowners will agree with the approval of long leases on page 70. The fear that a lease will not be renewed unless the farm is kept in good condition has had a salutary effect on many tenants. The crux of the problem is not the length of lease but the length of tenure. One may question the statement, "Urban man has paid a tremendous price for the transfer from the old handicraft system to the new mechanized industrial order." The measurable standard of living of the working man has been raised, but it is difficult to assess the intangible offsets.

Undoubtedly teachers in agricultural colleges will agree that "the grammar, rhetoric, and literary skill of the average student in the agricultural colleges of this country are notoriously bad." But even if the shortcomings of the one-room rural school that are mentioned in chapter 19 are admitted, the advantages given in chapter 9 should not be forgotten. Inadequacy of results is by no means closely correlated merely to type of school. In regions where the average size of farms exceeds 240 acres and but few roads are hard surfaced, the consolidated school is probably a long way off. Doubtless the majority of these neighborhoods should strive to provide an excellent one-room school instead of grieving that they cannot have a city school.

In comparing the percentage of the national income that has been taken for local taxes and for federal taxes in recent years (pp. 394 and 395), no mention is made of the wide difference between federal tax receipts and federal expenditures. Undoubtedly the cost of local governments is often excessive, but the expenditures of the federal government during the past seven fiscal years have been greater than the expenditures of all states, counties, municipalities, school districts, and other local subdivisions.

The book will undoubtedly be warmly welcomed by teachers of rural sociology and by students of rural social problems. It brings together between two covers a wealth of information not easily available; and it is well written.

H. C. FILLEY

University of Nebraska

NEW BOOKS

- BOSSARD, J. H. S., editor. *Children in a depression decade: a survey of the factors affecting children from 1930 to 1940, showing the present status of child welfare*. Annals, vol. 212. (Philadelphia: Am. Acad. of Pol. and Soc. Sci. 1940. Pp. xi, 287. \$2.)
- CADMAN, P. F. *The economics of discontent*. (New York: Am. Bankers Assoc. 1940. Pp. 46. \$1.)

- CAMPBELL, P. *Consumer representation in the New Deal*. Stud. in hist., econ. and public law no. 477. (New York: Columbia Univ. Press. 1940. Pp. 298. \$3.25.)
- CLARK, H. F., editor. *Economic education*. 11th yearbook. (Washington: Nat. Council for the Social Studies. 1940. Pp. v, 166. \$2.)
- COLE, L. *The background for college teaching*. (New York: Farrar and Rinehart. 1940. Pp. xxiv, 616. \$3.50.)
- COLEAN, M. L. and THE HOUSING COMMITTEE. *Housing for defense: a review of the rôle of housing in relation to America's defense and a program for action. The factual findings* by M. L. COLEAN; *The program* by THE HOUSING COMMITTEE. (New York: Twentieth Century Fund. 1940. Pp. xx, 198. \$1.50.)
- DALLAS, H. and ENLOW, M. *Read your labels*. Pamph. no. 51. (New York: Public Affairs Committee. 1941. Pp. 29. 10c.)
- GOLDENTHAL, A. J. *Concentration and composition of individual incomes, 1918-1937*. Investigation of concentration of econ. power monog. no. 4. (Washington: Temporary Nat. Econ. Committee. 1940. Pp. xv, 112.)
- GREENAN, J. T. and MEREDITH, A. B. *Everyday problems of American democracy*. New ed. (Boston: Houghton Mifflin. 1940. Pp. 639. \$1.80.)
- HARWOOD, S. *Vital American beliefs*. (Cambridge: Cambridge Analytical Services. 1940. Pp. 44. 25c.)
- KAPLAN, A. D. H., and assistants. *Study of consumer purchases*. Urban ser. no. 643. *Family expenditure in New York City, 1935-36*. No. 644. *Family income in nine cities of the East Central region, 1935-36*. No. 645. *Family income in five New England cities, 1935-36*. No. 646. *Family expenditure in six urban communities of the West Central-Rocky Mountain region, 1935-36*. No. 647. *Family income in the Southeastern region, 1935-36*. No. 647. *Family expenditure in three Southeastern cities, 1935-36*. Urban technical ser. no. 648. *Family expenditures in selected cities, 1935-36*. Vol. II. *Food*. Vol. V. *Medical care*. Vol. VI. *Travel and transportation*. (Washington: U. S. Bur. of Labor Stat. in coöp. with WPA. 1939; 1940. Pp. 232; 538; 351; 313; 520; 298; 406; 312; 165.)
- KURTZ, R. H., editor. *Social work year book, 1941: a description of organized activities in social work and in related fields*. 6th issue. (New York: Russell Sage Found. 1941. Pp. 793. \$3.25.)
- LÜTGE, F. *Kriegsprobleme der Wohnungswirtschaft*. (Jena: Fischer. 1940. Pp. 58. RM. 1.)
- OWEN, A. D. K. *The British social services*. (London: Longmans Green. 1s.)
- SCOTT, L. H. *Income management for women*. (New York: Harper. 1940. Pp. xi, 298. \$3.)
- SHALLCROSS, R. E. *Industrial homework: an analysis of homework regulation, here and abroad*. (New York: Industrial Affairs Pub. Co. 1939. Pp. xi, 257.)

New York homework legislation is analyzed in this study and compared with legislative attempts in other states and foreign countries. The author shows that statistical data are inadequate, representing few sources other than the experiences of factory inspectors. According to the main thesis of the book, the prevailing view which regards all homework as an evil—as sweat-shop work—is a fallacy which disregards existing varieties and is not based on an impartial collection of facts. The NRA's attempt to control homework was "characterized largely by confusion, with little or no administrative machinery for enforcement." As against large manufacturers and labor unions, "homeworkers themselves and the small struggling homework employer in

many industries were much less articulate in presenting their point of view" (p. 60).

As against the model bill, set up by the International Association of Government Labor Officials, and against the legislation in New York, which seeks ultimate prohibition rather than regulation, the author considers homework a help in solving the problem of the incapacitated and infirm who cannot compete with factory workers. Legislation is necessary. It should include, among other things, contracts with full particulars of the job, requiring employers to bear the costs of transporting materials to and from the shop, insuring homeworkers against loss of wages actually earned. Hours should remain unregulated.

Miss Shallcross, who for five years worked on New York homework inspection, presents rich material concerning homework legislation based partly on her own experience. As inspector, she has learned the difficulties of supervision and therefore avoids the easy demand for state help. In her general position of demanding reform and not prohibition by legislation, she is sound. In her attempt to refute the enemies of homework, however, Miss Shallcross has gone too far. Not all homeworkers are unfit for factory work. Not all hours are as good as those which she describes. Nor is the worker's own disposition of hours always a favorable one. There are good wages in homework, but most wages are concentrated at the bottom. Physical hazards do not receive adequate consideration. The study is a valuable record of experience, marred only by this slight lack of balance.

FRIEDA WUNDERLICH

SIMS, L. B. *The scholarship of junior professional appointees in the government service.* (Washington: President's Committee on Civil Service Improvement. 1940. Pp. xxi, 228.)

STONE, P. A. and DENTON, R. H. *Toward more housing.* Investigation of concentration of econ. power monog. no. 8. (Washington: Temporary Nat. Econ. Committee. 1940. Pp. xxi, 223.)

STRODE, J. and STRODE, P. R. *Introduction to social case work.* (New York: Harper. 1940. Pp. 234. \$2.50.)

TERESHTENKO, V. T. *The problem of coöperative medicine.* (New York: WPA for the City of New York. 1940. Pp. iv, 78.)

Clarifying many confused notions which are current regarding this growing movement, the author presents a brief picture of the health and medical care problems of today. The basic principles under which all voluntary group health associations operate are indicated as embodying group medical practice, preventive medicine, fixed periodic payments by patients and some form of consumers' coöperative control.

Of special value is the description of the development of group health associations abroad, especially in Sweden, Holland, Yugoslavia and Poland. Coöperative medicine appeared abroad chiefly as a natural ancillary to the services of consumers' coöperatives. The slow growth of consumers' coöperatives in the United States necessitates a more or less independent development of coöperative medicine.

In an effort to be unbiased, the author marshals the various arguments offered in support of the present system of medical care with appropriate comments from its defenders, together with statements offered in support of coöperative medicine. Advantages cited are lower costs and more complete services to more people with democratic (non-governmental) control and maintenance of the institution of the family physician, without tax burdens or

radical social changes. The greatest disadvantage is indicated in the inability of coöperative health associations to reach many people of the low income groups and the unemployed.

EARL E. MUNTZ

TERRY, P. W. and SIMS, V. M. *They live on the land: life in an open-country southern community*. (University, Ala.: Univ. of Alabama Bur. of Educ. Res. 1940. Pp. xi, 313.)

Chapter headings cover origins of the community, the population, economic life, civic life, health, the homes, churches, schools, how the people spend their time, and leadership.

THOMASON, C. C. and DAVIS, A. L. *Economic problems and cases*. 5th ed. (Rochester: Rochester Athenaeum and Mechanics Inst. 1940. Pp. 119. \$1.75.)

THORNDIKE, E. L. *Human nature and the social order*. (New York: Macmillan. 1940. Pp. xx, 1019. \$4.)

WILLIAMS, F. M. and HANSON, A. C. *Money disbursements of wage earners and clerical workers in eight cities in the East North Central Region, 1934-36*. U. S. Bur. of Labor Stat. bull. no. 636. (Washington: Supt. Docs. 1940. Pp. x, 443. 50c.)

———. *Money disbursements of wage earners and clerical workers in five cities in the Pacific Region, 1934-36*. U. S. Bur. of Labor Stat. bull. no. 639. (Washington: Supt. Docs. 1940. Pp. xii, 358. 35c.)

———. *Money disbursements of wage earners and clerical workers in the North Atlantic Region, 1934-36*. Vol. II. *Eleven cities*. U. S. Bur. of Labor Stat. bull. no. 637. (Washington: Supt. Docs. 1940. Pp. x, 522. 75c.)

WIRTH, L., editor. *Eleven twenty-six: a decade of social science research*. (Chicago: Univ. of Chicago Press. 1940. Pp. xv, 498. \$3.50.)

"This book . . . provides the life-history of an idea—the story of the work of an organization of scientists and scholars devoted to the exploration of the baffling and ubiquitous problems of man's relationship to man. . . . It is an informal record of the ideas that have come out of 1126 East Fifty-ninth Street, Chicago, . . . the Social Science Research Building at the University of Chicago."

WOLF, I. J. *A family doctor's notebook*. (New York: Fortuny's. 1940. Pp. 315. \$2.)

ZORBAUGH, G. S. M. and KUDER, G. F. *Factors in the vocational choices of university women*. (Chicago: Univ. of Chicago Bookstore. 1940. Pp. v, 47.)

Characteristics of state plans for aid to dependent children. Rev. July, 1940. (Washington: Social Security Board, Bur. of Pub. Assistance. 1940. Pp. 27. 10c.)

Proceedings of the National Conference of Social Work: selected papers, sixty-seventh annual conference, Grand Rapids, Michigan, May 26-June 1, 1940. (New York: Columbia Univ. Press. 1940. Pp. 747. \$3.)

Waverly: a study in neighborhood conservation. (Washington: Federal Home Loan Bank Board. 1940. Pp. ix, 97.)

Insurance and Pensions

NEW BOOKS

DAVENPORT, D. H. and GESELL, G. A. *Families and their life insurance: a study of 2,132 Massachusetts families and their life insurance policies*. Inves-

tigation of concentration of econ. power monog. no. 2. (Washington: Temporary Nat. Econ. Committee. 1940. Pp. x, 168.)

FAULKNER, E. J. *Accident and health insurance*. (New York: McGraw-Hill. 1940. Pp. xiii, 366. \$4.)

This book is the fourteenth volume of a well known "insurance series," twelve volumes of which have been written by prominent insurance businessmen. In general, the books intend to educate employees in business routine and not to promote the science of insurance.

A special book of this coverage is convenient to have, since there is no other covering solely accident and health insurance in America. Health insurance in particular, in the form of private business mentioned exclusively by the author, has heretofore lacked comprehensive treatment, so that besides the chapters on rates and history, the chapters on non-cancellable policies and on hospitalization insurance are the most useful. The "popular large-scale demand for hospitalization since 1921" is one of the important signs in the "change in the mass social and economic thinking . . . after the manifold and persisting effects of the business cataclysm" (p. 28). Nevertheless, though substantial, the number of persons who enjoy a health insurance policy of any kind seems relatively extremely small. The more so, if one considers that "98 per cent of the population are solely dependent upon the weekly or monthly pay check to maintain themselves," and on the other hand "that only 5 per cent of the income in the United States has been protected" (by accident and/or health insurance); 28 per cent of all loans by personal finance companies are to pay doctors' and hospitals' bills" (pp. 28-29). Meanwhile, still more than the author has been able to say, the most recent experience in connection with the defense legislation shows "the increase in morbidity with the fall in the mortality rates" (p. 27). Perhaps in the near future America may lead the world also in health insurance and in sickness prevention.

ALFRED MANES

FÉRAUD, L. *Actuarial technique and financial organisation of social insurance: compulsory pension insurance*. Stud. and rep., ser. M, no. 17. (Geneva and Washington: Internat. Labour Office. 1940. Pp. vi, 568. \$4.)

This is a technical report containing basic data about certain aspects of social insurance in several countries. It is not a systematic treatise on social insurance plans in these countries; nor is it a handbook of this legislation. It presents the facts concerning the insured populations, the financing of the insurance scheme, and the administration of the funds. For Germany, the report outlines the old-age and widows' and orphans' insurance for workers; for Great Britain and northern Ireland, the subjects covered include the National Health Insurance plan and also widows', orphans' and the old-age contributory pensions; for Italy, the general scheme of compulsory insurance against invalidity, old age and death; for France, the general scheme of social insurance; for Belgium, the old-age plan for workers and also for salaried employees; and for Czechoslovakia, the old-age insurance plan.

The book is technical and is concerned with actuarial and financial data primarily. Economic, social and political factors are omitted. An introduction of 45 pages deals with statistical methods and is largely concerned with the work of the actuary in planning a social insurance scheme.

WILLIAM HABER

HOHMAN, H. F. *Old age in Sweden: a program of social security*. (Washington: Social Security Board, 1940. Pp. xiii, 305. 35c.)

Increased interest in various economic and social programs in Sweden has been accompanied by misinformation and misunderstanding, partly because much of the basic material upon which to form judgments is available only in Swedish. Mrs. Hohman's thorough and objective study of the Swedish old-age program is therefore most welcome. The author explains not only the present arrangements for old-age security under such headings as coverage, contributions, finance, administration, benefits and their adequacy, invalidity, medical care, and sickness insurance, but also the evolution of the old-age program and the relationship of that program to political conditions and to current theories of social planning in Sweden. The appendices contain abundant factual material, and the 25-page "selected" bibliography includes some 425 items in Swedish and English.

Legislative changes in the Swedish old-age program, like recent changes in our Social Security act, have tended to eliminate private insurance notions by partially socializing the benefits, by preventing the accumulation of a large reserve, and by opening the way for a government subsidy, which it is estimated will amount to as much as 75 per cent of the benefits paid by the Swedish contributory system in 1960. Perhaps through an error in proof reading, the position of the 1928 pension committee regarding the reserve issue is misrepresented on page 187. This Swedish committee took the view that the burden on future generations for the support of the aged could only be lightened by reason of a reserve fund if the interest on the reserve represented an increase in the real national income arising from investment of the reserve.

RICHARD A. LESTER

HOPKINS, W. S. *Social insurance and agriculture: a memorandum presenting suggestions for research and a bibliography*. Pamph. ser. no. 5. (Washington: Soc. Sci. Res. Council Committee on Soc. Sec. 1940. Pp. v, 93. 50c.)

Contains an extensive bibliography.

HUBER, F. *Seasonal workers and unemployment insurance in Great Britain, Germany, and Austria: a survey of legal provisions and administrative practice through 1938*. Bur. rep. no. 4. (Washington: Soc. Sec. Board, Bur. of Res. and Stat. 1940. Pp. viii, 167. 20c.)

LATIMER, M. W. and TUFEL, K. *Trends in industrial pensions*. Industrial rel. monog. no. 5. (New York: Industrial Rel. Counselors. 1940. Pp. x, 88. \$1.)

SHERWOOD, J. F. and PENDERY, J. A. *Social security and pay-roll accounting*. 6th ed. (Cincinnati: South-Western Pub. Co. 1940. Pp. 256. \$2.60.)

WARREN, R. B. *The search for financial security*. (New York: Columbia Univ. Press. 1940. Pp. vi, 91. \$1.25.)

The compensation of war victims: medical aid, compensation and war pensions. Stud. and rep. ser. E, no. 6 (Geneva and Washington: Internat. Labour Office. 1940. Pp. 91. 50c.)

How to start a life insurance program. (Cambridge: Inst. for Risk Analysis. 1940. Pp. 32. 50c.)

Problems of workmen's compensation administration in United States and Canada. Bull. 672. (Washington: U. S. Bur. of Labor Statistics. 1940. Pp. 229. 25c.)

Significant provisions of state unemployment compensation laws, June 1, 1940. (Washington: Social Security Board. 1940. Pp. 4.)

Statement on life insurance. (Washington: Temporary Nat. Econ. Committee. 1940. Pp. 109.)

What is social security: a brief explanation of the Social Security act. (Washington: Social Security Board. 1940. Pp. 24.)

Pauperism, Charities, and Relief Measures

Public Relief, 1929-1939. By JOSEPHINE CHAPIN BROWN. (New York: Holt. 1940. Pp. xvii, 524. \$3.50.)

Even a decade ago, a book entitled, *Public Relief, Year — to Year —* would have had but a handful of interested readers. The author's thesis, if he had one, would have encountered but a sprinkling of defenders or critics, and it would have found a lonely place on the "social science" shelf of the public library. Today, despite European war and a national defense program, public relief and its kindred subjects occupy a place of predominant importance in the public mind. They are, moreover, of no less concern to economist and statesman than to social worker or relief administrator. Relief and social security have attained a position of importance as political issues and in party platforms. They are, today, matters of fundamental public policy. Because of this fact, it can rightly be expected that phases of the subject would be controversial and that they would have importance for the general public as well as the technician, public administrator, economist or philanthropist.

The essential features of public relief as we know it today are likely to have continued significance for many years to come, even though they took shape within the past ten years—the period covered by the author. Its controversial phases, especially those that may seriously affect future policies, must, however, be evaluated in a historical perspective of longer duration. The forces and ideas embattled in the controversies in this field are of long standing, some as old as the American Commonwealth, others dating back to the beginnings of western civilization.

Miss Brown's book is the most comprehensive and most fully documented book on public relief covering this crucial and creative decade, 1929-1939. The necessary historical setting is also provided, and it is constructed with a fine, selective hand, with frankness, without gloves, yet without rancor. The battle between exponents of private philanthropy and of governmental relief, between the advocates of local (then state) autonomy in administration and the proponents of federal programs, between protagonists of work *versus* relief and promoters of straight relief, is described both in its theoretical and in its factual phases, and the outcome is seen as "inevitable" rather than as "just." It is a scholarly, comprehensive, but not pedantic performance.

Possibly the best part of the book is the historical summary of the period preceding 1929, with its excellent balance between recording and inter-

pretation, and its skillful selection of data. Only second best is Part 2, which the author might have called the "period of reluctance"—or the nostalgic era of shuffling forward with the facts, faces turned hopefully backward to the past. The author gives a masterful characterization of this period. Out of it rise, for an appreciative future generation, such names as those of Senators Costigan and La Follette and of several leaders of social work, protagonists of government responsibility for relief. There are those who will think that the Hoover-Gifford side, representing private and local relief, has been a bit roughly handled. To the reviewer, it seems that the author has used great restraint.

The largest units of the book deal with federal emergency relief legislation and the social security measures, the former an historical evaluation, the latter an historical-administrative analysis. Here details are of necessity numerous, documentation more onerous, and the interests of specialists rather than those of the general student of the social sciences are served. This intensive treatment is, however, quite justified, since this "speciality" is one of the most important in public policy. It is regrettable that the author had apparently no access to Miss Lillian Brandt's brilliant history of unemployment relief in New York City during the depression, which is still in manuscript form, but might have added a colorful local touch to this comprehensive study with its proper federal and state preoccupation.

The reviewer has one ardent hope—that Miss Brown has had a large, hard-working staff of assistants in gathering and organizing her material. If it is all the work of a single person, envy and despair will keep her colleagues from ever undertaking such an ambitious enterprise.

PHILIP KLEIN

*New York School of Social Work
Columbia University*

Socialism and Coöperative Enterprises

NEW BOOKS

- LAIDLER, H. W. *The federal government and functional democracy*. (New York: League for Industrial Democracy. 1940. Pp. 32. 10c.)
- LIN, M. H. *History of utopias (anti-statism)*. 2nd ed. (New York: Burstein and Chappe. 1940. Pp. 87. \$2.50.)
- MORRISON, H. *An easy outline of modern socialism*. 2nd ed. (New York: Rand School Press. 1940. Pp. 30. 10c.)
- MYERS, J. *Organized labor and consumer coöperation*. (New York: Coöperative League. 1940. Pp. 39. 15c.)
- STEWART, M. S. *Credit unions—the people's banks*. Pamph. no. 50. (New York: Public Affairs Committee. 1940. Pp. 31. 10c.)
- OSTROLENK, B. and TERESHTENKO, V. J. *Abstracts of the laws pertaining to coöperation in the United States of America, its possessions and territories*. (New York: W.P.A. for the City of New York. 1940. Pp. viii, 350.)

One of the most valuable contributions for the economist or the layman

interested in legislation pertaining to coöperation and coöperatives in the United States is this exhaustive compendium. In this country there are no general coöperative laws, but rather separate laws adopted to regulate coöperatives in accordance with the nature of their economic activity. The authors point out, moreover, that it is only since the beginning of the twentieth century—following the lead of New York and Wisconsin—that a number of states have enacted special coöperative laws for stock organizations embodying all the features of the so-called Rochdale principles.

In the procedure of abstracting laws, those of each state, territory and of the federal government have been treated as a separate unit. Likewise, the statutes affecting various forms of coöperation have been set forth under separate titles.

A representative idea of the scope of state laws on coöperation may be gleaned from the following list abstracted from the statutes of Wisconsin: building and loan associations; building and loan finance corporations; cemetery associations; coöperative associations; credit unions; credit union finance corporations; fraternal benefit societies; group accident and health insurance; hospital service corporations; mutual insurance corporations in general; mutual life insurance companies; mutual savings banks; instruction in coöperatives in public schools.

EARL E. MUNTZ

TREHEY, H. F. *Foundations of a modern guild system*. A dissertation. (Washington: Catholic Univ. of America Press. 1940. Pp. xi, 204.)

The instability of our economic system prompts a search for security. The author finds this in a guild system based on the Papal Encyclicals. The democratic character of Catholic social teaching in such a guild system is the main theme of the book. Thus the evidences of a guild system in the totalitarian states, including Portugal to a certain degree, are deprecated as being imposed from above and not being established from below in a democratic manner. The author reviews primarily French thought on the guild system, and more consideration might well have been given to central European writers.

In the author's plan the guilds are to be based on existing employee and employer organizations with joint councils on a local, regional, and national basis. The public-legal status proposed for the guilds demands a careful separation of the power of the guild and state. The political state is not displaced by the social and economic guild but makes decisions on general welfare by consulting the guilds as to the best course of action. The state does not create guilds but the organization is to proceed in democratic manner from below in accordance with the principles of graded structure and subsidiarity. The guild system implies a complete rejection of the philosophy of individualism, which is considered to be on the defensive everywhere including the United States.

The Catholic position on liberty is examined in the writings of Aquinas, Suarez, and Bellarmine. The medieval guilds are briefly reviewed, but are considered to be guides and not models to be followed since guilds must be fitted to the national temperament and tradition. The N.R.A., according to the author, failed through the weakness of employee organizations, and above all in the lack of social education and moral reform which are the absolute prerequisites of a guild system based on Catholic principles.

THEODORE C. HELMREICH

Statistics and Its Methods

NEW BOOKS

ARKIN, H. and COLTON, R. R. *Graphs: how to make and use them*. Rev. ed. (New York: Harper. 1940. Pp. xvi, 236. \$3.)

This book is entirely concerned with the drawing and interpretation of charts and graphs, and within this field it is a good book. No statistical technique is introduced and the contents should be immediately understandable and useful to anyone who prepares charts either for popular or scientific use.

The 15 chapters treat the following topics: principles of the graph, construction of the graph, graphic layout, equipment for graphic presentation, the line graph, the ratio chart, the bar chart, area and solid diagrams, graphing relationships, map graphs, organization charts, graphs for computation, control charts (of the Gantt type), reproduction of graphs, statistical tables and reports.

H. A. FREEMAN

MOULTON, E. S. *Sources of regional and local current business statistics*. Dom. commerce ser. no. 115. (Washington: Supt. Docs. 1940. Pp. vii, 57. 30c.)

ROSENBERG, R. R. *Essentials of business mathematics*. 3rd ed. (New York: Gregg Pub. Co. 1940. Pp. 383. \$1.20.)

Financial statistics of cities over 100,000 population, 1937. (Washington: U. S. Bureau of the Census. 1940. Pp. 327. \$1.)

PERIODICALS

General Works, Theory and Its History

- ARRARTE, J. P. *La teoría pura de la economía política*. Rev. de Ciencias Econ., Aug., 1940. Pp. 13.
- BERNARD, L. L. *The social science theories of William Graham Sumner*. Social Forces, Dec., 1940. Pp. 12.
- BITTERMANN, H. J. *Adam Smith's empiricism and the law of nature*. II. Jour. Pol. Econ., Oct., 1940. Pp. 32.
- CHAIT, B. *Les fluctuations économiques et l'interdépendance des marchés: a reply* (with a rejoinder by Susanne E. Hotelling). Jour. Pol. Econ., Oct., 1940. Pp. 7.
- COPELAND, M. A. *Competing products and monopolistic competition*. Quart. Jour. Econ., Nov., 1940. Pp. 35.
- DOBLIN, E. M. *Some aspects of price flexibility*. Rev. Econ. Stat., Nov., 1940. Pp. 7.
- . *Uncertainty and inducements to invest* (with a reply by G. L. S. Shackle). Rev. Econ. Stud., Oct., 1940. Pp. 9.
- KLIMPT, W. *Note über eine lineare homogene Differenzen-Differentialgleichung*. Archiv f. Math. Wirt. und Sozialforschung, Band vi, Heft 1, 1940. Pp. 9.
- KRIEHL, L. *Das Problem der Rassenvermischung und seine Bedeutung für die dynamische Sterbetafel*. Archiv f. Math. Wirt. und Sozialforschung, Band v, Heft 3, 1939. Pp. 23.
- LANGE, O. *Complementarity and interrelations of shifts in demand* (with a comment by J. R. Hicks). Rev. Econ. Stud., Oct., 1940. Pp. 8.
- LEONTIEF, W. *Elasticity of demand computed from cost data*. Am. Econ. Rev., Dec., 1940. Pp. 4.
- LERNER, A. P. *Some Swedish stepping stones in economic theory*. Canadian Jour. Econ. and Pol. Sci., Nov., 1940. Pp. 18.
- LUTZ, F. A. *The structure of interest rates*. Quart. Jour. Econ., Nov., 1940. Pp. 28.
- MATHERLY, W. J. *The history of the Southern Economic Association, 1927-1939*. So. Econ. Jour., Oct., 1940. Pp. 16.
- MIKESELL, R. F. *Oligopoly and the short-run demand for labor*. Quart. Jour. Econ., Nov., 1940. Pp. 6.
- . *The possibility of a positively sloped demand curve for labor*. Am. Econ. Rev., Dec., 1940. Pp. 4.
- PETER, H. *Zur Diskussion makroökonomischer Wirtschaftsmodelle*. Archiv f. Math. Wirt. und Sozialforschung, Band vi, Heft 1, 1940. Pp. 10.
- POLANYI, M. *Economics by motion symbols*. Rev. Econ. Stud., Oct., 1940. Pp. 19.
- SHACKLE, G. L. S. *The nature of the inducement to invest*. Rev. Econ. Stud., Oct., 1940. Pp. 5.
- SMITHIES, A. *Equilibrium in monopolistic competition*. Quart. Jour. Econ., Nov., 1940. Pp. 21.
- SPENGLER, J. J. *Sociological presuppositions in economic theory*. So. Econ. Jour., Oct., 1940. Pp. 27.
- STIGLER, G. J. *A note on discontinuous cost curves*. Am. Econ. Rev., Dec., 1940. Pp. 4.
- SWEEZY, A. R. *Population growth and investment opportunity*. Quart. Jour. Econ., Nov., 1940. Pp. 16.

Economic History and Geography

- LABOUGLE, A. *Situación en Argentina en el año 1940*. Rev. de Ciencias Econ., July, 1940. Pp. 11.
- MARTIN, B. F. *Southern industrial development*. Harvard Bus. Rev., Winter, 1941. Pp. 18.
- MILLER, W. *A note on the history of business corporations in Pennsylvania, 1800-1860*. Quart. Jour. Econ., Nov., 1940. Pp. 11.
- MIRKOWICH, N. *Economic growth of the Pacific area*. Pacific Affairs, Dec., 1940. Pp. 3.
- TAUSSIG, F. W. *My father's business career*. Harvard Bus. Rev., Winter, 1941. Pp. 8.

Agriculture, Mining, Forestry, and Fisheries

- BLOCH, K. U. S. secures more options on Chinese raw materials. *Far East. Survey*, Nov. 20, 1940. Pp. 2.
- DAVIS, C. C. *Agriculture and the defense program*. *Fed. Res. Bull.*, Nov., 1940.
- FORBES, G. *The passing of the small oil man*. *So. Econ. Jour.*, Oct., 1940. Pp. 12.
- GORDON, J. *American oil investments abroad*. *Barron's*, Oct. 21, 1940.
- GRAJDNZEV, A. *Growing difficulties with raw materials for special steels*. *Pacific Affairs*, Dec., 1940. Pp. 2.
- HUMASQUÉ, A. V. *El problema agrario español*. *Trimestre Econ.*, Oct.-Dec., 1940. Pp. 31.
- JOHNSTON, J. *Irish agriculture—then and now*. *Manchester School*, Oct., 1940.
- KELLOGG, C. E. *Contributions of soil science and agronomy to rural land classification*. *Jour. Farm Econ.*, Nov., 1940. Pp. 11.
- KREIDER, K. *The Anglo-American cotton-rubber barter agreement*. *So. Econ. Jour.*, Oct., 1940. Pp. 9.
- ROJO, T. A. *Salmon cannery workers and the salmon industry*. *Philippine Soc. Sci. Rev.*, Aug., 1940. Pp. 7.
- RYAN, B. *Democratic theses and county agricultural planning*. *Jour. Farm Econ.*, Nov., 1940. Pp. 10.
- DE WILDE, J. C. and MONSON, G. *Defense economy of the United States: an inventory of raw materials*. *Foreign Policy Rep.*, Nov. 15, 1940. Pp. 11.
- WILLMAN, F. A. *Aid for agriculture*. *Bankers' Insur. Manag. and Agents' Mag.*, Dec., 1940. Pp. 5.
- WILSON, M. L. *The democratic processes and the formulation of agricultural policy*. *Social Forces*, Oct., 1940. Pp. 11.
- America's raw material needs*. Index, N.Y. Trust Co., Winter, 1940. Pp. 13.
- Resource position of the Far Eastern areas*. *Conf. Bd. Econ. Record*, Oct. 23, 1940. Pp. 2.

Manufacturing Industries

- DENHARDT, E. T. *The effect of war on the relative importance of producing centres with special reference to the textile industry*. *Internat. Lab. Rev.*, Dec., 1940. Pp. 46.
- GARVEY, B. S., JR. *Synthetic rubber*. *Scientific Mo.*, Jan., 1941. Pp. 8.
- HANKS, J. J. *The paper industry in the emergency*. *Harvard Bus. Rev.*, Winter, 1941. Pp. 8.
- HANSEN, H. E. *Recent changes in production costs*. *Conf. Bd. Econ. Record*, Nov. 2, 1940. Pp. 2.
- HOLLENDER, E. A. *Aircraft and national defense*. *Conf. Bd. Econ. Record*, Dec. 24, 1940. Pp. 2.

Transportation and Communication

- ANDERSON, P. C. *Railroads and the war*. *Barron's*, Nov. 4, 1940.
- CAMPBELL, E. G. *Railroads in national defense, 1829-1848*. *Miss. Valley Hist. Rev.*, Dec., 1940. Pp. 18.
- FARWELL, L. C. *A review of railroad financing, 1920-1938: III. Funds for capital purposes*. *Jour. Land and Pub. Util. Econ.*, Nov., 1940. Pp. 12.
- JACK, L. *St. Lawrence waterways, a Canadian viewpoint*. *Barron's*, Nov. 11, 1940.
- LACHMANN, K. *War and peace economics of aviation*. *Soc. Research*, Nov., 1940. Pp. 12.
- PASCHEN, W. *Die Eisenbahnen in Japan in den Jahren 1935-36 und 1936-37*. *Archiv f. Eisenbahnw.*, Sept.-Oct., 1940. Pp. 28.
- PHILLIPS, E. J., JR. *Diversion of freight traffic from the railroads*. *Jour. Land and Pub. Util. Econ.*, Nov., 1940. Pp. 13.
- SOMMERICH, J. *Pacific air links extended despite European war*. *Far East. Survey*, Oct. 23, 1940. Pp. 2.
- THIRLBY, G. F. *The report of the Railway Line Revision Commission*. *So. African Jour. Econ.*, June, 1940. Pp. 8.
- WERNEKE. *Die Besteuerung der amerikanischen Eisenbahnen*. *Archiv f. Eisenbahnw.*, Sept.-Oct., 1940. Pp. 6.

- . *Die Eisenbahnen der Vereinigten Staaten von Nordamerika im Jahre 1939*. Archiv f. Eisenbahnw., Nov.-Dec., 1940. Pp. 10.
- WIEDENFELD, K. *Deutsche Eisenbahn-Gestalter aus Staatsverwaltung und Wirtschaftsleben im 19. Jahrhundert (1815-1914)*. Archiv f. Eisenbahnw., Sept.-Oct., 1940. Pp. 92.
- Highway user legislation*—1940. Tax Econ. Bull., Nov., 1940. P. 1.
- Transport policy*. Bull. Canterbury Chamber of Comm., Nov., 1940. Pp. 4.

Trade, Commerce, and Commercial Crises

- ADELARDE, P. E. *American tariff policy in the Philippines: a study of the rôle of the Congress of the United States in handling tariff legislations in a dependency*. Philippine Soc. Sci. Rev., Aug., 1940. Pp. 32.
- BECKETT, G. *The effect of the reciprocal trade agreements upon the foreign trade of the United States*. Quart. Jour. Econ., Nov., 1940. Pp. 15.
- BLOCH, K. *The puzzle of Chinese trade statistics*. Far East. Survey, Nov. 6, 1940. Pp. 3.
- DOUGLAS, M. *The place of barter in international affairs*. Inst. of Bankers of So. Africa Jour., Sept., 1940.
- DE HAAS, J. A. *World trade faces a new order*. Harvard Bus. Rev., Winter, 1941. Pp. 6.
- HANSEN, H. E. *Canadian business activity*. Conf. Bd. Econ. Record, Oct. 23, 1940. P. 1.
- DE JONG, E. VAN Z. *Economic mobilization in Netherlands India*. Far East. Survey, Nov. 6, 1940. Pp. 7.
- MACKINTOSH, W. A. *Reciprocity*. Canadian Jour. Econ. and Pol. Sci., Nov., 1940. Pp. 10.
- MORGAN, S. *Financing foreign trade after the war*. Export Trade and Shipper, Oct. 28, 1940.
- NEWCOMB, R. *Japanese-American trade in its latest phase*. Far East. Survey, Nov. 20, 1940. Pp. 7.
- PERKINS, M. *Exports and appeasement*. Harper's, Dec., 1940.
- REYES, J. S. *The implications of the quota system for Philippine products*. Philippine Soc. Sci. Rev., Aug., 1940. Pp. 16.
- SNYDER, R. C. *Commercial policy as reflected in treaties from 1931 to 1939*. Am. Econ. Rev., Dec., 1940. Pp. 16.
- STAUDINGER, H. *The future of totalitarian barter trade*. Soc. Research, Nov., 1940. Pp. 24.
- THOMAS, E. P. *America's trade in a changing world*. Vital Speeches, Dec. 1, 1940. Pp. 4.
- TOWLE, H. L. *The new type of business cycle: an industrial interpretation*. Jour. Bus. Univ., Chicago, pt. 1, Oct., 1940. Pp. 27.
- WATSON, J. H., III. *Wartime shipping*. Conf. Bd. Econ. Record, Nov. 23, 1940. Pp. 2.
- The breakdown of the British trade drive in South-Eastern Europe*. Weekly Report, German Inst. for Bus. Res., Oct. 26, 1940. Pp. 14.
- Export credits*. Bankers' Insur. Manag. and Agents' Mag., Nov., 1940. Pp. 6.
- The foreign trade of the Latin-American countries*. Mo. Bull. Amer. Tariff League, Sept.-Oct., 1940.
- Great Britain's foreign trade in wartime*. Royal Bank of Canada Bull., Oct., 1940.
- Notes on statistical tables, August, 1940: net value and indices of foreign trade of Shanghai*. Chinese Econ. and Stat. Rev., Sept., 1940. Pp. 5.
- The trade of the Americas*. Economist (London), Sept. 28, 1940.

Accounting, Business Methods, Investments, and the Exchanges

- CONNELY, F. F. *Private placement of security issues*. Invest. Banking, Nov., 1940.
- COOPER, W. A. *Excess profits net income and exemptions under the income method*. Jour. Accountancy, Dec., 1940. Pp. 22.
- CRUM, W. L. *The current improvement in business profits*. Rev. Econ. Stat., Nov., 1940. Pp. 4.
- DAVIS, C. R. *Statement analysis*. Bull. Am. Inst. of Banking, Jan., 1941. Pp. 2.
- FOULKE, R. A. *The financial statement of the future*. Dun's Rev., Nov., Dec., 1940. Pp. 7, 6.

- GERDES, J. *General principles of plans of corporate reorganization*. Univ. Pa. Law Rev., Nov., 1940.
- GILMAN, S. *Audit record of the internal control survey*. Jour. Accountancy, Dec., 1940. Pp. 7.
- HANSEN, H. L. *Premium merchandising*. Harvard Bus. Rev., Winter, 1941. Pp. 12.
- HATFIELD, H. R. *An accountant's adventures in Wonderland*. Jour. Accountancy, Dec., 1940. Pp. 6.
- HUBBARD, J. B. *Industrial bond and preferred stock refundings, 1933-1937: appendix*. Rev. Econ. Stat., Nov., 1940. P. 1.
- HUSS, E. *Calculation of the yield on long-term investments*. Quart. Rev. Skandinaviska Banker Aktiebolag.
- IVERSON, H. M. *Accounting for the distribution of motion picture productions*. N.A.C.A. Bull., sec. i, Oct. 15, 1940. Pp. 12.
- KELLY, L. G. *Accounting and auditing under cost-plus-a-fixed-fee contracts*. Jour. Accountancy, Dec., 1940. Pp. 5.
- LEWIS, E. E. *The control of capital expenditures and the return on capital investment*. N.A.C.A. Bull., sec. i, Nov. 15, 1940. Pp. 9.
- LONGMAN, D. R. *Distribution costs—present methods of cost analysis*. Jour. Accountancy, Nov., 1940. Pp. 13.
- MELLON, H. J. *American private investments in Latin America*. Conf. Bd. Econ. Record, Dec. 24, 1940. Pp. 2.
- MITCHELL, W. L., JR. *How expenses and profits vary with retail credit policies*. Dun's Rev., Nov., 1940. Pp. 9.
- PERRY, H. C. *Forecasting and budgeting*. N.A.C.A. Bull., sec. i, Dec. 1, 1940. Pp. 7.
- PRATT, H. J. *Incentive plan for a trading business*. N.A.C.A. Bull., sec. i, Oct. 15, 1940. Pp. 10.
- REYNOLDS, L. G. *Cutthroat competition*. Am. Econ. Rev., Dec., 1940. Pp. 12.
- SCHULTZE, J. W. *Management versus budgetary control?* N.A.C.A. Bull., sec. i, Nov. 15, 1940. Pp. 5.
- SINCLAIR, P. *Accounting problems of government war contracts*. Jour. Accountancy, Nov., 1940. Pp. 14.
- WASHINGTON, G. T. *The corporation executive and his profit-sharing contract*. Yale Law Jour., Nov., 1940. Pp. 30.
- WHITE, H. G., JR. *Foreign trading in American stock-exchange securities*. Jour. Pol. Econ., Oct., 1940. Pp. 48.
- WICHMAN, W. C. *The control of gross margins in a manufacturing enterprise*. N.A.C.A. Bull., sec. i, Nov. 15, 1940. Pp. 16.
- Fixed interest investments*. Economist (London), Oct. 19, 1940.

Capital and Capitalistic Organization

- BARNES, I. R. *Measures of land value for utility regulation*. Michigan Law Rev., Nov., 1940. Pp. 22.
- . *II. Shall going value be included in the rate-base?* Jour. Land and Pub. Util. Econ., Nov., 1940. Pp. 8.
- CHANTLER, P. *Six years of controlled milk prices*. Manchester School, Oct., 1940.
- DAVIS, S. C. *The bottlenecks of business*. Atlantic Mo., Nov., 1940.
- GEORGE, E. B. *Prices and profits in a defense economy*. Dun's Rev., Nov., Dec., 1940. Pp. 15, 6.
- GINDER, W. R. *Streamlining defense contracts*. Jour. Accountancy, Dec., 1940. Pp. 4.
- HARBESON, R. W. *The present status of the Sherman act*. Michigan Law Rev., Dec., 1940. Pp. 24.
- HARTLEY, H. *British war controls. I. The legal framework*. Manchester School, Oct., 1940.
- HOROTH, V. L. *Japanese ambitions and economic limitations*. Mag. of Wall Street, Nov. 16, 1940.
- JONES, M. M. *The headless horsemen of Economic Hollow. Why private capitalism will triumph over "Fifth Columnists."* Trusts and Estates, Oct., 1940. Pp. 7.

- MCDONNELL, R. E. *Growth and comparison of municipal ownership (of utilities) and private ownership*. Municipal Rev. Oct., 1940.
- MOULTON, H. G. *War-time price control*. Vital Speeches, Nov. 15, 1940. Pp. 4.
- PENROSE, E. F. *Economic organization for total war*. Internat. Lab. Rev., Oct.-Nov., 1940. Pp. 39.
- RANDALL, R. J. *Municipal enterprise*. So. African Jour. Econ., June, 1940. Pp. 12.
- RICHTER-ALTSCHAEFFER, J. H. *War-time price control in the United Kingdom*. Jour. Farm Econ., Nov., 1940. Pp. 11.
- SMITH, N. L. I. *The outlook in regulation*. Jour. Land and Pub. Util. Econ., Nov., 1940. Pp. 7.
- SPIEGEL, H. W. *Wehrwirtschaft: economics of military state*. Am. Econ. Rev., Dec., 1940. Pp. 11.
- STAFFORD, J. *British war controls. II. An economic comment*. Manchester School, Oct., 1940.
- SUTCH, W. B. *New Zealand's war controls*. So. African Jour. Econ., June, 1940. Pp. 9.
- SWISHER, C. B. *The control of war preparation in the United States*. Am. Pol. Sci. Rev., Dec., 1940. Pp. 19.
- TUCKER, R. S. *The degree of monopoly*. Quart. Jour. Econ., Nov., 1940. Pp. 3.
- WILSON, G. L. and ROSE, J. R. *Pacific Gas and Electric case: reply*. Am. Econ. Rev., Dec., 1940. Pp. 3.
- The Rouell-Sirois report: a Canadian reaffirmation of the democratic faith in social progress*. Internat. Lab. Rev., Dec., 1940. Pp. 30.
- Conscription of industry*. Congressional Digest, Nov., 1940.

Labor and Labor Organizations

- BENEDICT, M. R. *The British program for farm labor—as a contribution to American thinking on the subject*. Jour. Farm Econ., Nov., 1940. Pp. 15.
- BOWDEN, W. *Wages, hours, and productivity of industrial labor, 1909 to 1939*. Mo. Lab. Rev., Sept., 1940. Pp. 28.
- BROWN, F. M. *Labor disputes and the Sherman act*. Calif. Law Rev., Sept., 1940.
- HUZAR, E. *Federal unemployment relief policies: the first decade*. Jour. Politics, Aug., 1940.
- JACK, D. T. *Labor problems in wartime*. Inst. of Bankers of So. African Jour., Aug., 1940.
- KOSSORIS, M. D. *Relation of age to industrial injuries*. Mo. Lab. Rev., Oct. 1940. Pp. 16.
- KUVIN, L., et al. *The probable effect of the defense program on unemployment*. Conf. Bd. Econ. Record, Dec. 5, 1940. Pp. 3.
- MATER, D. H. *The development and operation of the railroad seniority system*. Jour. Bus. Univ. Chicago, pt. 1, Oct., 1940. Pp. 33.
- MURRAY, P. *The national defense program and organized labor*. Survey Graphic, Dec., 1940.
- MYERS, C. A. *Experience rating in Wisconsin in 1940*. Am. Econ. Rev., Dec., 1940. Pp. 3.
- PADWAY, J. A. *Union contracts and the draft*. Am. Fed., Nov., 1940. Pp. 2.
- REYBURN, H. A. *Wage and price movements*. So. African Jour. Econ., June, 1940. Pp. 2.
- RICHERS, E. J. *Relative wages in wartime*. Internat. Lab. Rev., Oct.-Nov., 1940. Pp. 24.
- ROGERS, C. L. *The shortened work day in the New York City building industry*. Conf. Bd. Econ. Record, Nov. 2, 1940. Pp. 6.
- RUGGLES, R. *The relative movements of real and money wage rates*. Quart. Jour. Econ., Nov., 1940. Pp. 20.
- SAYRE, R. A. *Strikes and turnover rates, 1929-1940*. Conf. Bd. Econ. Record, Dec. 5, 1940. P. 1.
- SMITH, R. H. *Some reflections on the economics of wage fixation in South Africa*. So. African Jour. Econ., June, 1940. Pp. 26.
- SPIELMANS, J. V. *Measurements of the effectiveness of the National Labor Relations Act*. Am. Econ. Rev., Dec., 1940. Pp. 11.
- TUCKER, R. S. *The frontier as an outlet for surplus labor*. So. Econ. Jour., Oct., 1940. Pp. 29.

- VANCE, R. B. and DANILEVSKY, N. *Population and the pattern of unemployment in the Southeast, 1930-1937*. So. Econ. Jour., Oct., 1940. Pp. 17.
- WINANT, J. G. *The I.L.O. looks ahead. A note from the director*. Internat. Lab. Rev., Oct.-Nov., 1940. Pp. 2.
- . *What war is doing to labour in Europe*. Lab. Gazette, Oct., 1940. Pp. 2.
- WOYTINSKY, W. S. *Additional workers on the labor market in depressions: a reply to Mr. Humphrey*. Jour. Pol. Econ., Oct., 1940. Pp. 5.
- WRIGHT, C. M. *Labor weighs its patriotism*. Nation's Business, Nov., 1940.
- Annual earnings in the iron and steel industry, 1937*. Mo. Lab. Rev., Oct., 1940. Pp. 11.
- Employment, earnings and hours—Class I railroads, January-July, 1940*. Conf. Bd. Econ. Record, Nov. 2, 1940. Pp. 3.
- Factory-labor turn-over, 1931 to 1939*. Mo. Lab. Rev., Sept., 1940. Pp. 13.
- Four years of the Public Contracts act*. Mo. Lab. Rev., Oct., 1940. Pp. 18.
- Hours-of-labor legislation in the United States*. Mo. Lab. Rev., Sept., 1940. Pp. 6.
- Labor and defense contracts*. Sphere, Nov., 1940.
- Labor turn-over in the machine-tool industry*. Mo. Lab. Rev., Nov., 1940. Pp. 4.
- Military service and contracts of employment (Italy; Rumania; Greece)*. Internat. Lab. Rev., Aug.-Sept., 1940. Pp. 5.
- The problem of agricultural labour*. Internat. Lab. Rev., Aug.-Sept., 1940. Pp. 13.
- Railway wages and pay rolls before and under the New Deal*. Railway Age, Oct. 26, 1940.
- Two years of the Fair Labor Standards act*. Mo. Lab. Rev., Sept., 1940. Pp. 13.
- Vacations with pay in union agreements, 1940*. Mo. Lab. Rev., Nov., 1940. Pp. 8.
- Wage earners and the loan shark*. Mo. Lab. Rev., Nov., 1940. Pp. 9.

Money, Prices, Credit, and Banking

- ADAMS, E. S. *Easy money on trial—the issue and its practical implications*. Banking, Jan., 1941. Pp. 2.
- "AKANTHOS." *The structure of the banking industry after the war*. Bankers' Insur. Manag. and Agents' Mag., Dec., 1940. Pp. 11.
- . *The war-time difficulties of lending bankers*. Bankers' Insur. Manag. and Agents' Mag., Nov., 1940. Pp. 7.
- ATKINS, P. M. *War effects on banking credits*. Bankers Mag., Nov., 1940. Pp. 7.
- BARRETO, E. G. *Los problemas del oro*. Trimestre Econ., Oct.-Dec., 1940. Pp. 14.
- BEDFORD, D. E. *London banking carries on*. Banking, Jan., 1941. Pp. 2.
- BLOOMFIELD, A. I. *The significance of outstanding securities in the international movement of capital*. Canadian Jour. Econ. and Pol. Sci., Nov., 1940. Pp. 30.
- CADMAN, P. F. *Gold's post-war possibilities*. Banking, Nov., 1940. Pp. 2.
- CASSEL, G. *Shortage of capital*. Quart. Rev. Skandinaviska Banker Aktiebolag.
- CURRY, L. K. *The wage-hour problem in relation to banks*. Midwest Banker, Oct., 1940.
- EDITOR OF "THE STATIST." *Wholesale prices in 1939*. Jour. Royal Stat. Soc., pt. iii, 1940. Pp. 18.
- EISNER, F. W. *U. S. freezing of foreign credits*. Bankers Mag., Oct., 1940.
- ELLIS, P. W. *Defense financing and inflation possibilities*. Conf. Bd. Econ. Record, Nov. 23, 1940. Pp. 3.
- EZEKIEL, M. *Price analyses, wars, and depressions*. Jour. Farm Econ., Nov., 1940. Pp. 7.
- FOSTER, W. T. *The future course of inflation*. Bankers Mag., Dec., 1940. Pp. 3.
- HARWOOD, E. C. *Comment on review of "Cause and Control of the Business Cycle"*. Am. Econ. Rev., Dec., 1940. P. 1.
- HATMAKER, P. C. *Keeping the lid on inflation*. Barron's, Nov. 4, 1940.
- LASSER, J. K. *The cost of borrowing money*. Banking, Jan., 1941. Pp. 2.
- LORENZ, O. C. *The volume of consumer credit*. Banking, Nov., 1940. P. 1.
- MCQUEEN, R. *Central banking in the Dominions*. Canadian Jour. Econ. and Pol. Sci., Nov., 1940. Pp. 12.
- MOL, A. A. *Government inflation and the private investor*. Barron's, Nov. 18, 1940.
- . *Inflation and trust fund management*. Barron's, Dec. 2, 1940.
- MOLL, B. *Depreciación monetaria e inflación*. Trimestre Econ., Oct.-Dec., 1940. Pp. 28.

- NADLER, M. *Post-war banking problems*. Bankers Mag., Dec., 1940. Pp. 5.
- . *The war and bank investments*. Bankers Mag., Nov., 1940. Pp. 3.
- NIEBYL, K. H. *A reëxamination of the classical theory of inflation*. Am. Econ. Rev., Dec., 1940. Pp. 15.
- RAGAZZI, B. R. *Sulla valutazione internazionale della lira*. Riv. Ital. di Sci. Econ., Sept., 1940. Pp. 9.
- RYDER, F. R. *The banker and war damage to real property*. Bankers' Insur. Manag. and Agents' Mag., Nov., 1940. Pp. 4.
- SILVERSTEIN, N. L. and OSTROLENK, B. *Comments on "Some considerations on the management of commercial bank investments."* Jour. Bus. Univ. Chicago, pt. 1, Oct., 1940. Pp. 4.
- UPHAM, C. B. *The bank of the future*. Bankers Mag., Nov., 1940. Pp. 4.
- VILLARD, H. H. *Further comment on "offset checks"* (with a further reply by C. A. Dice and Philip Schaffner). Am. Econ. Rev., Dec., 1940. Pp. 5.
- WELFLING, W. *Characteristics of savings deposits*. Am. Econ. Rev., Dec., 1940. Pp. 11.
- WHITTINGTON, L. M. *Present and future status of gold*. Bankers. Mag., Dec., 1940. Pp. 8.
- British purchasing power in the United States*. Conf. Bd. Econ. Record, Dec. 24, 1940. Pp. 2.
- Heading off price inflation*. U. S. News, Oct. 18, 1940.
- Is it inflation?* Economist (London), Sept. 28, 1940.
- Money and concealed inflation*. Statist, Oct. 5, 1940.
- Progress in uniform banking laws*. Banking, Jan., 1941. Pp. 2.
- The progress of banking in Great Britain and Ireland during 1939*. Bankers' Insur. Manag. and Agents' Mag., Oct., 1940. Pp. 15.

Public Finance, Taxation, and Tariff

- ATWOOD, A. W. *Where to spend 10 billion defense dollars?* Banking, Nov., 1940. Pp. 4.
- BLAKEY, R. G. and BLAKEY, G. C. *The two Federal Revenue acts of 1940*. Am. Econ. Rev., Dec., 1940. Pp. 12.
- BOWER, J. A. *Liquidate federal credit agencies*. Bankers Mag., Dec., 1940. Pp. 3.
- BOWLEY, M. *Local rates and housing subsidies*. Rev. Econ. Stud., Oct., 1940. Pp. 11.
- BURGESS, W. R. *Essentials in defense financing*. Bankers Mag., Nov., 1940. Pp. 5.
- CASSEL, G. *The significance of state borrowing in wartime*. Quart. Rev. Skandinaviska Banker Aktiebolag, July, 1940.
- COLM, G. *Full employment through tax policy?* Soc. Research, Nov., 1940. Pp. 21.
- DAVIS, J. W. *The conflict between the federal commerce power and the taxing power of the states*. Southwest. Soc. Sci. Quart., Sept., 1940.
- DEUTSCH, J. J. *War finance and the Canadian economy, 1914-20*. Canadian Jour. Econ. and Pol. Sci., Nov., 1940. Pp. 18.
- ELLIS, P. W. *American and British income tax burdens*. Conf. Bd. Econ. Record, Oct. 23, 1940. Pp. 4.
- . *Federal taxes on corporate income*. Conf. Bd. Econ. Record, Nov. 23, 1940. Pp. 3.
- GASTON, H. E. *The government as a business: a consideration of budget problems in relation to the general welfare*. Soc. Research, Nov., 1940. Pp. 13.
- GATES, W. *Weighing impact of 1941 taxes on corporate earning power*. Mag. of Wall Street, Dec. 28, 1940. Pp. 6.
- GERSTENBERG, C. W. *1940 tax conference*. Bull. Nat. Tax Assoc., Oct., 1940. Pp. 4.
- GIBSON, A. H. *War finance problems*. Bankers' Insur. Manag. and Agents' Mag., Nov., 1940. Pp. 6.
- GILBERT, D. W. *Cycles in municipal finance*. Rev. Econ. Stat., Nov., 1940. Pp. 13.
- GLOVER, J. D. *Defense "lending": 1918 and 1941*. Harvard Bus. Rev., Winter, 1941. Pp. 14.
- GRAGG, C. I. *Negotiated contracts*. Harvard Bus. Rev., Winter, 1941. Pp. 9.
- GRAJDANZEV, A. *A sudden increase of defense expenditures in the Soviet budget*. Pacific Affairs, Dec., 1940. Pp. 5.

- HANSEN, H. E. *Corporate profits and taxes*. Conf. Bd. Econ. Record, Nov. 23, 1940. Pp. 3.
- . *National defense contracts awarded*. Conf. Bd. Econ. Record, Oct. 23, Nov. 23, 1940. Pp. 4, 3.
- HOLDEN, G. *Incidence of taxation as an analytical concept*. Am. Econ. Rev., Dec., 1940. Pp. 13.
- HOPKINS, A. L. *Federal tax laws—recent interpretation and administration*. Jour. Accountancy, Nov., 1940. Pp. 8.
- HORNE, D. *The excess profits tax act of 1940*. Banking, Nov., 1940. Pp. 2.
- HOWELL, H. E. *The effect of the new excess profits tax on preparation of 1940 corporate income tax returns*. N.A.C.A. Bull., sec. i, Dec. 15, 1940. Pp. 26.
- KEY, V. O., JR. *The lack of a budgetary theory*. Am. Pol. Sci. Rev., Dec., 1940. Pp. 8.
- KILLOUGH, L. W. *Tax exempt industries in Rhode Island*. Bull. Nat. Tax Assoc., Nov., 1940. Pp. 16.
- LESSER, J. K. *What the new excess profits tax requires and permits*. Dun's Rev., Dec., 1940. Pp. 7.
- PAUL, R. E. *Redesigning federal taxation*. Harvard Bus. Rev., Winter, 1941. Pp. 8.
- PHILLIPS, J. A. *Applying the excess-profits-tax law in practice*. Jour. Accountancy, Nov., 1940. Pp. 6.
- POLLARD, R. S. W. *Income tax evasion*. Fabian Quart., Autumn, 1940. Pp. 4.
- ROSTAS, L. *Capital levies in Central Europe, 1919-1924*. Rev. Econ. Stud., Oct., 1940. Pp. 13.
- SHOUP, C. *The taxation of excess profits*. I. Pol. Sci. Quart., Dec., 1940. Pp. 21.
- SMITH, F. C. *The federal debt*. Vital Speeches, Nov. 1, 1940. Pp. 2.
- STUDENSKI, P. *Toward a theory of business taxation*. Jour. Pol. Econ., Oct., 1940. Pp. 34.
- TARLEAU, T. *Explanation of new excess profits tax law*. Jour. Accountancy, Nov., 1940. Pp. 7.
- TOMLINSON, L. *How much are taxes discounted?* Barron's, Dec. 2, 1940.
- WALKER, Q. F., COLLINS, W. T. and HIGGINS, D. E. *The effects of Federal Reserve acts of 1938, 1939, and 1940 on the realization of gains and losses on securities*. Jour. Am. Stat. Assoc., Dec., 1940. Pp. 13.
- WINSELMAN, H. A. *Federal, state, and local tax collections*. Conf. Bd. Econ. Record, Nov. 23, 1940. P. 1.
- WRIGHT, D. M. *The economic limit and economic burden of an internally held national debt*. Quart. Jour. Econ., Nov., 1940. Pp. 14.
- WUELLER, P. H. *Public finance: trends and issues*. Harvard Bus. Rev., Winter, 1941. Pp. 13.
- WYNNE, W. H. *The Canadian federal sales tax*. Bull. Nat. Tax Assoc., Oct., 1940. Pp. 10.
- Federal fiscal situation*. Conf. Bd. Econ. Record, Nov. 23, 1940. P. 1.
- Federal tax legislation in 1940*. Tax Policy, Oct., 1940.
- German taxation and finance during war-time*. Weekly Report, German Inst. for Bus. Res., Sept. 5, 1940. Pp. 4.
- Paying for the war*. Bankers' Insur. Manag. and Agents' Mag., Nov., 1940. Pp. 11.
- Some possible effects on business conditions of the excess profits tax*. Guaranty Survey, Oct. 28, 1940.
- The tax status of 400 stocks*. Financial World, Oct. 23, 1940.
- Ways of paying for the war (Britain)*. Finan. Rev. of Rev., Sept., 1940.

Population and Migration

- BEERS, H. W. *Sociological analysis and population research*. Social Forces, Dec., 1940. Pp. 18.
- CHAO, C-H. *Familism as a factor in the Chinese population balance*. Yenching Jour. Soc. Stud., Oct., 1940. Pp. 21.
- COX, O. C. *Sex ratio and marital status among negroes*. Am. Sociological Rev., Dec., 1940. Pp. 11.
- EVANS, J. G. *The economics of migration and Southern poverty*. Social Forces, Oct., 1940. Pp. 6.

- FISCHER, C. H. and PIXLEY, H. H. *Specific fertility rates for Detroit*. Jour. Am. Stat. Assoc., Dec., 1940. Pp. 9.
- GREBENIK, E. *Some aspects of population in Bristol* (with discussion). Jour. Royal Stat. Soc., pt. iii, 1940. Pp. 38.
- JONES, J. H. *The report of the Royal Commission on the distribution of the industrial population—a discussion*. Jour. Royal Stat. Soc., pt. iii, 1940. Pp. 21.
- LOTKA, A. J. and SPIEGELMAN, M. *The trend of the birth rate by age of mother and order of birth*. Jour. Am. Stat. Assoc., Dec., 1940. Pp. 7.
- RHODES, E. C. *Population mathematics*. III. Jour. Royal Stat. Soc., pt. iii, 1940. Pp. 26.
- WESTEFELD, A. *The distance factor in migration*. Social Forces, Dec., 1940. Pp. 6.

Social Problems and Reforms

- ALBERS, J. M. *Progress in county zoning: Marathon County, Wisconsin*. Jour. Land and Pub. Util. Econ., Nov., 1940. Pp. 10.
- ASHLEY, E. E., 3RD. *Government housing activities*. Harvard Bus. Rev., Winter, 1941. Pp. 13.
- BOLLINGER, L. L. *Dealing with Uncle Sam*. Harvard Bus. Rev., Winter, 1941. Pp. 10.
- BOWEN, H. R. *Grants-in-aid and the English housing program*. Bull. Nat. Tax Assoc., Oct., 1940. Pp. 6.
- BYSE, C., et al. *Alcoholic beverage control*. Law and Contemp. Problems, Autumn, 1940. Pp. 205.
- CAVE, R. C. *Distribution of property in two California counties, 1907 and 1935, based on probate records*. Am. Econ. Rev., Dec., 1940. Pp. 5.
- CHAPIN, F. S. *An experiment on the social effects of good housing*. Am. Sociological Rev., Dec., 1940. Pp. 12.
- DAVIS, J. S. *Food in a world at war*. Harvard Bus. Rev., Winter, 1941. Pp. 10.
- DRAPER, E. S. *Urban development in the Southeast: what of the future?* Social Forces, Oct., 1940. Pp. 6.
- GUÉNAULT, P. H. and RANDALL, R. J. *An introduction to the housing problem*. So. African Jour. Econ., June, 1940. Pp. 17.
- HOAGLAND, H. E. *Housing and national defense*. Jour. Land and Pub. Util. Econ., 1940. Pp. 5.
- JOHANNESBURG POLITICAL ECONOMY CLUB. *Native budgets in Johannesburg—a sample investigation*. So. African Jour. Econ., June, 1940. Pp. 7.
- LEEVEY, J. R. *Contrasts in urban and rural family life*. Am. Sociological Rev., Dec., 1940. Pp. 6.
- MORON, A. G. *Public housing from a community point of view*. Social Forces, Oct., 1940. Pp. 7.
- NING, M. *Agrarian democracy in Northwest China* (translated by MARTIN R. NORINS). Pacific Affairs, Dec., 1940. Pp. 10.
- OGBURN, W. F. and COOMBS, L. C. *An economic interpretation of the social characteristics of cities*. Am. Jour. Soc., Nov., 1940. Pp. 11.
- THORNDIKE, E. L. *The press in American cities*. Scientific Mo., Jan., 1941. Pp. 4.
- WOOD, E. *The rôle of the government in defense housing*. Jour. Land and Pub. Util. Econ., Nov., 1940. Pp. 4.
- Fascism in the United States*. Fortune, Nov., 1940.
- The first year of the war*. Bankers' Insur. Manag. and Agents' Mag., Oct., 1940. Pp. 10.
- Housing legislation in the United States*. Mo. Lab. Rev., Oct., 1940. Pp. 14.

Insurance and Pensions

- BERRY, T. S. *On measuring the cost of life insurance*. Jour. Am. Stat. Assoc., Dec., 1940. Pp. 13.
- O'MAHONEY, J. C. *Government regulation of insurance*. Vital Speeches, Nov. 15, 1940. Pp. 5.
- Compensation for war victims in Italy*. Internat. Lab. Rev., Aug.-Sept., 1940. Pp. 7.
- Property insurance*. Economist (London), Oct. 12, 1940.

Pauperism, Charities, and Relief Measures

- HERMAN, S. *The Food Stamp plan: a study in law and economics*. Jour. Bus. Univ. Chicago, pt. 1, Oct., 1940. Pp. 29.
- REED, E. F. *Welfare expenditures and relief rolls compared with community need*. Social Forces, Dec., 1940. Pp. 9.
- YNTEMA, D. B. *Changing seasonal fluctuations in the amounts of public and private assistance and earnings on CWA and WPA projects in 116 urban areas, 1929-38*. Jour. Am. Stat. Assoc., Dec., 1940. Pp. 9.
- Effect of the stamp plan on living levels*. Mo. Lab. Rev., Nov., 1940. Pp. 6.
- Philanthropy—some conditions affecting organized giving*. Index, N. Y. Trust Co., Winter, 1940. Pp. 8.

Socialism and Coöperative Enterprises

- BALAY, E. *Bases económicas del cooperativismo*. Rev. de Ciencias Econ., July, 1940. Pp. 16.
- HOOK, S. *What is living and what is ahead in Marxism*, Southern Rev., Oct., 1940.
- LANDAUER, C. *Literature on economic planning* (note). Soc. Research, Nov., 1940. Pp. 13.
- PAULSON, W. E. *Contribution of coöperation to the problem of distribution*. Jour. Farm Econ., Nov., 1940. Pp. 13.
- TAYLER, J. B. *The theory of coöperation: a preface to social economy*. II. Yenching Jour. Soc. Stud., Oct., 1940. Pp. 39.

Statistics and Its Methods

- BLÜMEL, H. *Die Sterblichkeit nach dem Körpergewicht*. Archiv f. Math. Wirt. und Sozialforschung, Band v, Heft 3, 1939. Pp. 13.
- DAEVES, K. *Zur Analyse von Häufigkeitskurven bei der Grosszablforschung*. Archiv f. Math. Wirt. und Sozialforschung, Band vi, Heft 1, 1940. Pp. 24.
- DAVIS, A. *Time and the technicways—an experiment in definition*. Social Forces, Dec., 1940. Pp. 15.
- DWYER, P. S. *The calculation of correlation coefficients from ungrouped data with modern calculating machines*. Jour. Am. Stat. Assoc., Dec., 1940. Pp. 3.
- GEPPERT, M.-P. *Über die Alterskorrektur von Merkmalshäufigkeiten in der Erbstatistik*. Archiv f. Math. Wirt. und Sozialforschung, Band vi, Heft 2, 1940. Pp. 23.
- VON HENTIG, H. *A statistical test of causal significance*. Am. Sociological Rev., Dec., 1940. Pp. 7.
- HITT, H. L. *A sampling technique for studying population changes in rural areas*. Social Forces, Dec., 1940. Pp. 6.
- HOFFMAN, R. and WHITE, I. J. *Effects of defense spending on national income*. Conf. Bd. Econ. Record, Nov. 23, 1940. Pp. 3.
- HOYLE, H. *The Pennsylvania Committee on State Statistics*. Jour. Am. Stat. Assoc., Dec., 1940. Pp. 5.
- KENDALL, M. G. *On the method of maximum likelihood*. Jour. Royal Stat. Soc., pt. iii, 1940. Pp. 12.
- LIVINGSTON, J. A. *Forecasting*. N.A.C.A. Bull., sec. i, Dec. 1, 1940. Pp. 19.
- LORENZ, P. *Darstellung statistischer Übersichten mit zwei Eingängen durch orthogonale ganze rationale Funktionen (Flächendarstellung)*. Archiv f. Math. Wirt. und Sozialforschung, Band vi, Heft 2, 1940. Pp. 14.
- MARTIN, J. L. *Income payments to individuals, by states, 1929-39*. Survey Current Business, Oct., 1940. Pp. 5.
- MÜNZNER, H. and SCHWARZ, H. *Ein Zusammenhang zwischen Erneuerungszahlen und dem moireschen Problem*. Archiv f. Math. Wirt. und Sozialforschung, Band vi, Heft 1, 1940. Pp. 4.
- ROBINSON, G. B. *Actuarial principles versus financial principles*. Annalist, Oct. 24, 1940.
- RUCHTI, W. *Über die Bedeutung einer Sterblichkeits- und Fruchtbarkeitsvariation für die Reproduktionskraft einer Bevölkerung*. Archiv f. Math. Wirt. und Sozialforschung, Band vi, Heft 1, 1940. Pp. 5.

- SPURR, W. A. *A graphic short cut to the moving average method of measuring seasonality.* Jour. Am. Stat. Assoc., Dec., 1940. Pp. 4.
- STEPHAN, F. F., DEMING, W. E. and HANSEN, M. H. *The sampling procedure of the 1940 population census.* Jour. Am. Stat. Assoc., Dec., 1940. Pp. 16.
- TUCKER, R. S. *The National Resources Committee's report on distribution of income.* Rev. Econ. Stat., Nov., 1940. Pp. 18.
- WENDT, E. *Über die mathematische Auswertung statistischer Beobachtungen.* Archiv f. Math. Wirt. und Sozialforschung, Band v, Heft 3, 1939. Pp. 7.
- WORKING, E. J. *Crop-yield index numbers.* Jour. Farm Econ., Nov., 1940. Pp. 13.
- The Gallup and "Fortune" polls.* Pub. Opinion Quart., Sept., 1940.

Frank William Taussig, 1859-1940

For more than a quarter of a century Professor Taussig occupied in America a position comparable to Marshall's in England as dean of the fraternity of economists. The uniqueness of Taussig's position would appear with greatest clarity if we inquired who in the present scene might by common consent inherit his palladium. Although such a question would set the figure of Professor Taussig in relief, it would not detract from the worth of our contemporaries, for the character of economics has changed. An oppressive necessity for specialization has accelerated the progress of scientific knowledge, but this has cost us much of the inspiration and mellowing influence of the "general practitioner" in economics.

Frank William Taussig was a distinguished figure in a generation of economists remarkable for their broad culture and humanitarian sentiments. That he stood forth even in this company is ascribable to the great versatility and long-sustained period of his activities. He launched his academic professional career at the age of twenty-three as an instructor at Harvard and retired from the Henry Lee professorship only at the age of seventy-five, a span of fifty-two years; his editorship of the *Quarterly Journal of Economics* extended over forty-one years; his activity as a writer continued almost to his death at eighty-one. These many years of phenomenal physical and intellectual vigor contributed to his renown, but they do not account for the brilliance of his career. For Taussig was at once an extraordinarily successful teacher, an exacting but discerning editor, and a writer on a broad range of subjects. American economic literature owes much to this editorship in content and in stylistic excellence; until the last years, Taussig himself read virtually every manuscript submitted to the *Journal*, making painstaking notations; and in his own writings he set a noteworthy example of lucid and graceful expository style. In addition to those fields in which he wrote authoritatively—general economic theory, economic motivation, international trade, American tariff history, monetary problems—we find also, amongst others, articles devoted to the teaching of economics, price indices, public finance, labor relations, business cycles, and the reparation problem; the list of his publications embraces something over two hundred titles, including thirteen books of which all but two appeared in more than one edition or version.

In his general theoretical position Taussig was more strongly influenced by the classical economists—particularly by Mill whose *Principles* was employed as the chief textbook at Harvard during his student days and his early career as an instructor—than by later schools of thought. Prices are indeed formed by the equilibration of utility, or "vendibility," as he preferred to say, and costs. But the marginal utility doctrine never sufficiently permeated his thinking to tempt him to formulate a system of the general equilibrium of all prices, nor to persuade him to a complete surrender of the classical labor theory of value. Curiously enough, atavistic remnants of the latter persisted in the two fields in which Taussig's theoretical contributions were most noteworthy—in the theory of international trade and of capital. At the foundation of the former he set the proposition that deviations of costs from simple labor-quantity costs were not sufficiently important to affect the flow of goods exchanged between nations. And in the sphere of capital theory, he still maintained against Clark that "capital as such is not an independent factor of production and there is no separate productiveness of capital"; he refused "to accept a general principle of diminishing returns in the applications of capital"; and the wage-fund conception of wages

as "advances" to laborers persisted in the principle that wages are the "discounted marginal product of labor."

International Trade and *Wages and Capital* embody Taussig's most original work, but the originality of the two books is of different complexion. The former rarely represents a sharp deviation from tradition; but as Viner has held, its most notable originality rests upon an "effective synthesis of complex and varied materials into a coördinated whole." Nevertheless the elaboration of "received doctrine" into complete theories of trade under dislocated exchanges, of the impact and repercussions of capital transfers, of the behavior of segments of prices in the domestic economy and the terms of trade under various international changes, and of real and monetary factors in exchange equilibrium—all these constitute substantial contributions in themselves. In *Wages and Capital*, on the other hand, Taussig was concerned with exposing the fallacies of wage-fund doctrine which persisted in the "received doctrine" of his own time—that wages can be regarded as a stock of consumable goods, that the stock is fixed, that wage payments are a mere intermediate step toward the production of wealth. However much the author would have resented the inference, *Wages and Capital* did yeoman's work toward the triumph of productivity theorizing.

Were quantitative measurements appropriate, one would probably turn aside from scientific monographs to the *Principles of Economics* for Taussig's "greatest" influence, for hundreds of thousands of students, the present writer included, formed their first impressions of economics from these pages. The experience was inspiring. Economics did not appear to be a frosty exercise in algebra or geometry, or a sinister glance into the evil machinations of capitalists and proletarians, or a morose brooding upon stagnation and inevitable ruin. The primary concern was not mere analysis but analysis oriented toward policy, and the primary concern of policy was the mitigation of inequality. What if the treatment of increasing costs, or of "varying" costs in Taussig's unfortunate phrase, did not run on all fours with constant and decreasing costs! What if much of our later theoretical sophistication was absent, even in a fourth and somewhat apocryphal edition! To what other work since Marshall would it be possible to refer an intelligent layman for a liberal education in economic problems and for an appreciation of the fervor for betterment balanced by objectivity and reason to which economists aspire?

If Taussig's theoretical writings are distinguished by their eminent common sense, this quality arises not merely intuitively but from his constant concern with empiric verification. This painstaking regard for the actual course of events, for realism, animated the inquiries into the tariff history of the United States, into bimetallism and silver, and the several studies of economic motivation. His experiences as the first chairman of the Tariff Commission and his work with the War Industries Board bespoke not only his capacity but, more significantly for his general influence as an economist, his belief in the indispensable complementarity of theory and empiric reference. It is this orientation, more than anything else, which explains his great success as a teacher. Sentimentally his students will of course recall his impressive stature and bearing, his general but not unfailling tolerance of opposition, his adroit use of the Socratic method, his quick wit, benevolence, and magnanimity. Beneath these ingratiating and inspiring personal traits, however, his students found their most valuable lesson: to be open to conviction, to observe and, above all, to learn.

Amongst American economists of Taussig's era, J. B. Clark and F. M. Taylor were more rigorous theorists; Cooley and Veblen were more original social

philosophers; Hollander was perhaps the more erudite scholar. But it would be difficult to name a greater economist, and it would be impossible to discover a finer gentleman.

HOWARD S. ELLIS

University of California

Editorial Note

The new managing editor of the *American Economic Review* is bound to express his gratitude for having had Dr. Dewey as his predecessor. The estate passed on to him is a sound one. The office is an efficient going concern, the departments are soundly conceived, the publication problems are all either fully solved or sharply delineated. Most important of all, there has been established a policy of editorial impartiality and of broad service to the members of the Association and to economics from which no successor could properly deviate. As heretofore, the pages of the *Review* will be open to persons who have substantial contributions to make to the discussion of economic subjects in the fields of theory, research, and policy. The quality of the contribution, and not any test of viewpoint or opinion, will be the basis for choosing from among manuscripts submitted.

Though a new editor naturally comes to his duties bursting with ideas, it seems wise to go slowly in the introduction of changes. Meantime, it will be helpful if members of the Association will send in suggestions both for improvement of existing departments and for additional services which the *Review* might undertake. Conversely, from time to time in this space I shall suggest particular ways in which members might add to the interest and usefulness of the *Review*.

My first impression is that improvement should be possible both in the leading articles and in the book review section. There is a definite dearth of acceptable material for leading articles. While some improvement may possibly be made through positive editorial performance in activating people to write, the general quality of the *Review* is necessarily set by the character of the unsolicited manuscripts submitted. Those who are dissatisfied with the quality have the remedy in their own hands. Concerning the problem of satisfactory book reviewing, I plan to prepare a later note. Apart from the assigned reviews, which are a necessary service, there is an almost wholly unexploited field for further commentary upon important books.

I appreciate the confidence expressed by my appointment as managing editor of the *Review*, and I shall willingly devote my energies to it on the condition that it be adequately supported, in the form of manuscripts, by the members of the Association.

P. T. HOMAN

NOTES

The Nominating Committee of the AMERICAN ECONOMIC ASSOCIATION has been appointed: A. B. Wolfe, Ohio State University, chairman; C. R. Whittlesey, University of Pennsylvania; C. F. Remer, University of Michigan; S. E. Leland, University of Chicago; J. B. Woosley, University of North Carolina; H. S. Ellis, University of California. Members are invited to send to the committee the names of persons whom they would like to have considered for the elective offices—president, vice-president, second vice-president, and two members of the Executive Committee.

The following names have been added to the membership of the AMERICAN ECONOMIC ASSOCIATION since November 1:

Adler, J. H., 281 Whalley Ave., New Haven, Conn.
Allen, C. L., 910 Arnette Ave., Durham, N.C.
Allen, J. E., Jr., Princeton University, 20 Nassau St., Princeton, N.J.
Alt, R. M., Dept. of Econ. and Soc. Inst., Princeton University, Princeton, N.J.
Andron, M., Dept. of Econ., University of Illinois, Urbana, Ill.
Arendtz, H. F., c/o United Business Service, 210 Newbury St., Boston, Mass.
Bagwell, L., 16 Pomander Walk, New York City.
Bandler, W., 944 Park Ave., New York City.
Barlow, W. D., Office of Asst. Secy. of War, Munitions Bldg., Washington, D.C.
Basch, A., 19 President Ave., Providence, R.I.
Bennett, W. B., College of Commerce, University, La.
Blair, W. S., Graduate College, Princeton, N.J.
Blake, F. H., Jr., 95 Montclair Ave., Montclair, N.J.
Bloom, M. R., 3633 Warder St., NW, Washington, D.C.
Boyden, T. C., F12 Lowell House, Cambridge, Mass.
Breidenbach, O. H., 1102 Lowerline St., New Orleans, La.
Brendel, H. J., University of Dayton, Dayton, Ohio.
Brown, P., 1701 Massachusetts Ave., NW, Washington, D.C.
Brush, W. S., 4 Irving Pl., Room 263S, New York City.
Campbell, H. C., 1400 Lake Shore Dr., Chicago, Ill.
Canon, H., College of Home Economics, Cornell University, Ithaca, N.Y.
Carlock, J. E., Jr., 43 Clerk St., Jersey City, N.J.
Carlson, R. E., Johns Hopkins University, Baltimore, Md.
Carmichael, D. J., School of Business Administration, Boston College, Chestnut Hill, Mass.
Carwell, J., Columbia University, Room 609 Business, New York City.
Chamberlain, N. W., 174 E. 14th Ave., Columbus, Ohio.
Cheney, R. A., 2 Park Ave., New York City.
Cole, D. M., Fort Hays Kansas State College, Hays, Kan.
Colgan, V. E., Association of Life Insurance Presidents, 165 Broadway, Room 910, New York City.
Condliffe, J. B., Dept. of Econ., University of California, Berkeley, Calif.
Craig, G. H., Dept. of Agric. Econ., Montana State College, Bozeman, Mont.
Crisafulli, V. C., 167 Chittenden Ave., Columbus, Ohio.
Cutts, I. M., 3737 S St., SE, Washington, D.C.
de Vegh, I., 56 E. 87th St., New York City.
Dittmer, R. W., 80 Howe St., New Haven, Conn.
Donnahoe, A. S., 1304 State-Planters Bank Bldg., Richmond, Va.
Due, J. F., School of Business, University of Utah, Salt Lake City, Utah.
Dugger, G. S., Presidential Gardens, Alexandria, Va.
Dugger, L. M., Coca-Cola Co., P. O. Drawer 1734, Atlanta, Ga.
Eastwood, R. P., School of Business, Columbia University, New York City.
Ehrlich, O. H., 123 W. 74th St., New York City.
Elliott, E. A., 6139 S. Ellis Ave., Chicago, Ill.
Field, M., 210 Lincoln St., Boston, Mass.
Finney, K., Western Reserve University, Cleveland, Ohio.
Fiske, D. L., Room 1206, 37 W. 39th St., New York City.
Frankel, A., 217 Haven Ave., New York City.
Fulcher, G. S., 3647 Van Ness St., Washington, D.C.
Gettell, Mrs. E. B., 51½ Trumbull St., New Haven, Conn.

- Goodman, A. B., 608 Terminal Bldg., Lincoln, Neb.
 Grenier, E. P., College of Commerce, University, La.
 Groden, G. D., 17 Butler Ave., Buffalo, N.Y.
 Hacker, E. A., Brookings Institution, 722 Jackson Pl., NW, Washington, D.C.
 Haller, W., Jr., Newcomb College, Tulane University, New Orleans, La.
 Hollowell, B. C., "Hillside," W. 254th St. and Independence Ave., Riverdale, N.Y.
 Heath, M. S., Dept. of Econ and Com., University of North Carolina, Chapel Hill, N.C.
 Hellmuth, W. F., Jr., 2700 Yale Station, New Haven, Conn.
 Hibbs, J. R., University of Illinois, 415 Commerce Bldg., Urbana, Ill.
 Hodges, W. E., Box 535, Clemson College, Clemson, S.C.
 Jensen, F. B., Dept. of Econ., University of Kansas, Lawrence, Kan.
 Jesse, H. C., 49 Wall St., New York City.
 Kern, E. G., 220-21 93 Rd., Queens Village, L.I., N.Y.
 Killough, H. B., 22 Belair Rd., Wellesley, Mass.
 Klehman, J., 2518 12th St., NW, Washington, D.C.
 Kottke, F. J., 628 W. 114th St., New York City.
 Kravis, I. B., 1422 N. 52nd St., Philadelphia, Pa.
 Kunst, E. J., 926 E. 61st St., Chicago, Ill.
 Lanier, C. N., Jr., University of Delaware, Newark, Del.
 Law, D. K., 1408 Massachusetts Ave., NW, Washington, D.C.
 Leonard, N. H., Jr., 276 Dwight St., New Haven, Conn.
 Lindholm, R. W., 912 W. 23rd, Austin, Tex.
 McClelland, M. E., Association of Life Insurance Presidents, 165 Broadway, New York City.
 Mellin, G. M., 176 W. McMillan St., Cincinnati, Ohio.
 Mors, W. P., 5425 Dorchester Ave., Chicago, Ill.
 Muench, C., Dept. of Econ. and Bus. Admin., Wartburg College, Waverly, Iowa.
 Munk, F., Reed College, Portland, Ore.
 Neal, A. C., Dept. of Econ., Brown University, Providence, R.I.
 Newman, H. E., 38 W. Delaware Ave., Newark, Del.
 Newmeyer, A. S., 5014 Spruce St., Philadelphia, Pa.
 O'Leary, E. B., University of Dayton, Dayton, Ohio.
 Perry, G. N., Bureau of Economics and Statistics, Weiler Bldg., Victoria, B.C., Canada.
 Pritchard, L. J., 117 W. Green, Champaign, Ill.
 Reynolds, T. J., 552 W. 114th St., New York City.
 Roose, K. D., 2796 Yale Station, New Haven, Conn.
 Rosenon, A. M., 6050 13th Pl., NW, Washington, D.C.
 Ryden, E. D., College Station, Berrien Springs, Mich.
 Ryniker, R. C., 34 Chalmers St., Champaign, Ill.
 Saye, J. B., Doane College, Crete, Neb.
 Schaffner, P. P., Federal Reserve Bank of Cleveland, Cleveland, Ohio.
 Schroll, Sister M. A., Mt. St. Scholastica College, Atchison, Kan.
 Sharp, L., Great National Life Bldg., Dallas, Tex.
 Shea, J. L., Canisius College, Buffalo, N.Y.
 Stead, W. H., Washington University, St. Louis, Mo.
 Stolper, W. F., 19 Ware St., Cambridge, Mass.
 Suiter, W. O., Guilford College, N.C.
 Sutcliffe, W. G., Graduate Division, Boston University, 685 Commonwealth Ave., Boston, Mass.
 Swarthout, A. V., Harrison, N.J.
 Swonger, C. W., New England Milk Producers' Asso., 73 Cornhill, Boston, Mass.
 Taylor, C. T., Georgia State College for Women, Milledgeville, Ga.
 Thompson, C. C., Amarillo College, Amarillo, Tex.
 Tilton, E. B., Central-Illinois Co., 120 S. La Salle St., Chicago, Ill.
 Ule, G. M., 5518 Ellis Ave., Chicago, Ill.
 Van Voorhis, R. H., Box 4091, Duke Station, Durham, N.C.
 Wallace, E. S., Hillsaps College, Jackson, Miss.
 Wasson, R. C., Minnesota Income Study, U. S. Court House, 3rd St. and Marquette Ave., Minneapolis, Minn.
 Watt, J. R., 329 E. 54th St., Seattle, Wash.
 Wedervang, I., Norges Handelshaiskole, Bergen, Norway.
 Weiss, F. J., 3600 Military Rd., NW, Washington, D.C.
 Westmeyer, R. E., Rice Institute, Houston, Tex.
 Weston, J. L., 915 W. Springfield, Champaign, Ill.
 Wightman, G. J., c/o Dairymen's League Coöperative Asso., 11 W. 42nd St., New York City.

Willigman, Mrs. M. L., University of Cincinnati, Cincinnati, Ohio.
 Wills, J. H., 42 Hawthorne Ave., Princeton, N.J.
 Wilson, H. H., Putney School, Putney, Vt.
 Wimsatt, G. B., 3721 Alton Pl., NW, Washington, D.C.
 Yoder, F. R., State College of Washington, Pullman, Wash.

The Pacific Coast Economic Association has elected the following officers for the year 1941: Robert D. Calkins, University of California, Berkeley, president; Calvin Crumbaker, University of Oregon, vice-president; Hampton K. Snell, University of Southern California, secretary-treasurer; Edward S. Shaw, Stanford University, editor.

At the nineteenth annual conference of the Pacific Coast Economic Association, held at Stanford University, December 27-28, 1940, papers were read as follows:

WAR FINANCE—"Revenue Problems in War Finance," by James K. Hall, University of Washington; "The War-Profits Tax," by Marvel M. Stockwell, University of California at Los Angeles; "Canada's Burden of War Finance," by Joseph A. Crumb, University of British Columbia; "Foreign Exchange Control," by John Richard Huber, University of Washington.

AGRICULTURAL ECONOMICS—"Self-Financed, State-Sponsored Advertising as a Form of Farm Relief," by H. E. Erdman, University of California; "Two Years of Crop Insurance," by John C. Clendenin, University of California at Los Angeles; "Trends in the Agricultural Output of Southern California, 1920-1935," by Robert P. Terrill, Reed College.

THE UNITED STATES AND THE ORIENT—"The Economic Impact of the European War on the Far East," by William Holland, Institute of Pacific Relations; "The Japanese Ship Replacement Program," by Charles S. Sheldon, II, University of Washington.

LABOR PROBLEMS—"Industrial Relations Problems and the National Emergency," by Paul Eliel, Stanford University; "A Policy for Organized Labor in a War-Time Economy," by Richard Liebes, Willamette University; "Administration of Unemployment Compensation in California," by Morrison Handsaker, Occidental College; "Economic Aspects of Large-Scale Cotton Growing," by Clark Kerr, University of Washington.

CHANNELS OF TRADE, WAR AND POST-WAR—"The Outlook for United States Trade in South America," by Kenneth Duncan, Pomona College; "Assumptions concerning United States Foreign Trade, Present and Future," by Alfred L. Lomax, University of Oregon; "American Industry: Peace to War," by W. Bruce Lockling, University of Washington; "Trends in Pacific Coast Fruit Exports," by S. W. Shear, University of California.

STATISTICS AND MATHEMATICAL THEORY—"An Hiatus in the Risk Theories of Knight and Myrdal," by Ernst W. Swanson, State College of Washington; "Elasticity of Demand for Rail Passenger Travel," by Beatrice Aitchison, University of Oregon; "A Test of Significance for Time Series Analysis," by W. Allen Wallis, Stanford University.

CONSUMPTION ECONOMICS—"Consumption Levels and Standards of Living: Concepts and Problems," by Joseph S. Davis, Stanford University; "Orthodox Economics and the Consumer," by F. W. Clower, State College of Washington; "Some Neglected Points in the Theory of Consumption," by Lyman D. Bothwell, Whitman College.

PROBLEMS OF MONOPOLY—"What Problem Does Competition Solve?" by C. E. Ayres, University of Texas; "The Temporary National Economic Com-

mittee: *New Deal or Old Delusion*," by Broadus Mitchell, Occidental College; "Probable Effects of the War Economy on Monopoly," by C. D. Jacobs, State College of Washington.

THEORY AND ITS APPLICATION—"J. R. Hicks on Dynamic Theory," by Frank L. Kidner, University of California; "Imperfect Competition and the Demand for Labor," by Raymond F. Mikesell, University of Washington; "The Economic Dynamics of Professor Hicks," by E. S. Shaw, Stanford University.

REAL ESTATE AND PUBLIC UTILITIES—"The Boulder Canyon Project," by Paul L. Kleinsorge, Oregon State College; "The Rate of Capitalization in Real Estate Appraisal and Lending," by Thurston H. Ross, University of Southern California; "Analysis of the Supply of Housing Credit in the West," by Harry J. Jordan, San Diego State College.

DINNER AND LUNCHEON MEETINGS—"Leisure: A Field for Social Research," by Martin H. Neumeyer, University of Southern California; "Economy, Economics and Economies," by Arthur G. Coons, Claremont Colleges; "The Expanding Universe of Monetary Theory," by Anatol Murad, University of Southern California.

The allied social science associations are being served by the following officers during the present year:

AMERICAN ECONOMIC ASSOCIATION—Sumner H. Slichter, Harvard University, president; James Washington Bell, Northwestern University, secretary.

AMERICAN ACCOUNTING ASSOCIATION—Henry T. Chamberlain, Chicago, Illinois, president; Robert L. Dixon, Jr., University of Chicago, secretary.

AMERICAN ASSOCIATION FOR LABOR LEGISLATION—Joseph P. Chamberlain, Columbia University, president; John B. Andrews, American Labor Legislation Review, 131 East 23rd Street, New York City, secretary.

AMERICAN ASSOCIATION OF UNIVERSITY TEACHERS OF INSURANCE—David McCahan, University of Pennsylvania, president; Chester A. Kline, University of Pennsylvania, secretary.

AMERICAN BUSINESS LAW ASSOCIATION—S. Homer Smith, Temple University, president; Gerald O. Dykstra, Ohio University, secretary.

AMERICAN FARM ECONOMIC ASSOCIATION—M. R. Benedict, University of California, president; Asher Hobson, University of Wisconsin, secretary.

AMERICAN MARKETING ASSOCIATION—Howard T. Hovde, University of Pennsylvania, president; Albert Haring, Indiana University, secretary.

AMERICAN POLITICAL SCIENCE ASSOCIATION—Frederic A. Ogg, University of Wisconsin, president; Kenneth Colegrove, Northwestern University, secretary.

AMERICAN SOCIOLOGICAL SOCIETY—Stuart A. Queen, Washington University, president; H. A. Phelps, University of Pittsburgh, secretary.

AMERICAN STATISTICAL ASSOCIATION—Winfield W. Riefler, Institute for Advanced Study, Princeton, New Jersey, president; Richard L. Funkhouser, 1626 K Street N.W., Washington, D.C., secretary.

ECONOMETRIC SOCIETY—Joseph A. Schumpeter, Harvard University, president; Alfred Cowles, Cowles Commission, University of Chicago, secretary.

INSTITUTE OF MATHEMATICAL STATISTICS—Harold Hotelling, Columbia University, president; E. G. Olds, Carnegie Institute of Technology, secretary.

The Tax Policy League has become a part of the Wharton School of Finance and Commerce of the University of Pennsylvania, with its name changed to Tax

Institute, 135 South 36th Street, Philadelphia. The transfer was accompanied by a grant to the University of Pennsylvania from the Alfred P. Sloan Foundation. Mabel L. Walker is director of the Institute; and Harold S. Bottenheim is chairman of the advisory council.

The Economic History Association was formally established at meetings held last December in New York City and New Orleans. The officers of the Association for 1941 are: Edwin F. Gay, president; Earl J. Hamilton and Herbert Heaton, vice-presidents; Shepard B. Clough, secretary-treasurer; Solon J. Buck, Harold A. Innis, Edward C. Kirkland, Wesley C. Mitchell, Everett E. Edwards, Ralph M. Hower and Herbert A. Kellar, council. The Association will publish *The Economic History Journal*, which will appear semi-annually. The editor is Professor E. A. J. Johnson of New York University, who will be assisted by Professor Clough. Membership dues are \$3.00 per year. Applications for membership may be sent to the secretary-treasurer, Professor Shepard B. Clough, Columbia University, New York City.

The University of Denver offers ten graduate fellowships in the field of government management, under a grant from the Alfred P. Sloan Foundation, for the academic period beginning September, 1941. The fellowships will be awarded on a competitive basis and will carry maximum stipends of \$100 per month for single persons and \$150 per month for married men. Applications must be filed not later than March 10, 1941. Further information may be obtained from the Department of Government Management, School of Commerce, University of Denver, Denver, Colorado.

Massachusetts Institute of Technology, beginning in the academic year 1941-42, offers a program of study and research leading to the degree of doctor of philosophy in industrial economics. There will be available fellowships with stipends up to \$1,200; and scholarships of tuition. Applications should be filed by March 15, 1941. Further information may be obtained from Professor Ralph E. Freeman, Department of Economics and Social Science, Massachusetts Institute of Technology, Cambridge, Massachusetts.

The Navy is looking for reserve officers who are economists, for active duty with the Administrator of Export Control. Naval Reserve officers desiring this assignment should immediately send their requests, with a statement of qualifications, to Lieutenant Commander C. C. Shears, care of Administrator of Export Control, Commerce Building, Washington, D.C.

The Annual Social Science Field Laboratory, organized under the auspices of the New York University Graduate School, will be held in northern California during the summer of 1941. Eight fellowships will be granted to graduate students and accredited seniors. Communications should be addressed to Dr. B. W. Aginsky, director, Social Science Field Laboratory, New York University, New York City.

The third summer seminar in Arabic and Islamic studies will be held in the Graduate College, Princeton University, under the directorship of Professor Philip K. Hitti, for a period of six weeks beginning June 21, 1941. The tuition fee for the seminar is \$40.00. A limited number of grants-in-aid are available

through the coöperation of the American Council of Learned Societies. For further information address Dr. Nabih A. Faris, P.O. Box 342, Princeton, New Jersey.

The eighth national conference on assessment administration, sponsored by the National Association of Assessing Officers, will be held at Jacksonville, Florida, October 19-22. Persons interested are invited to attend, whether members of the N.A.A.O. or not. Additional information may be secured from the headquarters of the Association, 1313 East 60th Street, Chicago, Illinois.

The Follett Book Company, 1255 South Wabash Avenue, Chicago, has started a new publication, *Review Index*, a quarterly guide to professional reviews. Articles are listed alphabetically by authors. The subscription price is \$3.00 per year.

Professor Alpheus Thomas Mason of Princeton University is engaged in preparing the authorized biography of Mr. Justice Louis D. Brandeis, and wishes to solicit data relevant thereto—letters, personal reminiscences, anecdotes, and the like. In particular he desires letters, since practically all Justice Brandeis' letters after 1915 were written in long-hand so that the only copy available is in the possession of the recipient. Arrangements for the handling or copying of materials may be made directly with Professor Mason.

Redvers Opie, The British Embassy, Washington, D.C., requests readers of the *REVIEW* who have letters from the late Professor Taussig to send them to him for use in preparing a biography. All letters received will be returned to their owners.

A. A. Rogers of the University of Virginia is engaged in compiling a volume on the family and family life in Virginia during the colonial period, and would be glad to receive additional data or suggestions from interested persons.

Roland P. Falkner of the research staff of the National Industrial Conference Board died November 27, 1940.

Chester Lloyd Jones, professor of economics at the University of Wisconsin, died January 13, 1941.

Appointments and Resignations

Stephen Cornelius Andrews of Virginia Polytechnic Institute has been appointed to the faculty of Northwestern University School of Commerce as assistant professor of industrial management.

Robert D. W. Bartels has temporarily left his position of instructor of marketing at the University of Washington to accept for the second semester a lectureship in economics at the University of California at Berkeley.

Abram Bergson of Harvard University has been appointed assistant professor of economics at the University of Texas.

Howard Berolzheimer of Northwestern University School of Commerce has been advanced to the rank of assistant professor of finance and insurance.

Oscar D. Beverly of the University of Kansas is instructor in business law at the School of Commerce, University of North Dakota.

Robert P. Brecht of the University of Pennsylvania is serving as impartial chairman of the Adjustment Board established by the agreement between the New York Shipbuilding Corporation and the International Union of Marine and Shipbuilding Workers of America, Local No. 1.

Allen Buchanan, who has been assisting the Tolan Committee of the House of Representatives in its investigation of interstate migration of destitute citizens, has returned to the Economics Division of the United States Tariff Commission.

Henry Bund of the University of Economics, Vienna, is instructor in economics at Brooklyn College.

Norman Burns of the Economics Division of the United States Tariff Commission has been loaned to the Bureau of Research and Statistics of the Defense Commission.

William Charles Chamberlin of Columbia University has been appointed instructor in business statistics at Northwestern University School of Commerce.

Robert Willis Chambers of the Harvard Graduate School of Business Administration is instructor in advertising at Northwestern University School of Commerce.

B. S. Chlepner, formerly of the University of Brussels, and one of the leading European authorities on banking and finance, is temporarily located at the Brookings Institution as a "visiting scholar."

Arthur G. Coons, professor of economics in the Graduate School, Claremont Colleges, is part-time consultant with the National Resources Planning Board with respect to an economic and industrial study of Southern California.

Michael C. Daly, formerly of Dalhousie University, has been appointed to the staff of the Bureau of Industrial Research, University of Virginia.

George M. Darlington has been promoted to the rank of associate professor of accounting in the College of Business Administration, University of Nebraska.

Joel B. Dirlam, on leave of absence from the Securities and Exchange Commission, is serving as part-time instructor in the department of economics, Yale University, for the second half of the present academic year.

Richard Donham of Harvard University has been appointed professor of business administration at Northwestern University School of Commerce.

H. B. Drury is on leave from the Brookings Institution to do special work for the Defense Commission.

Lloyd Faust has resigned as instructor in economics at the University of Kansas in order to become assistant economist with the National Resources Planning Board.

C. C. Fichtner has been granted a leave of absence from the University of Arkansas until July, 1942, to serve as chief of the Division of Regional Economy of the United States Department of Commerce.

Eugene A. Gilmore, Jr., has been promoted to the rank of associate professor of economics in the College of Business Administration, University of Nebraska.

R. A. Gordon has returned to the University of California after an eight months' study of business organization at the Brookings Institution.

Wendell C. Gordon is instructor in economics at the University of Texas.

John T. Griffin is instructor in economics at Long Island University, Brooklyn, New York, lecturer in social science at Hunter College and lecturer in business organization at the School of Education, Fordham University.

William Haber, professor of economics at the University of Michigan, has returned to his teaching after acting as executive director of the National Refugee Service in New York. Professor Haber is also chairman of the National Resources Planning Board Committee on Long Range Work and Relief Policies and is directing the Board's studies in this field.

L. Hamburger, formerly professor of labor legislation at the University of Geneva, is spending the current year at the Brookings Institution as a "visiting scholar" under arrangements with the Rockefeller Foundation and the Emergency Committee in Aid of Displaced Foreign Scholars.

Michael A. Heilperin has completed a year's lecture tour under the auspices of the Institute of International Education in New York and is visiting lecturer in economics at Bryn Mawr College.

William G. Herzel has resigned from his position with the University of Kentucky Bureau of Business Research to become director of the Research Division of the Kentucky Department of Revenue.

Alvin H. Jones of Xavier University has completed two studies sponsored by the Carnegie Corporation of New York on "Labor on the New Orleans Waterfront" and "Gambling Rackets in New Orleans."

Ralph R. Kaul of the Economics Division of the United States Tariff Commission has been loaned to the Labor Division of the Advisory Commission to the Council of National Defense.

Arthur Kemp, assistant in economics at New York University, has been appointed assistant professor of economics at Earlham College, Indiana, for the spring semester.

Norris G. Kenny has been granted leave of absence from the Economics Division of the United States Tariff Commission after being called to active service as a major in the Ordnance Reserve with the Army and Navy Munitions Board in the War Department at Washington, D.C.

Harry D. Kerrigan has been advanced to the rank of assistant professor of accounting at Northwestern University School of Commerce.

Noel P. Laird, associate professor of economics and business administration at Franklin and Marshall College, has been elected director of the Eastern Commercial Teachers Association.

Daniel R. Lang of the University of Illinois has been appointed assistant professor of business writing at Northwestern University School of Commerce.

Samuel J. Lukens, assistant professor of economics at the School of Business Administration, University of Pittsburgh, has been appointed director of the School of Business and Secretarial Studies at Simmons College.

Stewart Yarwood McMullen has been advanced to the rank of assistant professor of accounting at the Northwestern University School of Commerce.

Glenn Morrow has accepted a position with the University of Kentucky Bureau of Business Research.

J. E. Morton has been promoted to the rank of associate professor of economics and statistics at Knox College.

Otto Nathan, associate professor of economics at New York University, is doing part-time work as a consultant for the Advisory Commission of the Council on National Defense.

Arthur Nilsson, professor of economics at Oberlin College, served during the summer as an economic adviser with the National Defense Commission.

L. A. Oosterhous is on a leave of absence from Teachers College, Oshkosh, Wisconsin, and is working on the Industrial Plant Location Study which the National Resources Planning Board is making for the President.

Rex Osteen has accepted a position with the University of Kentucky Bureau of Business Research.

Lawrence Lippincott Parrish of the University of Pennsylvania is instructor in industrial management at the Northwestern University School of Commerce.

Howard S. Piquet, chief of the Economics Division of the United States Tariff Commission, is serving as liaison officer between that organization and the Bureau of Research of the Defense Commission.

Paul Jerome Raver, for the past two years director of the government's Bonneville Dam project, has resigned as professor of public utilities at the Northwestern University School of Commerce.

Royal A. Roberts is absent from the department of economics, University of California at Berkeley, on war duty in Washington.

Erich Roll, professor of economics and commerce at the University College of Hull, England, has been visiting professor of economics at the University of Texas during the first semester of this year.

Harold B. Rowe, on leave of absence from the Brookings Institution, is acting as adviser on agricultural questions to the Consumer Division of the National Defense Commission.

Robert Sawyer has resigned from his position with the University of Kentucky Bureau of Business Research to accept a position with the Wages and Hours Division of the United States Department of Labor.

Samuel Waldo Specthrie has been advanced to the rank of assistant professor of accounting at the Northwestern University School of Commerce.

Francis A. Spencer has been appointed a temporary member of the staff of the Brookings Institution to complete a study of Air Mail Compensation.

George W. Stocking, on leave from the University of Texas, has resigned his position as assistant director of the Bureau of Research and Statistics of the National Defense Commission to accept a position as economic expert in the Anti-trust Division of the Department of Justice.

Maurice A. Strickland, formerly of North Carolina State College of the University of North Carolina, is associate professor in economics at Georgia School of Technology. He is also engaged in economic research with the United States Department of Labor, Bureau of Labor Statistics, on a state, county and municipality employment survey.

George W. Taylor of the University of Pennsylvania has been appointed to succeed Professor Millis as arbitrator between the General Motors Corporation and United Automobile Workers—C.I.O.

Harold W. Torgerson has been advanced to the rank of assistant professor of finance at the Northwestern University School of Commerce.

Frank T. deVyver, associate professor of economics at Duke University, has been appointed special industrial consultant in the Bureau of Labor Statistics.

Fred W. Wagner has been appointed an instructor at the University of Hawaii.

M. T. Wermel has resigned as assistant professor of economics at Brooklyn College and is technical adviser to the Economic Analysis Section, Analysis Division, Bureau of Old-Age and Survivors Insurance, Social Security Board.

Robert R. West, formerly president of the Riverside and Dan River Cotton Mills, has been appointed director of the newly established Bureau of Industrial Research at the University of Virginia.

Kurt Woerner of the University of Pennsylvania has been appointed research associate of the Philadelphia Housing Association in connection with a study of defense housing for the Philadelphia area.

Trade, Commerce, and Commercial Crises

Book Reviews

BAKULIN and MISHUSTIN, <i>Statistika Vneshnei Torgovli</i> , by M. V. Condoide	397
DIETRICH, <i>Far Eastern Trade of the United States</i> , by A. G. Coons	399
Titles of New Books	399

Accounting, Business Methods, Investments and the Exchanges

Book Reviews

MEAD and GRODINSKY, <i>Ebb and Flow of Investment Values</i> , by R. E. Badger . . .	401
FOSTER, <i>Introduction to Accounting</i> , by F. P. Smith	404
STEIN, <i>Government and the Investor</i> , by E. S. Mead	405
TOSDAL, <i>Introduction to Sales Management</i> , by R. S. Alexander	406
Titles of New Books	403

Capital and Capitalistic Organization

Book Reviews

BONBRIGHT, <i>Public Utilities and the National Power Policies</i> , by M. G. Glaeser . . .	407
CUSACK, <i>Significance of a Changing Concept of Ownership in Social and Economic Planning</i> , by M. B. Northrop	408
MUNK, <i>Economics of Force</i> , by R. A. Brady	409
ROSEN and ROSEN, <i>Technology and Society</i> , by R. A. Clemen	410
Titles of New Books	406

Labor and Labor Organizations

Book Reviews

BAKKE, <i>Unemployed Worker: A Study of the Task of Making a Living Without a Job: Citizens Without Work: A Study of the Effects of Unemployment Upon the Workers' Social Relations and Practices</i> , by W. S. Hopkins	412
WUNDERLICH, <i>Labor under German Democracy: Arbitration, 1918-1933</i> , by W. S. Woytinsky	413
DECKER, <i>Labor Problems in the Pacific Mandates</i> , by P. H. Clyde	415
GAFFEY, <i>Productivity of Labor in the Rubber Tire Manufacturing Industry</i> , by L. G. Reynolds	415
GILSON, <i>What's Past is Prologue</i> , by S. Perlman	416
HAMBURGER, <i>How Nazi Germany Has Mobilized and Controlled Labor</i> , by W. S. Woytinsky	417
WIECK, <i>American Miners' Association: A Record of the Origin of the Coal Miners' Unions in the United States</i> , by E. Glück	418
Titles of New Books	415

Money, Prices, Credit, and Banking

Book Reviews

COPPOCK, <i>Government Agencies of Consumer Instalment Credit</i> ; SAULNIER, <i>Industrial Banking Companies and Their Credit Practices</i> ; BERNSTEIN, <i>Pattern of Consumer Debt, 1935-36: A Statistical Analysis</i> ; PLUMMER and YOUNG, <i>Sales Finance Companies and Their Credit Practices</i> , by C. O. Fisher	420
WARREN, <i>Search for Financial Security</i> , by L. L. Watkins	423
Titles of New Books	423

Public Finance, Taxation, and Tariff

Book Reviews

BUEHLER, <i>Public Finance</i> , by E. T. Miller	424
LELAND, editor, <i>State-Local Fiscal Relations in Illinois</i> , by H. J. Bittermann	426
Titles of New Books	424

Population and Migration

Book Reviews

MYRDAL, <i>Population, a Problem for Democracy</i> , by Z. C. Dickinson	428
---	-----

WILLCOX, <i>Studies in American Demography</i> , by A. B. Wolfe	429
GLASS, <i>Population Policies and Movements in Europe</i> , by P. K. Whelpton	431
WALSHAW, <i>Migration to and from the British Isles</i> , by W. B. Hurd	432
Titles of New Books	432

Social Problems and Reforms

Book Reviews

COLEMAN and HOUSING COMMITTEE, <i>Housing for Defense</i> , by J. McCreary.....	434
STAFFORD, <i>Government and the Needy: A Study of Public Assistance in New Jersey</i> , by E. Pancoast	435
Titles of New Books	433

Insurance and Pensions

Book Reviews

MAGEE, <i>Property Insurance</i> , by A. Manes	437
Titles of New Books	437

Pauperism, Charities, and Relief Measures

Titles of New Books	438
----------------------------------	-----

Socialism and Coöperative Enterprises

Book Reviews

LEROSSIGNOL, <i>From Marx to Stalin: A Critique of Communism</i> , by J. E. Moffat ..	439
Titles of New Books	438

Statistics and Its Methods

Book Reviews

WOLD, <i>Study in the Analysis of Stationary Time Series</i> , by H. A. Freeman	440
<i>Statistical Yearbook of the League of Nations</i> , by J. C. Rocca	441
Titles of New Books	440

Officers of the American Economic Association

President

SUMNER H. SLICHTER, Harvard University

Vice-Presidents

{ JAMES C. BONBRIGHT, Columbia University
WALTON H. HAMILTON, Yale University

Secretary-Treasurer

JAMES W. BELL, Northwestern University

Counsel

JOHN E. WALKER, Washington, D.C.

N. S. B. GRAS, Harvard University

RAY B. WESTERFIELD, Yale University

J. DOUGLAS BROWN, Princeton University

GEORGE W. STOCKING, University of Texas

STACY MAY, Rockefeller Foundation

Executive Committee

EDWIN E. WITTE, University of Wisconsin

Ex-Officio

The President, Vice-Presidents, Secretary-Treasurer, Managing Editor, and three ex-Presidents who have last held office (Alvin H. Hansen, Jacob Viner, Frederick C. Mills)

THE AMERICAN ECONOMIC REVIEW is published five times a year, in February, March, June, September, and December, at 450 Ahnaip St., Menasha, Wisconsin.

Correspondence in regard to contributions to the REVIEW should be sent to the Managing Editor, Professor Paul T. Homan, McGraw Hall, Cornell University, Ithaca, N.Y., or to members of the Board of Editors.

Books for review should be sent to the Managing Editor.

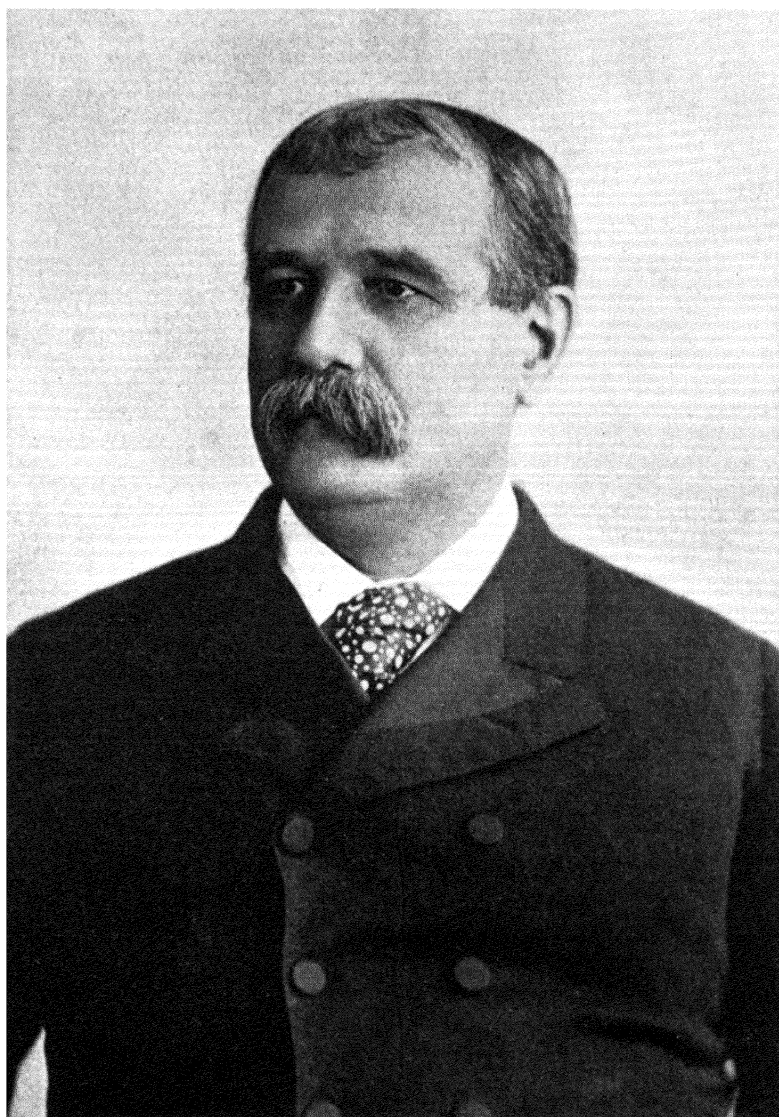
Publication offices of the AMERICAN ECONOMIC REVIEW, 450 Ahnaip St., Menasha, Wisconsin, and Evanston, Illinois. Office of the Secretary of the American Economic Association, Northwestern University, Evanston, Illinois. Membership dues are five dollars a year; life membership, two hundred dollars.

THE AMERICAN ECONOMIC REVIEW is sent to all members of the American Economic Association as one of the privileges of membership, \$4.00 of the annual membership dues being in payment of a year's subscription to the publication.

FRANCIS AMASA WALKER

First President of the American Economic Association, 1886-92

Born in Boston, July 2, 1840, son of Amasa Walker. Died January 5, 1897. Graduated at Amherst, A.B., 1860 and began to study law; lieutenant colonel and brevet brigadier general in the Civil War. Taught Latin and Greek at Williston Seminary 1865-68; on staff of the Springfield *Republican*, 1868; director of the Bureau of Statistics of the Treasury Department, 1869; superintendent of the Ninth Census, 1870; Commissioner of Indian Affairs, 1872. He was professor of political economy and history at Sheffield Scientific School of Yale, 1873-81; lecturer at Johns Hopkins University, 1877-79; represented the United States at the Monetary Conference in Paris, 1878; superintendent of the Tenth United States Census, 1880; and from 1881 until his death he was president of Massachusetts Institute of Technology. The Walker Memorial, a students' clubhouse and one of the new Technology buildings on the Charles, was dedicated in 1916. From 1882 to 1897 he served as president of the American Statistical Association. President Walker was one of the foremost advocates of international bimetallism. In economic theory he was regarded as an original and powerful thinker, and his treatment of wages and profits has had a profound influence upon economic theory. Indeed, the development of interest in economics in America is in a large measure the result of his work. His principal writings are: *The Indian Question*, 1874; *The Wages Question*, 1876; *Money*, 1878; *Money in Its Relation to Trade and Industry*, 1879; *Political Economy*, 1883; *Land and Its Rent*, 1883; *History of the Second Army Corps*, 1886; *Political Economy* (3rd ed. 1888); *Life of General Hancock*, 1894; *The Making of the Nation*, 1895, *International Bimetallism*, 1896.



Frank A. Walker

The American Economic Review

VOL. XXXI

JUNE, 1941

No. 2

MARSHALL'S ECONOMICS, IN RELATION TO THE MAN AND TO HIS TIMES

A paper read at the Fifty-third Annual Meeting of the American Economic Association, New Orleans, December 29, 1940.

Malthus once said, with reference to Senior's lectures on population, that "it was among the disadvantages of public lectures, that the lecturer sometimes thought he was called upon to say something new, where there was nothing new to be said." Malthus, it may be ventured, would have been willing to concede that he had contributed substantially to placing Senior in that position by having himself previously said most of what was worth saying about population. Asked to speak to the Association on Marshall as part of the celebration of the fiftieth anniversary of the publication of his *Principles*, I find myself very much in the position Malthus thought Senior was in.

My own plight I attribute mainly to four factors: First, so much of what knowledge I may have about Marshall has been gained through the years from the late Dr. Taussig's writings, teaching, and conversation that I can no longer separate what I have learned for myself from what I have derived from him. Secondly, the fifty years and more of published commentary on Marshall's *Principles* have made it difficult to find fresh cause for praise or complaint. Third, the admirable *Memorials of Alfred Marshall*, 1925, edited by Pigou, and containing penetrating and enlightening contributions by Keynes, Edgeworth, and Pigou on the relation of Marshall's personality and social philosophy to his economics, has so thoroughly exploited the biographical data available even to insiders that not much scope is left to those who had never seen nor heard Marshall in the flesh nor had an opportunity to draw on the rich fund of oral Cambridge tradition. What would be ordinarily a substitute, published letters, are also unavailable except for the few published in the *Memorials*. Finally, Mr. Schumpeter has kindly made available to me in advance a generous-sized abstract of his paper on the pure theory aspects of Marshall's *Principles*, with the consequence that I cannot easily, without resort to plagiarism, fill out what I can find to say within my own assignment by encroachment on his.

If, then, what I say should sound unduly familiar and commonplace, solace must be sought in the also familiar and commonplace reflection that

on the subject of Marshall what is new is highly unlikely at this late date also to be both true and significant. I will deal in turn with the influence on Marshall's economics of his political views, of his moral philosophy, and of some of his methodological predilections.

I

Marshall was in many respects a highly representative late Victorian intellectual. He was a Victorian "liberal" in his general orientation toward social problems, as probably also in the narrower partisan sense. English economics was throughout the nineteenth century intimately bound up with English politics, and throughout the century English economists had, probably without any important exception, political affiliations or preferences which influenced and were influenced by their economic doctrines. It is possible to ascertain with some degree of assurance the political affiliations of the earlier economists from their economic writings, but this requires an examination of their position with respect to issues which, though of minor importance for economics, sharply divided the various political groupings. On the major economic issues of the nineteenth century which were also important political issues, notably, foreign trade policy, the treatment of the poor, and the economic rôle of the state, there was much overlapping of position as between the political parties, at least during the first half of the century. By the middle of the century all the political parties as parties had accepted, or had ceased to contest, the free trade doctrine which stemmed from Adam Smith and which all the major economists except Malthus enthusiastically supported. By the late 1830's there was opposition only from one wing of the Tories and from the extreme radicals to the principle of confining relief to the able-bodied poor on the basis of "less eligibility"; that is, of granting it only in such unattractive form that the incentives to industry, thrift, and prudential control of the birth-rate should not be undermined, a principle developed with almost complete agreement by the classical economists on the strength of Smithian individualism, Benthamite-Malthusian population theory, and the Malthusian-Ricardian law of diminishing returns, plus in all probability a large dose of unconscious puritanism. The period from 1800 to 1850 was, whatever party was in power, fairly consistently a period of piecemeal legislative repeal, item by item, of the mass of legislation restrictive of domestic freedom of enterprise which had survived on the statute books from the mercantilist period, and this trend also was aided and abetted by all the classical economists from the Benthamites, at one extreme, to the most conservative Whigs, like Malthus and Senior, at the other. On the major political issues of the first half of the century, therefore, while there might be a question as to whether the classical economists were determining the historical trend, or merely riding it, it is clear that they were not fighting it. It can now be seen, if it was not then possible to do so, that what con-

flict there then was between legislators and economists turned for the most part on the pace, and not on the general direction, of the legislative activity.

Even the Tory party, whose basic political philosophy seemed to be that all institutions were evil when new and irreproachable when aged, was moving, though slowly, reluctantly, and with misgivings and internal dissension, on the paths mapped out for it by the anti-Tory economists. It is in fact a paradox in the history of the relations of economics and politics in early nineteenth century England that the one political movement of importance which the historians most unitedly ascribe to the influence of the economists, the advocacy of extreme *laissez-faire* by the Manchester School, was the only one which the leading economists felt impelled expressly to denounce as going counter to, or at least beyond, the teachings of political economy. In so far as the dogmatic *laissez-faire* position of the Manchester School found in its own day, aside from the tariff question, any adherents among the ranks of economists, these were Continental or American economists. John Stuart Mill, Senior, Cairnes, McCulloch, Torrens, Longfield, the only English economists of note of the period, all sharply dissociated themselves from some at least of the doctrines of the Manchester School and denied its pretensions to support from the "principles of political economy." The classical economists did espouse *laissez-faire*, but a *laissez-faire* avowedly subject to qualification and requiring specific justification in each case of potential application.

The Manchester School, in any case, had but a brief period of power. The growing information—and exaggeration—about working and living conditions in the factory towns, the steadily increasing political power of the working classes even under the restricted suffrage of the Reform Act of 1832, and the widespread humanitarian reaction against the doctrine of governmental impotence to remedy unmerited distress, made support of governmental inaction as a policy increasingly dangerous politically to any party which committed itself too strongly to it. With the establishment by the second Reform Act of 1867 of very nearly complete adult male suffrage, it became necessary for both the aristocratic Conservative or Tory party and the by-now predominantly middle-class Liberal party, if either were to gain or retain power as against the other, and if a third and "subversive" working-class party, as strong as or stronger than they, was not to come into being, to woo the working classes by support of a policy of wider governmental activity in relief of distress and poverty. Social reform through legislation thereafter became respectable political doctrine for both parties, and reform legislation in fact obtained active support alternately or simultaneously from both major parties during the remainder of the century.

During the period of Marshall's youth, John Stuart Mill was the only economist of great public eminence, and Mill, who in his own youth had been one of the original Benthamites, had in his intellectual development

absorbed something from almost every major humanitarian and utopian current of his time while managing substantially to retain most of the form and much of the substance of the sterner doctrines of the Bentham-James Mill-Ricardo circle under whose discipline he had been brought up to a too-precocious maturity. With his too-catholic blending of the dour individualism and the unrelenting *a priori* political democracy of the classical school, the utopianism of the Owenites and the St. Simonians, the patriarchal humanitarianism of Wordsworth and Coleridge, and the new misgivings as to the workings of political democracy and social equalitarianism in actual practice as revealed in the United States, John Stuart Mill was the connecting link with respect to political presuppositions for Marshall, as for many later economists in England (and also in the United States), between the classical school of the 1820's and the late-Victorian neoclassical economics. It is substantially true that from the 1870's on all English economic *theorists* of any note were, although with varying degrees of certitude and enthusiasm, political liberals of the John Stuart Mill type. It incidentally seems also to be substantially true that all the English economic *historians* of note were conservative, imperialist, anti-democratic, in their political tendencies, or else went far beyond the liberals in their advocacy of radical social and economic reforms.

The data available on Marshall's political opinions are scanty and scattered. They suffice, however, to support the following summary of the substance and content of his political liberalism as being probably correct as far as it goes:

(1) Marshall was a believer in political democracy, meaning by it essentially universal (male) suffrage, decisions reached by free discussion and by majority vote, and an electorate educated at public expense. In the Benthamite tradition, he held these beliefs not on natural rights grounds, but on the utilitarian ground that they were essential for good government.

(2) Marshall was an individualist in most of the many senses of the term. His ultimate criterion for appraising the social value of any policy was the nature of its probable impact upon the character and well-being of *individuals*. His appraisals of policies and trends were always in terms of what they did for individuals, singly or in groups, and never in terms of their contribution to the prestige or power of an idealized "state" distinguishable from its people. His hope for social progress rested primarily on the capacity for industry, thrift, enterprise, voluntary coöperation, and "economic chivalry," of enlightened individuals, and he had limited, though some, faith in the possibilities of betterment through restrictive or coercive legislation or through the direct exercise of governmental enterprise in the economic field.

(3) Marshall also was essentially a political equalitarian in the Bentham-J. S. Mill sense. He not only wished every (male) adult to count as one and only as one in the machinery of political democracy, but he believed,

with the English classical school, that in so far as there were significant differences in the capacities and the economic status of the different social classes these class differences were for the most part not due to biological differences in innate capacity or character as between individuals but were due instead to environmental differences, to inequality of opportunity: "the poverty of the poor [was] the chief cause of that weakness and inefficiency which are the cause of their poverty."¹

(4) Basically, Marshall's political doctrines carried the hallmark also of Victorian complacency and gentility. While he recognized the problem of poverty as a major one, he never revealed any doubt that it could be substantially resolved within the limits of British parliamentary democracy and of a free enterprise economy. He was impatient alike with theories of economic history which treated economic and social progress as if it was in any sense inevitable or automatic, and with pessimistic theories which treated it as impossible, or as impossible without revolutionary political changes. He was confident that if only there were sufficient goodwill ("economic chivalry") and economic understanding substantial progress would in fact occur, and he evidently had faith in the effectiveness of sound moral preaching to produce the goodwill and of sound Cambridge economics to produce the understanding. The progress he sought, moreover, was not to be merely a matter of more goods, but of access to and liking for a more leisurely and more refined life for *all* the people, so that even hod-carriers could be gentlemen. The stamp of these political doctrines is perceptible throughout his economic writings.

II

Marshall is said by his biographers to have come to economics from ethics. But his early interest in ethics arose out of his search for a guide to his conscience rather than from an intellectual interest in the metaphysical aspects of moral philosophy. In his younger days at Cambridge as student and teacher the conflict waged hot between utilitarian and idealistic theories of ethics, but there is no evidence that Marshall ever took real interest in this controversy or believed that it had immediate significance for his economics. It would be more accurate, I think, on the basis of the available evidence, to say that Marshall came to economics from his morals, from his zeal to make a contribution to the social betterment of man. Of the many passages in his writings which reveal Marshall's conviction that it is the duty of educated men to strive for the improvement of social conditions, and that a sound and moralized economics is a valuable instrument to this end, and his self-dedication to economics in this spirit, the following are representative:

Is there not a great fund of conscientiousness and unselfishness latent in the

¹ "The Present Position of Economics" (1885), in A. C. Pigou, ed., *Memorials of Alfred Marshall* (London, Macmillan, 1925), p. 155.

breasts of men, both rich and poor, which could be called out if the problems of life were set before them in the right way, and which would cause misery and poverty rapidly to diminish?²

It will be my most cherished ambition, my highest endeavour, to do what with my poor ability and my limited strength I may, to increase the numbers of those, whom Cambridge, the great mother of strong men, sends out into the world with cool heads but warm hearts, willing to give some at least of their best powers to grappling with the social suffering around them; resolved not to rest content till they have done what in them lies to discover how far it is possible to open up to all the material means of a refined and noble life.³

. . . I have devoted myself for the last twenty-five years to the problem of poverty, and . . . very little of my work has been devoted to any inquiry which does not bear on that.⁴

I see no grounds for questioning either Marshall's complete sincerity in this connection, or the conformity of his life as a whole—which of course does not mean the whole of his life in every detail—to his announced principles. The moral earnestness with which Marshall regarded the rôle of economics and his own rôle as an economist was thoroughly Victorian, was altogether in keeping with the spirit of his times in liberal educated circles. If, in so far as simple formulae ever have validity when applied to the thought of a generation, late eighteenth century thought can be said to have reflected enlightenment without zeal, light without warmth, and our present-day world to exhibit zeal without enlightenment, heat without light, then it may be remembered that the late Victorian age in which Marshall reached maturity was the age of "sweetness *and* light," of reason tempered—some would say alloyed—by pity.

There are genuine differences in tone here between the Benthamite economists of the 1820's and Marshall. In one of the passages I have cited, Marshall spoke of the need for "cool heads but warm hearts." Bentham and his followers laid more stress on the dangers than on the benefits which might result from warmheartedness. The Benthamites had, as much as Marshall, dedicated their lives to the betterment of the conditions of the mass of mankind, and Marshall, like the Benthamites, believed that charity and goodwill unguided and unrestrained by "sound" general principles could do more harm than good. But Bentham's circle believed that acquaintance with sound principles was more urgently needed than goodwill. In Marshall's case this does not seem to be true, for Marshall seems on the whole to have been more fearful of too little stress on the heart than of too little exercise of the mind. There is a passage in Marshall's writings

² Lecture by Marshall (1883) quoted in "In Memoriam: Alfred Marshall," by Pigou, *op. cit.*, p. 83.

³ "The Present Position of Economics" (1885), *ibid.*, p. 174.

⁴ Alfred Marshall, "Minutes of Evidence taken before the Royal Commission on the Aged Poor, June 5, 1893," *Official Papers* (London, Macmillan for the Royal Economic Society, 1926), p. 205.

which is interesting not only because of its bearing on this point but also because it is the only passage in all of Marshall's writings in which I have been able to detect the slightest taint of humor—and even here it may well have been unconscious:

G. Possibilities of Discrimination
[between worthy and unworthy]

9. Patience in bearing other people's sufferings is as clear a duty as patience in bearing one's own, but it may be carried too far.⁵

John Stuart Mill was here again the connecting link between the Benthamites and Marshall. Under the influence largely of Wordsworth, he had reacted against his father's and Bentham's social philosophy as unduly cold and hard, and as lacking the moderating element obtainable from giving a larger rôle to "feeling." Mill introduced into the main line of English economic thought the sentimentality, the heart-throbbing, which Bentham, James Mill, Ricardo, McCulloch, Malthus, and Senior had carefully avoided. John Stuart Mill had thus made it more difficult for the humanitarians and the tear-evoking novelists to accuse the economists of having made it possible to freeze one's heart and yet live at peace with one's conscience. When Bagehot wrote, in a not wholly facetious vein, that "no real Englishman in his secret soul was ever sorry for the death of a political economist; he is much more likely to be sorry for his life," it was not economists like J. S. Mill or Marshall whom he had in mind. In any case, once Marshall had become the leading British economist it ceased to be a common charge against economics that "it dries up the hearts and the imaginations of the most who meddle with it" (Miss Lucy Aikin), or that all that it asked of men "is that they should harden their hearts" (Robert Southey); and the question whether humane men could be devotees of the dismal science had ceased to be a live one.

While it could be argued that these were more largely differences in mode of expression as between the Benthamites and Marshall, corresponding merely to changes in verbal style, than differences in substance, it seems clear that Marshall's lesser willingness to be patient about the immediate woes of the poor led him actively to seek means of reconciliation between advocacy of relief of distress on humanitarian grounds and adherence to the Benthamite principle that it was urgent to preserve unimpaired by excessive charity the capacity for and the will to practice self-help on the part of the poor. To take one instance: the classical economists, in appraising the claims of the aged poor to generous relief, held that, as old age

⁵ "Royal Commission on the Aged Poor (1893). Memorandum and Evidence offered to the Commissioners by Professor Alfred Marshall. (i) Preliminary Memorandum. A. Preliminary Statement." *Ibid.*, pp. 202-3.

was a foreseeable contingency, in general provision for it should be regarded as an individual responsibility. They drew no distinction between absence of reserves for old age due to expenditures on gin, on the one hand, and to expenditures on the education, nutrition and health of children, on the other. Marshall expressly refused to follow them on this point:

Too much stress is often laid both from the ethical and from the economical point of view on those forms of thrift which result in material provision for sickness and old age, in comparison with those forms which benefit the coming generation.

This is greatly due to the influence exerted on the administrators of poor-relief and charity by the economic and social philosophy of the early years of this century.⁶

When Marshall spoke of the task of economics to search for methods of opening up to all "the material means of a refined and noble life," he again used language which the Benthamites would not have found to their taste. Bentham would have spoken instead in terms of making available greater provision for the poor, without setting limits as to the amount to be desired of such increase in provision or inquiring as to its contribution to the refinement or ennobling of the life of the poor, provided only it contributed to their happiness. To Bentham, or so he claimed at least, "pushpin was equal to poetry" if they produced equal quantities of happiness, and he and his followers carefully avoided resort to any criterion for appraisal of the use which men made of their resources except its effect on their own, or their neighbors', or their children's happiness.

Here again John Stuart Mill was the connecting link between the strict utilitarianism of the early classical school, on the one hand, and the Victorian stress on refinement and nobility of Marshall, on the other hand; for Mill had diluted the Benthamite doctrine by insisting that over and above the purely quantitative differences between utilities there was a hierarchy of higher-and-lower, nobler-and-less-noble utilities which should be taken into account. Whatever may be the merits of this issue, and it is one on which there still seems to be as much room for inconclusive debate as there was when it was first raised, for Marshall the choice in favor of Mill as against Bentham was a convenient one. It not only put him in accord with the dominant ethical thought in the Cambridge of his time, but it also enabled him to retain an evangelistical note in his economics even after he had on intellectual grounds eliminated it from his theology.

Marshall, however, never explicitly discussed these ethical issues, and in fact sought deliberately to avoid being entrapped into open discussion thereof and into formal statement of his position by using as colorless and irenic terms as were available to express the ethical implications and presuppositions of his economics. Without surrendering or completely con-

⁶ *Ibid.*, p. 202.

cealing his position, he thus succeeded fairly well in escaping the necessity of ever having to defend it.

III

Marshall came to economics also from mathematics. Educated at Cambridge, noted for its emphasis on the educational and disciplinary value of rigorous training in mathematics, he attained high distinction in that field as a student. He taught mathematics before he taught economics. He had not only distinct aptitude but also great liking for mathematical forms of reasoning. It is clear, however, that he had grave mistrust of the consequences of unrestrained employment of formal mathematics in economic analysis. One factor in this distrust was probably a lurking puritan suspicion of the morality of any highly pleasurable activity: the formulation and solution of economic problems in mathematical, and especially graphical, terms yielded him so much intellectual and aesthetic delight that it for that reason alone became somewhat suspect to him as a worthy occupation. Mathematics, and especially graphs, were Marshall's fleshpots, and if he frequently succumbed to their lure it was not without struggle with his conscience. It can also be said for Marshall that when he did succumb he not only frequently warned his readers not to take his mathematical adventures too seriously but shielded them from the young and the susceptible by confining them to footnotes and appendices where, as he rightly anticipated, only the hardened sinners already beyond further corruption would prolongedly gaze. Marshall also was anxious for a wide audience, and the fact that the bulk of his potential readers were both unable and unwilling to read economics in mathematical form no doubt was an additional consideration.

But Marshall had other and presumably better reasons for misgivings as to the effect on economics of the extensive use of mathematics. First, the mathematical approach required rigorous abstraction, whereas Marshall thought that the economist must strive to account for the concrete. Secondly, although this may not be wholly a different consideration, Marshall believed that economics must become more complicated and more biological in character, whereas mathematical economics tended toward excessive simplification and sought its prototype rather in mechanics than in biology.

Marshall from the first had a live sense of the complexity and variability of the interrelations between economic phenomena, and of the biological rather than mechanical nature of these interrelations. During his early years at Cambridge, as student and as teacher, the influence of Darwin and of Huxley was strong. Cambridge was becoming a center for distinguished work in the biological sciences, challenging in intellectual prestige to some extent the traditional academic aristocracies of theology, philosophy, the classics, and mathematics and the physical sciences. While I know of no evidence that Marshall was ever a serious student of biology, and I have been unable to find that there was any personal intimacy between Marshall

and the distinguished Cambridge biologists, physiologists, pathologists, psychologists, and so forth of his time, biological ideas were then very much in the air, and could be absorbed without special effort. In any case, Marshall saw in biological rather than in mechanical modes of thought the most suitable instruments of economic analysis. ". . . in the later stages of economics, when we are approaching nearly to the conditions of life, biological analogies are to be preferred to mechanical, other things being equal. . . . The Mecca of the economist is economic biology rather than economic dynamics."⁷

The biological sciences have in fact proved least tractable of all the natural sciences to abstract mathematical analysis, for largely the same reasons, I suppose, which in all probability led Marshall, and others, to see but a limited scope for the fruitful use of mathematics in economic theory: (1) great complexity of the problems; (2) significant variables too great in number for their separate analysis and yet not great enough in number to make reliance upon technical probability theory without specific analysis of particular variables a safe procedure; (3) the absence of reversibility in the interactions of variables; (4) the restricted scope for completely controlled experiment; (5) the absence of that complete indifference of the investigator to the material with which he is working and to the nature of his results which is the only reliable guarantee of scientific objectivity which we can have.

Devotees of the mathematical approach to economic problems frequently claim for that approach that the alternative non-symbolic method, or the "literary method" as they too generously put it, is too imprecise and clumsy a tool for the exposition in all their complexity of the relationships between economic variables, with the implication that it is the complexity of economic problems, rather than their simplicity, which establishes a necessary and fruitful field for the use of mathematics. Marshall, both in his formal writings and in his letters of warning to his disciples against overindulgence in mathematics, seems to me to have taken exactly the reverse view, although not in so many words; namely: that non-symbolic language and simple statistical methods alone had the elasticity to deal with the infinite detail and variability of concrete economic phenomena; that resort to mathematics, unless confined to a preliminary stage of economic investigation, involved a greater degree of surrender of this elasticity than it was wise to accept; and that only the relatively simple propositions in economics could be expressed in mathematical form, and even then only at the cost of artificial and often serious further simplification. It must have been the complexities of the biological as distinguished from the mechanical aspects of economic problems which Marshall had in mind, for I cannot see how he could have intended to deny that, whatever the degree of complexity of the mechanical type economic problems may involve, they

⁷ "Distribution and Exchange" (1898), *Memorials*, pp. 317-18.

can be handled better with than without the aid of mathematics.

There was still another element leading Marshall to cry down the value of the mathematical method. Marshall, at least in his frequent moralizing moods, placed no high value on economic analysis as a good in itself, as a cultural pursuit or a substitute for chess. Writing to Edgeworth in 1902, he said:

In my view "theory" is essential. No one gets any real grip of economic problems unless he will work at it. But I conceive no more calamitous notion than that abstract, or general, or "theoretical" economics was "economics" proper. It seems to me an essential but a very small part of economics proper: and by itself sometimes even—well, not a very good occupation of time.⁸

From this and other passages it can be inferred that Marshall, believing as he did that it was "pure theory" which lent itself most fully to mathematical exposition, that for economics to be a serviceable instrument of human betterment it must be extended to include consideration of the concrete detail not readily or at all amenable to abstract mathematical treatment, and that the attraction of mathematics led some economists to neglect the concrete detail and to confine themselves to pure theorizing, minimized the usefulness of mathematics to economics in order to check the tendency toward what he regarded as undue abstraction.⁹

I am no mathematician myself, and I try always to remember and to profit from Edgeworth's merited reproof to an Italian economist who had had the temerity to question the usefulness of Edgeworth's application of the mathematical method to taxation problems: "The withers of the mathematician are not wrung by these commonplaces. The use of the method is not necessarily attended with an exaggeration of its importance. The inability to use it is not a qualification for appreciating its usefulness." Professional mathematicians have assured me, moreover, that the uninitiated can have no conception of the feats which can be performed by the aid of the elastic, the precise, the versatile, and the delicate apparatus of the modern higher mathematics. Although they have also upon occasion suggested to me that economists are pressing it to perform false miracles, I venture no disclaimer, therefore, of whatever general or specific claims for their method mathematical economists may make, provided they are confined to mathematical claims beyond my understanding or ability to test. But non-mathematical economists with an inferiority-complex—which today includes, I feel certain, very nearly all non-mathematical economists

⁸ Letter by Marshall to Professor F. Y. Edgeworth (1902), *ibid.*, p. 437.

⁹ Cf. J. M. Keynes, "Alfred Marshall, 1842-1924," *ibid.*, p. 37: "... Marshall was too anxious to do good. He had an inclination to undervalue those intellectual parts of the subject which were not *directly* connected with human well-being or the condition of the working classes or the like, although *indirectly* they might be of the utmost importance, and to feel that when he was pursuing them he was not occupying himself with the Highest. . . . When his intellect chased diagrams and Foreign Trade and Money, there was an evangelical moraliser of an imp somewhere inside him, that was so ill-advised as to disapprove."

—may be pardoned, perhaps, if they derive a modest measure of unsanctified joy from the spectacle of the great Marshall, a pioneer in mathematical economics himself, disparaging the use of mathematics in economics, and counting as wasted effort the mastery of any other economist's mathematical symbols. If, as seems doubtful, Marshall's warnings served to dissuade any budding Cambridge economic geniuses with aptitude for mathematics from acquiring an abundant command of its techniques, they no doubt served economics ill rather than well. But if they helped to check the descent of economics to the status of an unwanted foundling on mathematics' doorstep, they did render a useful service.

If Marshall's puritan conscience led him to disparage the method from which he undoubtedly derived the greatest intellectual excitement and joy, even that over-scrupulous conscience occasionally took a holiday. Marshall recognized that the instruments for a general ethical calculus were lacking, but he claimed that the institution of money provided an adequate basis for calculations of *economic* satisfaction and sacrifice: "The pure science of Ethics halts for lack of a system of measurement of efforts, sacrifices, desires, etc., fit for her wide purposes. But the pure science of Political Economy has found a system that will subserve her narrower aims."¹⁰

Marshall was well aware and repeatedly acknowledged that the monetary unit represented substantially different quantities of satisfaction and of sacrifice for rich and for poor, respectively. It would seem that this was an insuperable barrier to the use of market prices as a measurement of such satisfaction and sacrifice as between different persons, and that, with his acceptance of the problem of poverty as the major problem for economics, Marshall would have felt obliged to recognize that even for a calculus of economic happiness no satisfactory instruments of measurement were available. His zeal for quasi-quantitative analysis and for reaching value-judgments overcame, however, his other scruples, and he adopted an analytical procedure which operated to distract attention from the necessity of making full allowance for the inequality in the distribution of wealth and income in reaching such value-judgments. In a passage in his *Principles* which has not escaped unfavorable notice by others, Marshall offered what must be regarded as a glaringly weak defense of this procedure:

On the whole, . . . it happens that by far the greater number of the events with which economics deals affect in about equal proportions all the different classes of society; so that if the money measures of the happiness caused by two events are equal, there is not in general any very great difference between the amounts of the happiness in the two cases.¹¹

Marshall was here setting up a screen between himself and his readers, on the one hand, and the problem of poverty on the other, in order to be

¹⁰ "Mr. Mill's Theory of Value" (1876), *ibid.*, p. 126.

¹¹ Alfred Marshall, *Principles of Economics*, 6th ed., p. 131.

free to engage, without too sharp pangs of conscience, in what was for himself a delectable intellectual activity. This was not Marshall at his best, however, nor even the normal Marshall, and there have been few of us who have made conscience be our guide as to subjects of investigation and methods of analysis as steadily and as consistently as did Marshall.

I do not regard it as part of my function to render a definite appraisal of Marshall as man or as economist. In any case, those aspects of Marshall's work with which I have dealt are not really matters for appraisal, and narration and description are all that is called for. That Marshall was a great figure, one of the greatest, in the history of our discipline, and that without being by any means flawless he nevertheless fully earned his status, I would strongly argue if I knew of sufficient dissent from significant quarters and on significant grounds to give any point to such argument.

But Marshall is now long dead, and the rule "*De mortuis non nisi bonum*" is a required rule of morals or of good manners only for men very recently dead. There would be no point therefore in treating Marshall, whether the man or his work, with special tenderness or reserve. He had, beyond doubt, his weaknesses on both counts, including some with which he may have infected his followers, so that we regard them as points of strength. I am sure also that even his virtues are not to be admired by us to the point of slavish imitation. Each generation should—and will—work out its own economics, borrowing from, reacting from, improving upon, retrograding from, that of the preceding generation. Marshall's economics is now distinctly that of a generation which is past, and is increasingly *not* that of our own. For one thing, it is essentially the economics of a society assumed to be free and to have its economic affairs conducted by free individuals. Freedom, whether of the economic system as such, or of individuals, has over a large part of the earth's surface either never existed or been suppressed. The appropriate economics of the day is, moreover, the economics of war and preparation for or against war, *Wehrwirtschaft*, and Marshall here has only very limited guidance to offer.

It was a characteristic of Victorian, including Marshallian, public utterances that they typically ended on a double note, of assurance, on the one hand, of continuance into the future of all the well-established institutions and cherished values of the Victorian Age, and of promise, on the other hand, of continued betterment of the social conditions of mankind. Both the Victorian complacency with respect to the present and the Victorian optimism with respect to future progress are now utterly inappropriate. As a social philosopher, Marshall is not yet merely a period piece. If he should become so in the near future, it would properly be a matter for concern, but not for surprise.

JACOB VINER

University of Chicago

ALFRED MARSHALL'S *PRINCIPLES*: A SEMI-CENTENNIAL APPRAISAL¹

I

Fifteen years or so ago I gave a series of lectures at the London School of Economics in which I incidentally paid my respects to the great shade of Marshall. Somebody in the audience thereupon wrote me a letter expressing a feeling, couched in the form of a question, to the effect that Marshall's message would pass away much as Mill's message had, or for that matter that of Adam Smith. I will put what I have to say in the form of an answer to that question.

In one sense Marshallian economics has passed away already. His vision of the economic process, his methods, his results, are no longer ours. We may love and admire that mighty structure which, battered by the impact of criticisms and of new ideas, still spreads its majestic lines in the background of our own work. We may love and admire it as we love and admire a madonna by the Perugino, recognizing that she embodies to perfection the thought and feeling of her time, yet recognizing also how far we have traveled from her.

This, of course, is no more than the inevitable result of the work done during these fifty years which would have had to be entirely barren if Marshall's *Principles* could be to us anything else than what is conveyed by that equivocal term, "a classic." It is the common fate of all classics in all fields. *Si licet parva componere magnis*, there is a significant analogy between the relation of modern economic theory to the theory of the *Principles* and the relation of modern physics to the physics of the '90's. It was in 1894, if my memory serves me, that H. A. Lorentz said he felt that theoretical physics had attained perfection and therefore had ceased to be very interesting. Now that feeling of certainty is gone. Gone are the beautifully simple and clear-cut contour lines. Instead, we see the disorder of a battlefield—uncoördinated masses of fact and pieces of technique, no prospect at all of fitting this heap ever again into an architectural structure. Something very similar has happened to economics. I do not now mean to refer to the vicissitudes of the capitalist system and to the change in moral and political attitude that has occurred with respect to it. It is not Marshall's views on practical problems, social questions, and the like that

¹ This article is a reconstruction, from notes, of a "paper" read to the American Economic Association, at the New Orleans meeting, on December 29, 1940. Here and there, some comments have been added from an earlier and unpublished essay of mine which in turn had been revised in the light of the information contained in Mr. Keynes's "Memoir of Marshall," first published in the *Econ. Jour.*, and reprinted in *Memorials of Alfred Marshall* (ed. A. C. Pigou, 1925) and in J. M. Keynes, *Essays in Biography*, 1933. I hereby acknowledge my debt to that "Memoir," which I regard as one of the outstanding masterpieces of biographical literature. References are to the 1933 volume.

are so obsolete. They may be, but whether they are or not is immaterial for the purpose of this paper. What matters is that his analytical apparatus is obsolete and that it would be so even if nothing had happened to change our political attitudes. If history had stood still and nothing except analysis had gone on, the verdict would have to be the same.

In another sense, however, Marshall's teaching can never pass away. Its influence will last for an indefinite time not only because teaching of such breadth and force merges into the inheritance of subsequent generations, but also because there is about it a peculiar quality which effectively resists decay. Reared in an atmosphere that was full of the slogans of evolutionary progress, Marshall was one of the first economists to realize that economics is an evolutionary science (although his critics not only overlooked this element of his thought but in some instances actually indicted his economics on the very ground that it neglected the evolutionary aspect), and in particular that the human nature he professed to deal with is malleable and changing in function of changing environments. But again, this is not what matters to us just now. What does matter is that he carried his "evolution-mindedness" into his theoretical work. There was no air of finality about it. Unlike Mill, he would never have said that some problem or other was settled for all time to come and that there was nothing about it that called for further explanation either by himself or any other writer. On the contrary, he was fully aware that he was building an essentially temporary structure. He always pointed beyond himself and toward lands into which it was not given to himself to enter. New problems, ideas, and methods that are enemies to the work of other men, thus came to his own as allies. Within the vast fortified camp that he built, there was room—in fact, there was accommodation prepared in advance—for them all. Many as were and are the revolts against his rule, most of them were but local. And sometimes the insurgents discovered—or other people discovered for them—that he had anticipated their goals and that there really was no point in revolting.

II

The *Principles* were the fruits of work that extended over more than twenty years.² When finally they appeared in 1890, success was instantaneous and complete. This success is not difficult to explain. The book was a great performance. And this performance was presented in a most attractive garb that suited to perfection the humors of the time and the prevailing conditions in the field of economics—indeed it does as much credit to

² During those twenty years, Marshall published several articles and, in collaboration with his wife, his (or her) *Economics of Industry*, 1879. In the same year, at the instigation of Henry Sidgwick, the two famous little monographs, *The Pure Theory of Foreign Trade* and *The Pure Theory of Domestic Values*, were privately printed and circulated both in England and abroad. Most of their contents entered into the *Principles* and into the Appendix J of *Money, Credit and Commerce*.

the judgment as it does to the genius of the author.

The precise nature of the performance, however, is less easy to define. Full justice cannot be rendered to it by going straight to the core of the analytic apparatus the *Principles* present. For behind, beyond, and all around that kernel there is an economic sociology of nineteenth century English capitalism which rests on historical bases of impressive extent and solidity. Marshall was, in fact, an economic historian of the first rank, though he may not have been much of an historical technician. And his mastery of historical fact and his analytic habit of mind did not dwell in separate compartments but formed so close a union that the live fact intrudes into the theorem and the theorem into purely historical observations. This shows, of course, very much more obviously in *Industry and Trade* than it does in the *Principles*, in which, even in the historical introduction, historical fact has been so severely scaled down as to be almost lost to follower and critic alike. But it is there nevertheless and so are the results of his tireless and sympathetic observation of contemporaneous business life which he understood as few academic economists ever did. In its very nature the latter achievement implies certain limitations. The practice of the middle-sized English business firm of his time no doubt absorbed a greater share of the attention of the analyst than it should have done in an exposition making large claims to generality. But within those limits a realism was attained which greatly surpasses that of Adam Smith—the only comparable instance. This may be one of the reasons why no institutionalist opposition rose against him in England.

To be sure, such opposition did arise in this country. Nor is this difficult to understand. A simplified Marshallism, which disregarded historical backgrounds, pervaded the routine of college teaching until many of the more lively intellects got thoroughly sick of it. It is but natural that in breaking away from a traditionalized Marshall they should have thought that they were breaking away from the real Marshall, and that in trying to cut their way toward economic reality they should have overlooked the fact that there was a Marshallian signpost pointing to realization of their program.

The analytic core or kernel of the *Principles* consists of course in a theory of economic statics. Its originality does not stand out as, on the merits of the case, it should because for us it is just one member of a family which had grown up or was growing up at that time. Moreover, the other members of that family were no doubt independent of Marshall, whereas his habits of work and his methods of publication make it impossible for the historian of economic thought to be equally positive about his version. I do not wish to be misunderstood. Mr. Keynes's biography of his teacher bears witness to, and presents evidence for Marshall's subjective originality which seems to me quite convincing.³ Marshall himself kept dignified si-

³ Keynes, *op. cit.*, pp. 180 ff.

lence on the matter and indicated his feelings only by being scrupulously fair to the classics, in particular to Ricardo and Mill, and by taking up a position of armed neutrality against Menger, Jevons, and the greatest of all theorists, Walras. The following reconstruction cannot, however, be far from the truth.

We know from Mr. Keynes's pages that it was not primarily intellectual curiosity that brought Marshall into the economist's camp. He was driven to it from ethical speculations by a generous impulse to help in the great task of alleviating the misery and degradation he observed among the English poor. When talking about his preoccupation with the subject, he was constantly rebuffed by a friend steeped in the economist's wisdom of the time, and that was why he turned to Mill's *Principles* for enlightenment. There are other indications from Marshall's work which suggest that he first learned his economics from that source. He also took up Ricardo in 1867. And even if we did not know, we could easily infer what would happen when a mind, thoroughly trained in mathematics, turns to those two authors with a will: such a mind would, first, be shocked at the haziness and carelessness that both authors, but especially Mill, displayed with respect to cogency of proofs and determinateness of results; secondly, it would at once set about eliminating restrictions and generalizing propositions. Not much more than that is really needed to transform Mill's structure into the Marshallian one.

Of course that is a very considerable performance. Many a theoretical physicist has gained immortality for less. Marshall himself acknowledges the help of Cournot and Thünen and the profound influence of both is indeed obvious. The demand and supply curves of the partial or particular equilibrium analysis are Cournot's curves (though Fleeming Jenkins should not be forgotten) and the marginal analysis, which in any case would automatically occur to the mathematical mind, is Thünen's. As regards marginal utility in particular, there was Jevons' *Brief Account of a General Mathematical Theory of Political Economy*, presented to the Cambridge meeting of the British Association in 1862, which paper contained the idea under the name of "coefficient of utility." The two parts of Walras' *Éléments d'Économie Politique Pure* were published in 1874 and 1877. These contained the theoretical skeleton of the static model in question much more fully than did Marshall's *Principles*. But, given the economist's reading habits, it is not likely that at the time they were known to Marshall, and all the rest of the authors to whom technical priority belongs would have had only fragments to contribute.

This seems to account for Marshall's tendency to impute to Mill and Ricardo practically all that the reformers of economic theory had to say. Although an ardent admirer of Walras may perhaps be excused for resenting the scant notice taken of him in the *Principles*, and an ardent

admirer of Marshall for lamenting the absence of more expansive generosity on his part, it follows that no serious objection can be raised to Marshall's acknowledgments to persons. But such objection is in order as regards his written and spoken comments about his great impersonal ally to which he owed so much, mathematics.

If the above diagnosis be correct, then the point is—not merely that his mathematical turn of mind was favorable to his achievement in the field of economic theory, but—that the actual use of the methods of mathematical analysis *produced* that achievement and that the transformation of the Smith-Ricardo-Mill material into a modern engine of research could hardly have been accomplished without it. It is of course possible to argue that any particular result or even the general vision of a system of interdependent economic quantities could also have been attained by methods not mathematically articulate, just as it is possible to argue that a railroad cannot take us to any place which we could not also reach by walking. But even if we choose to disregard the fact that rigorous proofs cannot be supplied except in ways which are mathematical in essence though in simple cases they need not be mathematical in form, the further fact remains that performance of the Marshallian kind *practically* presupposes a mathematical schema. And this Marshall always refused to admit. He never gave full credit to the faithful ally. He hid the tool that had done the work.

Of course there were excellent reasons for this. He did not wish to frighten the layman, he wanted—strange ambition!—to be “read by businessmen.” He was afraid, and justly, of setting an example which might induce people with a mathematical training to think that mathematics is all an economist needs. Yet one might wish that he had extended more encouragement to those who, partly inspired by his work, were then beginning to espouse the cause of exact economics. He does not seem to have realized that the danger of “mathematics running away with us” is not confined to the field of economics, yet has not proved to be so very terrible elsewhere. No science will ever progress if there are no runaways among its votaries. Economics cannot, alone of all the branches of human knowledge, be tied down forever to what the layman can readily understand. As a matter of fact, Marshall himself cannot be fully understood by readers who have no grasp at all of the elements of the calculus. No good purpose is served by making them think that he can. Much good could have been accomplished if Marshall had resolutely stood for the line of advance which he had done more than anyone else to open.

III

Every member of a family, however, has his distinctive characteristics, and the Marshallian individual is not fully described by indicating the family to which it belongs.

The feature that will first strike the theorist's eye is the neatness of the structure. This virtue that has so much to do with success, stands out particularly well if we compare Marshall's exposition with that of Walras. There is a tiresome heaviness about the latter whereas the former flows along with easy grace. All traces of effort have disappeared from the highly polished surface. Theorems are elegantly put. Proofs are simple and concise—in the skeleton appendix at least. Marshall's mathematical training disciplined even his verbal statements. It also accounts for the charming simplicity of his diagrams.

Geometrical illustrations of economic arguments had been used before, especially by Cournot. By now, many of us have grown out of humor with them, because the use of the easy two-dimensional variety unavoidably implies oversimplification. But still they are inestimable vehicles of fundamental, if elementary, propositions. They victoriously clear up many a point. They have proved a boon in countless classrooms. And practically all the most useful ones we owe to Marshall.

Secondly, the text of the *Principles* suggests and the appendix proves that Marshall had fully grasped the idea of general equilibrium, discovering "a whole Copernican system, by which all the elements of the economic universe are kept in their places by mutual counterpoise and interaction."⁴ But in order to display the working of that system he forged and extensively used a different model that was much easier to manage though its field of application was also much more restricted. In most cases, especially in Book V, he primarily thought of medium-sized firms operating in "industries" whose importance is not great enough to influence appreciably the course of events in the rest of the economy, and of individual commodities absorbing but small parts of their buyers' total expenditure. This "partial" or "particular" analysis has its shortcomings. He did not fully state—perhaps he did not fully realize himself—how many phenomena it excludes from vision and how dangerous it may be in unwary hands: to some of his disciples Professor Pigou's all too necessary emphasis on the "smallness" of the industries dealt with has, I dare say, come as a surprise, and others have carelessly applied the Marshallian demand-supply curves to such commodities as labor. But if we frankly recognize that this method is essentially one of approximation—and if furthermore we waive our present-day objections to the concept of an industry—then we are at liberty to enjoy the rich harvest of results which it turned out and for the sake of which Marshall, deviating from strict correctness, developed what was really much more bold and novel than his method of presentation suggests.

Third, in order to reap that harvest he devised those handy tools everyone knows, such as substitution, the elasticity coefficient, consumers' surplus, quasi-rent, internal and external economies, the representative firm,

⁴ Cf. Keynes, *op. cit.*, p. 223.

prime and supplementary cost, the long and the short run. They are such old friends of ours and have become so familiar denizens of our arsenal of analysis that we hardly realize any more what we owe to them. Of course they, or the things they stood for, were not all completely new. But even those that were not, then stepped into their proper places and became really useful for the first time. Like old friends, however, they occasionally prove treacherous. Some of them, such as the representative firm and the external economies, cover rather than mend the logical difficulties we are bound to encounter when we emerge, on the one hand, from the precincts of statics and, on the other hand, from the precincts of the individual industry. The downward sloping cost and supply curves cannot be completely salvaged by those means. And the attempt to do so for a time absorbed energies that might have been better employed in radical reconstruction.

Fourth, when we again recall the reasons which Marshall may have had for the particular equilibrium aspect and when we analyze those handy tools, we cannot fail to be struck by the realism of his theoretical thought. Particular equilibrium analysis brings out the practical problems of the individual industry and of the individual firm. It is much more, of course, but it is also a scientific basis for business economics. Some of the tools are directly taken from business practice, the prime and the supplementary costs, for instance; while others, like the quasi-rent and the internal and external economies, are excellently qualified to catch business situations and to formulate business problems. Nothing at all like that has been so much as attempted by any of Marshall's peers, whereas everything else was not only attempted but also achieved by them, and in some respects more completely than by him. Thus, a full elaboration of the theory of general equilibrium could only have duplicated the work of Walras; a mere elaboration of the concepts of the particular equilibrium method would have been trite. But the one inspired by the other and the other implemented by the one—that was the achievement that was exclusively his own.

Finally, fifth, though it was essentially a static theory that he worked out, he always looked beyond it. He inserted dynamic elements whenever he could, more often in fact than was compatible with the static logic he nevertheless retained. The mists that lie on certain parts of his route, particularly where it touches the phenomena that lie behind his treatment of the "element of time," mainly arise from this source. There is a hybrid character about some of his curves which later analysis was not slow in discovering. Yet though he did not take the fortress, he effectively led his troops up to it. Nor is this all. A still more significant point comes into view if we pass from the distinction static-dynamic to the distinction stationary-evolutionary. Marshall put up, somewhat regretfully as it seems, with the static nature of his apparatus but he disliked the stationary hypothesis to the point of overlooking its usefulness for some purposes. His thought ran in terms of evo-

lutionary change—in terms of an organic, irreversible process. And something of the flavor of it he imparted to his theorems and concepts and still more to the factual observations with which he presented them. I do not think that the theory of evolution at the back of them was satisfactory. No schema can be that does not go beyond an automatic expansion of markets—an expansion not otherwise motivated than by increase of population and by saving—which then induces internal and external economies that in turn are to account for further expansion. But still it *was* a theory of evolution, an important development of Adam Smith's suggestions, and greatly superior to what Ricardo and Mill had to offer on the subject.

IV

However, imposing as the achievement was, it would not have met with so huge a success without the garb in which it strode forth and which appealed to the spirit of the time. Fundamentally, Marshall had built an "engine of analysis . . . machinery of universal application in the discovery of a certain class of truths . . . not a body of concrete truth, but an engine for the discovery of concrete truth."⁵ The discovery that there is such a thing as a general method of economic analysis or, to put it differently, that as far as the logic of their procedure is concerned, economists, whether dealing with international trade or with unemployment or with profits or with money or what not, are always applying substantially the same schema that is invariant to the particular subject matter in hand—this discovery was not his. Nor was it the discovery of the group of economists of which he was so outstanding a member. In order to satisfy ourselves that this truth must have been known, at least from the Physiocrats on, to all economists that knew their business, we need only look at Ricardo's work. The first chapter, supplemented by the second, is obviously a blueprint of such an "engine for the discovery of concrete truth," and the rest of Ricardo's chapters is nothing but a series of experiments in the application of that blueprint. But no economist before Marshall ever grasped the meaning of this so fully, preached it so energetically, acted upon it so consistently.

Now from a man who took that view of the nature and the function of economic theory, one might have expected a treatise very different from the *Principles*, one that could never have enjoyed widespread popular favor. We have already seen some of the reasons why the *Principles* were more fortunate: Marshall's historic-philosophical culture tells on almost every page—his analytic schema is embedded in a luxuriant frame that conciliates and comforts the layman. The analytic skeleton does not grin at you. It is clothed in flesh and skin which Marshall's observation of business facts found it easy to assemble. All that meant more than homely and palatable illustration. But it also meant that this theory "went down" with the general

⁵ Taken from Mr. Keynes's "portmanteau quotation" in his essay, *op. cit.*, p. 208.

public as no other comparable treatise on economic theory ever did.

There was something else however. In more fortunate fields of human knowledge, the analyst is allowed to do his work without constantly thinking of and pointing out its utilitarian virtues; he may even with impunity stray from any possibility of practical application—which is one of the reasons why he progresses so well. The economist has not only to struggle with much less promising problems; he is also incessantly harassed by imperious demands for the immediately “useful” result, for service in the troubles of the hour, for professions of sympathy with the betterment of mankind and, unlike the physicist, he is not permitted to answer that all successful production is roundabout production and that even the utilitarian result is best attained by *not* aiming at it directly. But Marshall felt no repugnance to the credo that prompts those demands. In fact, he fully subscribed to it. *L’art pour l’art* had no place in his eminently Anglo-Saxon soul. To serve his nation and his time, and to teach what would be immediately helpful, that was what he himself wished to do more than anything else. He had no objection to commonplaces about human values and loved to preach the gospel of the Noble Life.

Moreover, his idea of the Noble Life, his views about social problems, his general outlook on the public as well as on the private sphere, happened to coincide with the ideas, views and outlook of his country and his time. More precisely, his ideals and convictions were the ideals and convictions, not indeed of the average Englishman of 1890, but of the average intellectual Englishman of 1890. He accepted the institutions around him, the privately owned firm and the family home in particular, and entertained no doubt about their vitality or the vitality of the civilization that had grown up around them. He accepted the utilitarianized and detheologized Christianity that prevailed. He complacently carried the flag of justice and did not question the validity of the compromise that had been struck, by means of the White Man’s Burden, between a creed of utilitarian righteousness and the inheritance of the Great Mogul. He cheerfully sympathized, from a warm heart, with the ideals of socialism and patronizingly talked down to socialists from a cool head. Thus he was in a position to give his readers exactly what they craved—a message that was both high-minded and comforting—and at the same time to answer to the call of his conscience.

We may question the propriety of *professiones fidei* in a scientific treatise—though, after all, Marshall was in the same boat with Newton in that respect.⁶ I for one do. More than that, we may fail to admire the particular

⁶ I have been struck by what seems to me a curious similarity between those two great men, and I have often wondered how much of it was due to their approximately similar environments and how much merely to chance. It is not only that academic pontificality, that assertiveness of fundamental creed, that unreasonable sensitiveness to criticism which both of them displayed. There is more. Both developed methods which they were extremely reluctant to publish as such. They liked to keep their blueprints to themselves. They worked

message. I confess that few things are so irritating to me as is the preaching of mid-Victorian morality, seasoned by Benthamism, the preaching from a schema of middle-class values that knows no glamor and no passion. But that does not alter the fact that the vast majority of Marshall's readers felt differently, and that they welcomed an analysis which was thoroughly imbued with what to them was the only right and decent spirit.

V

But there is something about Marshall's work that is much greater than anything he actually accomplished—something that assures immortality or, let us say, vitality far beyond the lifetime of any definite achievement. Over and above the products of his genius which he handed to us to work with and which inevitably wear out in our hands, there are in the *Principles* subtle suggestions or directions for further advance, manifestations of that quality of leadership that I have made an effort to define at the start. To list some of the former is easy; to convey a sense of the latter, difficult.

First, it was but natural that a work of such importance should have guided the work of the generation it taught. The economic literature of the thirty years after 1890, therefore, abounds with developments and restatements of, and corollaries to, Marshallian propositions and pieces of technique. The works of Marshall's pupil and successor, Professor Pigou, of Robertson, Lavington, Shove and many others afford countless instances that are familiar to all of us. Even a part of Edgeworth's contributions comes within this category. One example may suffice for the theorems and another for the techniques.

Marshall was the first to show that perfect competition will not always maximize output. This, so far as I know the first breach in an ancient wall, yielded the proposition that output might be increased beyond the competitive maximum by restricting industries subject to decreasing, and expanding industries subject to increasing returns. Pigou, Kahn and others, following up the suggestion, developed what eventually became a field of considerable interest and importance.

Again, the concept of elasticity of demand may not quite merit all the praise that has been bestowed on it. Still it set a fashion of reasoning in terms of elasticities which all of us find convenient. There are nearly a dozen elasticity concepts now in use. Among them, the elasticity of substitution ranks first in importance. Though it is true that it works well only under assumptions so restrictive as to be practically inapplicable to any real pattern, it serves admirably to clear up points that have been the subject of much unnecessary controversy—the question, for instance, whether the in-

out results and presented them in ways other than those by which they had been discovered, and after curiously long delays. Especially in later life, they both affected to despise precisely those things in which they were so great.

roduction of machinery into the productive process can or cannot injure the interests of labor. Now, the concept of substitution is basic for the Marshallian structure. His emphasis on the "principle of substitution" might almost be looked upon as the main purely theoretical difference between his schema and that of Walras. Hence the new instrument consists entirely of material that is to be found in the *Principles* and had only to be joined.

Second, though Marshall's distinction between the long run and the short does not quite satisfactorily express what Marshall presumably intended to express by it, it spelled a great advance in clear and realistic thinking and is fully entitled to the homage that was rendered to it by its ready acceptance. Marshall himself used it extensively and by so doing taught us a lesson from which our generation was and is eager to profit: by slow accretion a whole branch of economics has developed, Short Time Analysis.

Third, Marshall is still more obviously the father of another comparatively recent body of economic thought, of the theory of Imperfect Competition. This, I suppose, is true quite generally, but it is particularly obvious in the case of the English version. The ideas presented to English readers by Piero Sraffa in his famous article of 1926, are there seen to arise—this is still clearer in *Costo di Produzione e Quantità Prodotta*—from a struggle with the logical difficulties about Marshall's descending cost curves. Moreover, there are positive suggestions in the *Principles*, in particular the comments on special markets of individual firms. And Mr. Harrod and Mrs. Robinson simply proved themselves good Marshallians as well as economists of powerful originality by building the structure we admire.

Less incontrovertible, I admit, is the fourth claim I am going to make on Marshall's behalf. I have said that though he grasped the idea of general equilibrium he yet relegated it to the background, erecting in the foreground the handier house of partial or particular analysis. Nevertheless, especially in Book VI, he launches out into wide generalizations about the economic process as a whole. What is their nature, if they are neither particular nor general analyses? Well, I suppose we have got to recognize a third type of theory—in my own workshop it is called "aggregative." Of course, he did not link up his treatment of such aggregative quantities with money. His failure to do so, in spite of his many and important discoveries in monetary theory—since this is a comment on the *Principles* they cannot be mentioned here—is perhaps the only fundamental criticism that I should level against him. But really, if one starts from partial analysis and then wishes to say something about the economic process as a whole, is it not natural that, despairing of the possibilities of the unwieldy idea of general equilibrium, one should turn to aggregative theory? And would not then the theory of money automatically come in, to use Mrs. Robinson's phrase, as the theory of total output and employment?

Fifth, it has been pointed out that Marshall held a definite theory of

economic evolution which, though true to his habit he did not press upon the reader's attention, stood in the very center of his thought. I shall not be suspected of harboring much sympathy for it. But I do want to point out that, not as a philosophy but as an instrument of research, it has exerted more influence than most of us seem to be aware of. H. L. Moore's trend-values can be considered to approximate equilibrium-values only on the basis of that theory. And W. M. Persons found in it the theoretical rationale for dealing as he did with the trends in the Harvard-barometer series. This, however, leads to the item that is the most important of all.

Sixth, then, Marshall's was one of the strongest influences in the emergence of modern econometrics. Many as are the points in which the *Principles* resemble the *Wealth of Nations*, there is one in which the former are definitely superior to the latter, if, eliminating time, we reduce both to the common denominator of subjective, time-conditioned performance. Adam Smith judiciously assembled and developed whatever he thought most worth while in the thought of his own and of the preceding epoch. But he did nothing to develop one of the most significant of the achievements within his reach, the "Political Arithmetick" of the seventeenth century, whereas Marshall who, proportions guarded, had really less to go upon firmly led the way toward, and prepared the ground for, an economic science that would be not only quantitative but numerical. The importance of this cannot be overestimated. Economics will never either have or merit any prestige until it can figure out results.

How clearly Marshall realized this can be seen from his address on "The Old Generation of Economists and the New" (1897). But we owe him much more than a program; we owe him a definite approach. All we have to do in order to satisfy ourselves of this, is to glance once more at what I have described as his "handy tools." They are all of them eminently operational in the statistical sense. We need but try our hand at the task of constructing, from statistical material, models of a firm, a household, a market, in order to find that in doing so we run up against difficulties with which those tools are intended to cope. They are useful irrespective of that, to be sure, but we do not appreciate them fully until we realize that, whatever else they may be, they are first of all methods of measurement—*devices to facilitate numerical measurement*—and parts of a general apparatus that aims at statistical measurement. They are perhaps not the best possible ones and they are certainly not the only possible ones. But they were the first of their kind, and econometric endeavors could hardly have started from anything else.

For instance, it is obviously no coincidence that those endeavors were, on a large scale, first directed toward the derivation of statistical demand curves: Marshall's theory of demand had provided an acceptable basis. There would have been little point in imposing all those restrictions that

enable us to define point elasticity or that kind of demand curve itself if he had not wished to work out a method of approximation that would, in many cases at least, prove manageable statistically. In fact, those restrictions which give rise to many objections become completely understandable only if we look at them from this standpoint. Take the concept of consumers' rent. It is true that not much has come from this particular suggestion. But unless it was meant to lead up to statistical evaluation of a quantified welfare, why should not Marshall have been content with mentioning the existence of such a surplus, a function of many variables, instead of courting the danger of misunderstanding and opposition by insisting, as Dupuit had done before him, on this kind of simplification that would reduce the number of independent variables to two? The same reasoning applies, of course, to his cost and supply functions and, among other things, explains his adherence to those long-run industrial supply curves that do not look well to the theorist, yet open up certain statistical possibilities⁷ that are closed to more correct and more general models.

Marshall's conquests in the field of monetary theory could also be invoked in support of the thesis that the vision of a theoretical apparatus that would effectively grip statistical fact pervades all his work and actually is its most distinctive feature. Boehm-Bawerk's reasoning is no doubt quantitative. But the possibility of statistical measurement seems never to have occurred to him, and he did nothing to fit his theory for it. Walras' system, while not as hopeless as many of us believe it to be, presents difficulties formidable enough to deter. Only Marshall's teaching urges on. Never mind that it also cautions. We can do with that, too. Urging or cautioning, he is still the great teacher of us all.

Standing on the edge of the ravine in which we all vainly seek for a concrete highway, we behold him whenever we look back, serene, in Olympian repose, safe in the citadel of his beliefs, still telling us much that is worth our while to hear—nothing, however, that is more worth while to ponder over than this: "The more I study economics the smaller appears the knowledge I have of it . . . and now at the end of half a century, I am conscious of more ignorance of it than I was at the beginning." Yes, he was a great economist.

JOSEPH A. SCHUMPETER

Harvard University

⁷ Those possibilities have been partially exploited by G. T. Jones in his work on Increasing Returns.

A MULTIPLIER ANALYSIS OF ARMAMENT EXPENDITURE

Under present programs of increasing armament expenditure, it becomes necessary to adapt financial policy to progressive stages of employment in order to permit the maximum increase of national income. Traditional monetary tools apply only to general unemployment and full employment, and not to the intermediate stages. Since to reach full employment the economy must pass through successive stages of decreasing total unemployment, with full employment appearing much earlier in some sectors than in others, a policy relevant to this development at any intermediate stage is necessary. The recent experience of Great Britain, Canada, and Germany, in passing through this period of segmentary full employment, indicates a need for new controls over the distribution and amount of savings. In order to channelize the flow of funds into non-saturated fields, the federal government in this country might well consider: (1) licensing of new security issues; (2) differential reserve requirements for commercial banks; (3) increased control over the disposable funds of other financial institutions; (4) revival of the undivided profits tax; and (5) Treasury absorption of private savings. Still other measures might be used when it becomes necessary to enlarge the total supply of savings, such as: direct propaganda, curtailment of certain types of consumption, increased social security payroll taxes, and "deferred savings certificates" to government bondholders. A numerical estimate of maximum diversion can be made on the basis of these proposals.

Government expenditure, expanded by war needs, now absorbs more than one-half the national income of most of the belligerent nations. In England, almost 60 per cent of the enlarging national income must be transferred to the government for use in supporting the war effort.¹ Estimates of the German government's share in the national income of the Reich run as high as 72 per cent.² Japan and Italy use at least 50 per cent, although no complete data are available;³ and Canada is apparently diverting about 30 per cent.⁴ The United States, with the addition of the lease-lend program, will probably reach 20 per cent of an 80 to 85 billion dollar national income during 1941.⁵

¹ This percentage, as well as the others, is a very rough approximation, useful only to show order of magnitude. It is derived from the *Economist's* estimate for January, 1941: national income at a yearly rate of 8.12 billion pounds, and government spending at a rate of 4.63 billion per year. *The Economist*, February 1, 1941, p. 138.

² *New York Times*, March 9, 1941, p. 16, citing a report on wartime spending prepared for the Department of Commerce by H. Arnold Quirin.

³ Japan: *The Statist*, August 31, 1940, p. 189, citing the *Toyko Gazette*, shows that the national income to be expected for the year 1941 is about 30 billion yen, of which 12 billion will be taken by various savings devices. *New York Times*, January 24, 1941, p. 5, indicates that government plans call for 4.5 billion yen of taxes in addition to all borrowing. This means a transfer of 55 per cent of the national income to government.

Italy: *The Economist*, April 6, 1940, pp. 616-617, presents the only budget data for fiscal 1941 from which an estimate can be made.

⁴ From data in the *Bank Letters* of the Bank of Nova Scotia and the Bank of Montreal, I have estimated the current rate of national income at 5.5 billion dollars. From this, normal expenditures of .39 billion (Bank of Canada, *Statistical Summary*, August-September, 1940) and 1.46 billion of war costs (*New York Times*, March 9, 1941, p. 18), must be diverted to government. This is almost 34 per cent.

⁵ Federal spending is expected to be at the rate of at least 17.5 billion dollars per year, and if national income falls within the estimates which range from 80 to 85 billion, the percentage of it diverted to the national government will be between 20 per cent and 22 per cent.

When nations begin fighting each other, they come to realize, more clearly than when they are merely fighting depressions, the need both for planned efforts to maximize the national income and for planned transference of a major portion of this income to government hands for use in the public interest. Any nation has two objectives in wartime: (1) to meet war expenditure out of an expanding national income;⁶ and (2) to employ the best all-round method of commandeering a large share of the national income for war purposes, after the effective limits upon the conversion of formerly idle resources have been reached.

The rapid growth of arms spending over the last few years began in every nation during a period of general unemployment. That condition of general unemployment has the following characteristics.

1. All resources are underutilized; this includes the existing plant in producers' and consumers' goods industries, as well as the "attached" laborers. The factors are in differing stages of use, such that the idle reserves of some types of machinery or of skill are smaller than those of other types. These comparative shortages will become bottlenecks, segmentary full employment, once a general increase in the use of all machinery and labor is initiated.

2. Net additions to investment will raise the national income by more than the amount of initial expenditure; *i.e.*, there is a multiplier relationship in real terms. Controlled increases in the quantity of circulating money produce an increase of output and employment, without any necessary price rise. (a) Net income-creating expenditure by the government is equivalent to private measures as an initial increase in investment. (b) The consequences of government finance may, however, be a reduction of private investment, so that, although government expenditure does become a part of the multiplicand, it may do so only by reducing the other parts. Conversely, the conduct of government finance might cause an increase in the amount of private investment going into these other parts of the multiplicand (such increases need not be classed with tertiary effects, where additional invest-

⁶ Dan T. Smith, "Economic Consequences of Deficit Financing: A Review," *American Economic Review* (Suppl.), February, 1941, pp. 89 ff., has made a case against maximizing real national income. In his view, long-run interests would be better served if present civilian consumption were restricted in order to meet war needs, without marked expansion of plant capacity. Any expansion would leave producers after the war with great overcapacity in fields where no sufficient increase in consumer demand might conceivably be expected to arise. I could agree with Professor Smith if he had simply said that a limit is imposed on national income by purely mechanical restrictions upon productive capacity in particular fields. But when he defines the maximum in terms of an expected insufficiency of future aggregate demand, he is merely accepting "stagnation" as inevitable. Such a view is a logical outgrowth of the line of thought which supposes that depressions will be eliminated by "cutting off the booms and filling in the troughs." What this actually means is that, in attempting to reduce the amplitude of cyclical swings, we accept a condition of permanent stagnation, with employment and output held below the high levels which are reached only during prosperity.

ment is made in response to the rise in income resulting from the initial investment). (c) Allowing for the subsequent subtraction effect of investment which is self-liquidating,⁷ the greatest permanent stimulation of national income is furnished by investment of the type which does not have to be amortized out of receipts from the sale of its future yield of consumers' goods.

3. Increases in the proportion of national income spent for consumption purposes will increase the multiplier which operates upon any given investment-multiplicand to produce the level of national income. (a) If increased consumer-spending selects goods with a low elasticity of production which are not currently produced in sufficient quantities, or if it selects goods which must all be diverted to the military program, the price behavior characteristic of full employment will come into operation in this segment of the economy. (b) A generally raised propensity to consume may shift liquidity preference schedules upward, raising the interest burden for current borrowers, both private and public.

Stages of Employment

The experience of the warring nations during the past several years has demonstrated more clearly than we had ever recognized before that there are three significant stages of employment in a developed economy—general unemployment, segmentary unemployment, and full employment—with the lines between them rather difficult to draw. Too often in the literature there has been the bland assumption that only the two extremes must be considered. Even the recent excellent article by Professor Pigou fails to recognize this distinction sharply.⁸ In this article, Professor Pigou distinguishes three stages: (1) general unemployment, with the "slack" being taken up; (2) full employment, in a loose sense, when government is absorbing an *increasing proportion* of a constant total; and (3) full employment, again in a loose sense, when government is absorbing a *constant fraction* of the nation's constant total of economic power. He does not break down his first stage into the two phases during which this slack may be reduced: *i.e.*, first, the phase during which unemployment is being reduced in all sectors, and later, that during which unemployment is reduced only in the important segments which still remain underemployed.

Under such formulations, at any point short of full employment the maximization of national income should be brought about merely by con-

⁷ See P. A. Samuelson, "Theory of Pump-Priming Re-examined," *American Economic Review*, September, 1940, pp. 497-498. Furthermore, the deflationary effect of self-liquidating payments is comparable in the monetary sphere to a net repayment of deposits to commercial banks for the retirement of loans. To the extent that funds are not re-loaned the economy is forced to bear, at this point, net dissaving.

⁸ A. C. Pigou, "War Finance and Inflation," *Econ. Jour.*, December, 1940, pp. 462-468.

tinuing to enlarge either the multiplicand of new investment or the multiplier dependent on the propensity to consume, or both, until the limits set by full employment are reached. Actually, persistent increases in the volume of investment or the propensity to consume will only be certain to continue to increase the total output while *all* goods can be freely increased in quantity from supplies of unemployed resources. Unfortunately, the elasticities of production of all goods are not sufficiently alike to allow continued expansion of all to a point of simultaneous arrival at full employment. In fact, some segments of the economy not only reach full employment before others, but those arriving first often then become a barrier to the expansion of the rest. For example, if the multiplicand is increased by an increased flow of funds into the hands of those who will increase the demand for heavy producers goods, there will, none the less, be no increase in primary production if the steel-producing segment of the economy has already reached full employment. Or an increase in the average propensity to consume, consisting let us say of a desire to spend larger proportions of income on automobiles, would likewise be prevented from increasing the national income if that industry had reached capacity. True, the recipients of the profits of the resulting high prices may use them to purchase goods still in relatively elastic supply; and to that extent employment is increased. But to the extent that these profits are, in turn, used to purchase goods similarly limited in quantity, an upward spiral of prices will be under way with no increase in real income. The so-called "vicious spiral" of wages and prices begins when these automobile laborers wrest away part of the increased profits from their employers, and then spend their increased incomes on more automobiles, or goods similarly produced to capacity. The spiral goes from higher prices to higher gross revenue and then to wage increases. The wage increases mean increased spending, and the increased spending boosts prices still higher, setting the same sequence in motion again.

It seems fairly clear, then, that the recognition of this second stage, segmentary unemployment, introduces a need for additional planning of the form and quantity of the spending of new funds, if there is to be a maximization of real income. In the third stage, as has long been admitted, increases in the quantity of money can only produce continuous rises in prices. Because the characteristics of full employment have already received more public attention than they deserve, comparatively, this paper will be devoted chiefly to the analysis of the first two stages.

Great Britain and Canada have gone from the first to the second of these stages while still retaining the pattern of economic control found in the United States. Both have subsequently, as they moved through the second stage toward the third, abandoned much of the pattern in favor of more systematic over-all control.

Great Britain suffered general unemployment until the very outbreak

of the war. Measurement, however, is difficult because inferences based upon the unemployment among workers attached to an industry are likely to be in error. Unemployment of men can mean either underutilization of plant, with the consequent idle working force, or full employment of mechanical equipment without need for the services of many of the attached laborers. The reduction of unemployment of manpower by over one-half, from 1932 to 1937, can probably be interpreted, however, as showing largely the trend upward in the use of men *and* machines, following the general unemployment of the depression. The same analysis holds for the pre-war reduction of unemployment following the recession of 1937-1938. Unemployment, which had increased generally, had been reduced by mid-1939 below the low level of 1937 to 8.2 per cent of the insured workers in Great Britain and Northern Ireland. But with the advent of war, the second stage began. Bottlenecks appeared, especially in engineering, chemicals, and all trades relying heavily on imported materials. Despite the increase in the armed forces, which amounted to about 5 per cent of the employable population, unemployment increased to 10.3 per cent in February, 1940. From this date, as control weapons were instituted, the bottlenecks were to some extent eliminated, with the result that by September, 1940, only 5.2 per cent remained idle.⁹

In Canada, where unemployment statistics are very inadequate, the Bank of Canada's employment index did not reach the 1929 level until November, 1939. In the first war-budget speech, September 12, 1939, Finance Minister Isley noted the existence of general unemployment and announced a program appropriate to that condition.¹⁰ By January, on the occasion of the announcement of the first war loan, while unemployment was starting to increase as it had in England, official policy became that consistent with partial full employment. As late as April, 1940, the editors of the *Monetary Times* were insisting that general unemployment still prevailed;¹¹ they insisted that there were still unused plants, as well as unused skilled and unskilled workers, in every industry. By July, however, these editors themselves were ready to admit that conditions had come close to those of partial full employment.¹² By October, the Bank of Montreal was able to state that 95 per cent of all industrial capacity was being utilized.¹³ On No-

⁹ This percentage, as well as that for February, is too high due to the fact that although new workers are counted among the unemployed, the official statistics make no addition to the number of insured workers after July, 1939. Consequently, this percentage is calculated on too small a base. Further allowance should be made for the fact that Northern Ireland had an unemployment percentage of 21 per cent as late as August, 1940, thus distorting the total for "Great Britain and Northern Ireland." All employment data are from the *Ministry of Labor Gazette*.

¹⁰ *Monetary Times*, December 16, 1939, pp. 757-758.

¹¹ *Ibid.*, April 27, 1940, p. 554.

¹² *Ibid.*, July 6, 1940, p. 10.

¹³ *New York Times*, November 24, 1940, p. F 1.

vember 21,¹⁴ Mr. Isley reassured the nation that it had not yet passed completely through the second stage, ". . . we are still at the stage where we can expand total production by a careful use of those resources which are unemployed or poorly employed."

Germany went through these stages before the outbreak of the war. One-third of insured wage and salaried workers were unemployed in January, 1933; by June, 1938, including those occupied in labor or concentration camps among the employed, there was only 1.3 per cent unemployment. The largest reduction of unemployment came during 1933-1934; thereafter, during the stage of partial full employment, the rate of absorption slowed down to less than one-third the earlier rate. The volume of industrial production followed this same general pattern; while total national income increased at a much less rapidly declining rate, probably due to the increased productivity and improved organization which developed as the economy was passing through the stage of partial unemployment. The policy of the first Four Year Plan, beginning in 1933, was for increasing employment and expanding output (*Mengenkonjunktur*) without price rises. The bottlenecks, which had already become serious in some raw materials by 1935, called for more and more ration-control; and by the end of 1937, practically every industry was operating to the limit of existing capacity. In March, 1938, Dr. Schacht officially declared the second stage ended and promulgated a revised fiscal policy in conformity with these altered conditions.

General Unemployment

Multiplier analysis must necessarily apply differently to each of these stages. In the first, as has already been suggested, any net enlargement of the multiplier or the multiplicand will produce increases in the national income. There are differences, however, in the potency of various types of increase. Arms expenditures, financed during the first stage by new money, enter the economy at the point where supplies are purchased and soldiers are paid. There is no reason to suspect any marked variation from the prevailing average over the community in the disposition of these receipts—as between consumption and saving. In contrast, funds just released entirely into low-income hands will tend to raise the average propensity to consume.¹⁵

Defense spending during general unemployment cannot, then, be expected directly to alter the propensity to consume.¹⁶ The multiplicand, on the other hand, may be increased greatly for one or more of five reasons.

¹⁴ *Ibid.*, November 22, 1940, p. 2.

¹⁵ Cf. John Lindeman, "The Armaments Program and National Income," *American Economic Review*, March, 1941, pp. 42 ff.

¹⁶ Unless perhaps it can be assumed that there is a large increase of installment buying precipitated by the swift upward rise of income.

1. The fact that armaments are not purchased by governments with the expectation of using them to produce goods for sale removes entirely the limitation imposed by profit calculations. Private investment occurs only in amounts consistent with earning a profit. Skyscrapers are built to yield returns; they appear only if there is some prospect of gain from their rental. Pyramids, on the contrary, are built indefinitely, so long as there is land to build upon. Arms expenditures, like the pyramids, can be arbitrarily continued and increased wholly without regard to declining profit rates.

2. Even if private investment could be made in continuing amounts as sizable as arms expenditure during a period of general unemployment, the stimulation of the economy would be less. Private investment is only made in order to give off goods for sale, and it must be amortized from sale revenues. As the amortization takes place, new investment would have to be enlarged by that added amount in order to maintain any given level of incomes.¹⁷ On this basis, the ideal non-deflationary investment is one which does not add to the flow of consumers' goods in the future. Government expenditure on armaments is the fulfillment *par excellence* of this requirement. There is only one real danger. To the extent that additional taxes are imposed, constituting additional leakages, the expansionary effect of the arms spending upon aggregate demand is proportionally reduced.¹⁸ If the tax danger can be avoided, such dead weight expenditure as that upon armaments would seem to constitute the best type of addition to the multiplicand. The need to earn profits, whether it be in private investment or in self-liquidating government investment, has the effect, first, of limiting the amount of investment that can be made, and, second, of requiring deflationary repayments upon what investment is made.

¹⁷ As Professor Samuelson has correctly pointed out to me, this means that maintenance of a constant amount of net investment will be possible only with larger and larger gross investment, when projects are of a self-liquidating variety.

¹⁸ There are many tax experts who argue that increased spending will raise the national income sufficiently to yield tax revenues adequate for repayment of the borrowing. Actually each tax leakage is more likely simply to introduce a negative multiplier so that net income is held at its old level. To whatever extent taxation may be derived from attempted savings which have already become leakages, however, the amount of new borrowing necessary is reduced. But even in Germany where controls are more stringent than free capitalism could ever tolerate, there has been continued necessity for resorting to deficit financing in order to mop up all savings leakages, and to counteract the negative multiplier introduced by any taxation which did not draw solely from attempted savings. From 1932-1937, Germany's national income increased by about 50 per cent, while tax revenues increased about 200 per cent, largely because personal and corporate incomes rose into the higher bracket tax rates. But to maintain that higher level of national income, despite the rapid increase of tax revenues, the rate of deficit spending itself (financed since 1937 to a larger extent by direct borrowing than by credit creation) had to be steadily increased. During this period, before the outbreak of the war had more than doubled state demands upon the national income, there was no considerable attempt to enforce a reduced propensity to consume; consequently, it seems reasonable to conclude that the increasing rate of deficit spending over these years was not made necessary by artificial conditions.

3. Recognizing that dead-weight public expenditure is the most potent stimulus, it still remains true that the injection must be large in quantity and not subject to precipitous reductions. Deficit spending by the United States government during the late depression, it has been rather successfully argued, was neither sufficiently large nor continuous. Defense spending is another story. No one wants to limit or stop it just because "too much" has already been spent. The United States in fiscal 1941-42 will be spending at least 10 billion dollars on its military program alone—more than the total of all federal expenditure for any year of the depression. Barring involvement in war, the military "plant" will reach its expected peak in fiscal 1943, and outlays for new equipment will be tapered off throughout that year. But every year thereafter an outlay of 6 billion dollars will be necessary for maintenance. Clearly, neither an inconsequential amount nor a precipitous reduction in outlays is contemplated in the case of war expenditure.¹⁹

Difficulty must always arise, however, when the government undertakes a program of this size, if it has previously been engaged in other deficit financing operations. The United States had an immense program of public works, of insured loans on private account (urban and farm building, for example), and of direct loans to business, all under way when the defense program came in. Only two conditions would justify its reduction or elimination: the arms spending may bring full employment and eliminate the need for the earlier program, or arms production may require actual resources which the other operations were using. That is to say, either the arms spending may be so immense as to bring full employment, in which case the works program should be postponed;²⁰ private housing no longer needs stimulation, and the funds of lending agencies may be diverted to government use; or the arms spending may require all available supplies of particular resources which are likewise used in public works, private building, or by the borrowers in private industry. In either case, the conditions of segmentary full employment would compel government withdrawal from

¹⁹ Of course, the problems of post-war disarmament, or the stoppage of orders at the end of participation in a war, do create a major threat of discontinuity. The best immediate antidote must be found in maintenance of the deficit, with government spending shifted to fields in which most of the dependent plant and men could be employed. The supposedly inevitable post-war collapse, coming shortly after this stoppage of arms production, will be countered in part by an enormous release of deferred consumer demand for durable goods, such as that described in George Terborgh, "Present Position of the Durable Goods Inventory," *Federal Reserve Bulletin*, October, 1940, pp. 1040-1044. But a continuance of government spending, so long as men are not all employed in private industry, will assure a high level of activity until this deferred demand shall have become effective.

²⁰ In Germany, for example, outlays for relief (not strictly comparable to United States' work relief) were cut by seven-eighths from fiscal 1932-33 to fiscal 1936-37 because the approach of full employment made smaller relief outlays necessary—although the net deficit could not be decreased in the same way.

the other fields.²¹ Both explanations have been given in official circles for currently proposed reductions in public works, although neither has been adequately substantiated publicly.

4. It is customary to regard the private investment induced by an initial government outlay as tertiary, rather than as part of the original multiplicand. That practice is still sound for the investment consequent upon a rise in income which follows large government outlays. But the investment made by private firms who receive government contracts, and whose plants are paid for by the government through additional amounts attached to the payment for goods purchased, would seem to be fittingly regarded as primary multiplicand. Since for tax purposes such plants may be amortized in five years, from these government funds, the effect of the investment is exactly the same as if the government had used an equal amount of money to buy battleships. Such a plant is usually constructed in one complete operation. The multiplicand is increased, in that year, beyond the amount of government outlay, by the amount of private outlay on new plant for government orders. But then each succeeding year, the government payment to the private owners is potentially as deflationary as any repayment of private investment out of the receipts from sales. Each government payment in amortization of the private investment requires an equal offsetting increase in gross investment if the level of national income is to be maintained. On this basis, the national income will only be certain to reach its maximum if the outlay on each new plant is made directly, and all at once, by the government itself.

This conclusion is reinforced by the allegedly widespread business fear of new plant. Such plant is said either to mean expansion of capacity beyond all possible use in peacetime, or to give competitors a cost-free plant with which to begin cutthroat harassing of the market. Great Britain and Canada, whether for these reasons or others, have practically eliminated private investment financed through the capital markets; and Germany has rigid control over new issues. Only Great Britain, however, goes so far with an excess profits tax as virtually to prohibit investment in private plant from business savings. Germany, by contrast, was able, through severe control, to provide a large portion of the funds necessary for financing the *ersatz* plants from savings made by the chemical and textile industries themselves; only 12 per cent of the total outlay came from the Reich treasury, a small share from banks and coöperative loans, and the remainder from governmentally licensed issues of shares and securities (often forcibly sold to ancillary industries).

²¹ I have assumed away a third possible limitation, imposed by the condition that there is a maximum limit set upon the total amount of government deficit. In such an event, the government would rightfully curtail all but the most powerful stimuli.

5. Apart from the direct effect of government expenditure, the multiplicand may be increased during a period of war activity by a growing favorable balance of international payments on current account. The situations of Great Britain and Canada provide an interesting contrast for the case of warring nations. Despite valiant efforts, Great Britain's current balance has been growing steadily worse. Her export markets are greatly reduced, and her essential imports are still increasing. What she cannot buy with exports, she must secure by disinvesting in gold or foreign securities. As a consequence there is still segmentary unemployment in the affected exporting industries, such as coal. Canada, on the other extreme, by curtailing all non-military and non-subsistence imports, has kept her rising national income from bringing in the increases consistent with her old propensity to import. At the same time she has increased her investment multiplicand by sending such large quantities of food and munitions to Great Britain that her favorable balance during the first year of the war was greater than the Dominion's total war expenditure. The United States, possessing as it does the facilities for producing so many essential war materials, has steadily increased its export balance despite embargoes, despite curtailment of shipping services and the loss of continental markets under "cash and carry," and despite the placing of heavy duties on non-essential imports into Canada and Great Britain. One difficulty with such increases in the multiplicand, however, clearly lies in their distorting effect. Established export trades are contracted to the levels of the home market, while aircraft, ship-building, and munitions are expanded to capacity. A wartime export balance coming during conditions of general unemployment enlarges the multiplicand, and the nation is thankful for it; but it also directly aggravates the distortions which are developing into partial full employment.

War expenditure, beginning at a time of general unemployment, contributes uniquely to the multiplicand because, first, each injection is not limited to the amount capable of earning profits; second, each injection of spending is not followed by subsequent deflationary repayments; third, popular approval makes possible large government deficits; fourth, government direct investment in plant for producing armaments has greater stimulating effects than private investment; and fifth, the "favorable balance on current account" of a nation possessing the resources of the United States is likely to increase when all nations are building armaments.

Segmentary Full Employment

The multiplier resulting from defense spending must necessarily soon push the economy into the stage of segmentary full employment. It then becomes imperative that controls be introduced to prevent sharp price increases in the bottlenecks, in order to avoid the outbreak of cumulatively inflationary price spirals. These controls must be of three types: (1) control

over the *source* of government funds, and the quantity of new money created by the banks, (2) control over the *direction* of government spending to curtail outlays by other departments on goods needed for the war arsenal, and (3) direct control over the *prices* paid by government for its purchases, as well as by the general public. Until the stage of full employment is virtually reached, however, it is possible to control prices and increase the war inventory by using existing governmental machinery without invoking direct rationing for the general public, provided the immediate transfer to government does not increase by more than, say, 15 per cent of the national income. I shall deal only with possible methods of controlling the source of government funds and the quantity of new deposit creation.

Most of the already voluminous literature on the subject of defense finance has been premised on the assumption that once bottlenecks appear, and price increases seem imminent, all hope of securing the arms supplies from an addition to national income, provided by employing idle resources, must be abandoned. That fear is well meant, but not altogether necessary. True, it is no longer possible to enlarge the national income by simply releasing new funds in whatever direction. But there is still no necessity for freezing the existing level of national income by requiring that all arms expenditure be financed by savings and taxation diverted from the current income stream.

Control must be instituted over the institutional supplies of funds. On the long-term capital market new issues and refinancing must be licensed by the Securities and Exchange Commission to conform with the government's plans for plant construction under the defense program. English supervision has been so complete that only 16 million pounds of private issues were allowed during the first year of the war, while over 500 million of new investment was financed directly by the government according to its own specifications.²² Such strict control is not yet necessary in the United States, although the Reconstruction Finance Corporation is fortunately available, supplied with funds from the long- and short-term money markets, to lend directly in those cases where licensees cannot secure private commitment. On the short-term money market, where the commercial banks furnish a principal share of the funds, several checks are operative. The banks may be denied the further use of their reserves by the imposition of differential reserve requirements.²³ Or they may be subjected to increased

²² *The Economist*, July 20, 1940, p. 95.

²³ Cf. "Special Report of the Board of Governors," *Federal Reserve Bulletin*, January, 1941, pp. 1-2. The Board recommends: (1) an increase in statutory reserve requirements; (2) authorization of the Open Market Committee to raise reserve requirements as much as 100 per cent above the statutory figure, and to shift the differentials between the three classes of banks; (3) the inclusion of non-member banks within the scope of the reserve requirements; and (4) prevention of potential increases in excess reserves, such as the issue of greenbacks, devaluation, and continued addition of inflowing gold to the monetary stock.

portfolio supervision (principally through the Federal Deposit Insurance Corporation) requiring investigation into the economic incidence upon resources of a borrower's project before granting of a loan—such supervision to be advised by the Office for Production Management and the price study division of the Defense Advisory Commission. And, of course, all funds, new or reissued, flowing into government hands from the banks, will be directed under the same control only into the purchase of goods which can physically be produced under the price control provisions already operating for government contracts. As still another channel through which to guide commercial bank funds, the government agencies for insuring commodity loans and housing mortgages can arbitrarily limit their scope, or enlarge it, according as increased disposable incomes to farmers or increased building activity may fit into the plans of the defense commission.

There is another problem, however. What good does it do to circumscribe commercial bank activity if this merely means a shifting in functions, with the institutional savers stepping in to direct funds along avenues denied to commercial banks, and leaving to commercial banks that portion of the activities of the institutions now deemed legitimate? Further curbs must be imposed. But the machinery for such curbing is nearly complete already. The three chief channels of institutional savings in the United States are the insurance companies, the savings and loan associations, and the corporations which lay aside business savings.

Insurance companies have annually over 4 billion dollars in the form of additions to reserves and in currently liquidating loans yielding funds for relending.²⁴ This amount can first be limited in its effect by the use of such voluntary measures as those announced by the Treasury on January 23, 1941, for inducing insurance companies to contribute larger sums to the Treasury, which will of course then divert them according to the coördinated plan.²⁵ The banks will undoubtedly be specifically forbidden to take the type of bonds designed primarily for sale to the insurance companies. But once such measures fall short, the second step might be, in view of the findings being compiled by the Temporary National Economic

²⁴ *Hearings before the Temporary National Economic Committee*, "Life Insurance," Part 10-A, Washington, 1940, p. 92, table showing that this has been true from 1935 through 1938 for the total of the "twenty-six largest legal reserve life insurance companies domiciled in the United States."

²⁵ *New York Times*, January 24, 1941, p. 1, ". . . the Treasury's plans call for the creation of a new type of long-term bond which will appeal primarily to institutional investors such as life insurance companies and endowed funds.

"By redeeming part of the issue every year at par it would be possible, it is thought, to keep the price of the bonds fairly stable. Investors would be reluctant to bid a high premium because their holdings might be among the bonds called for redemption. Similarly there would be little disposition to sacrifice the bonds much below par because there would always be the chance of having them called for redemption at that level."

Committee's staff,²⁶ to begin now the government chartering and inspecting of insurance companies which has so long been necessary in the public interest. The plan is justified on purely social grounds. Providing protection to insurance company policy holders is no more than equitable in view of the insurance provided all bank depositors and savings and loan association depositors, and the assistance provided all investors in the securities markets. But coming now, it can be of even greater economic benefit by permitting the extension of the supervisory standards, herein proposed for the commercial banks, to include the insurance companies as well.

As for the savings and loan associations, more than three-fourths of them are already either federally chartered or members of the Federal Savings and Loan Insurance Corporation,²⁷ and subject to requirements which make the above conditions easy to meet. They are permitted to invest the more than six-tenths of a billion which they newly place each year only in approved housing or in government bonds. The supervisory agency can apply here the same standards invoked for commercial banks, in deciding whether or not more housing should be encouraged. If housing is to be discouraged, these current savings and current liquidations should be directed to the federal Treasury where their use can be fully controlled.

The savings of business corporations are already under some control through the amortization provisions of the profits tax. Savings otherwise attempted out of excess war profits can simply be taken in taxes. As for the amount of business savings which would normally be set aside, even without the excess profits of the war situation that can best be reduced to the same directional control by revival, solely for the period of the war emergency, of the undivided profits tax—revised to apply also to unincorporated enterprises. Or if this should appear too drastic, administratively complex, or unjust, there is also the alternative, suggested by the German experience, of inducing businesses to invest in government securities whatever cash balances they are currently accumulating in contemplation of investment.²⁸

There remain only the small savers whose funds are not diverted into

²⁶ Gerhard Gesell and Ernest Howe, *Study of Legal Reserve Life Insurance Companies*, TNEC Monograph No. 28, Washington, 1941; cf. also the testimony of Sumner T. Pike and Gerhard Gesell before the Temporary National Economic Committee, summarized in *New York Times*, March 1, 1941, p. 29.

²⁷ In terms of new lending each year, the most significant measure for this purpose, more than three-fourths of all activity in 1937, 1938, and 1939, was carried on by associations of these two classes, according to the *Seventh Annual Report*, Federal Home Loan Board, Washington, 1939, p. 192.

²⁸ Neither explicit business savings, nor those disguised in excessive depreciation allowances, are necessarily represented by accumulations of cash within the corporation. For an analysis of control over the flow of funds, however, only the actual use of cash is significant.

any of the organized channels just considered. For them, the program of savings stamps and small-denomination investments, announced by the Treasury on January 23, is devised. These same individuals contributed about four-fifths of a billion dollars to postal saving and baby bonds last year. And with this final method, supplementing all the others for securing a major share of current savings, and of controlling the creation of deposits,²⁹ the government should have sufficient power to set at rest most fears of a runaway inflation and to permit it to undertake a program for enlarging the physical volume of output to its maximum.

But nothing has yet been done to check the spending of consumers who receive expanding total incomes as a result of the reemployment of idle men and materials. The total disposable income of all workers as a group will increase whether individual wage rates are raised or not. As a result of the spending of new funds, or of savings, upon this most "expansive" form of new investment, armaments, the consuming public does have more money to spend. If it proceeds to purchase goods which are in relatively inelastic supply, then prices will rise despite all of the government controls just discussed. Only the amount of the initial spending will have constituted an addition to the real national income. But if, on the other hand, the secondary spending is upon goods in relatively elastic supply, then more men are employed, total income rises, and this next group of men has incomes with which to continue the effect of the multiplier.

The government's rôle in the case of secondary spenders should probably be, first, before real income has reached its maximum, to make every effort to increase the supply of food, clothing, and housing available to these consumers, even if this means permitting some new investment in these fields. Then, secondly, as in Germany, it may be possible to increase real output for consumers by cultivating a desire for things which can be easily supplied, diverting the increased consumer spending into such lines as an increased tourist trade. As a third step, for those goods the supply of which must be limited, excises may be imposed, thus rationing the available supply among the consumers who are able to pay most and increasing government revenue.³⁰

Another device, useful when consumer spending has ceased to flow into unemployed sectors, is an increase in voluntary saving. Japan, using the

²⁹ It must be stressed that no such sleight-of-hand as that of 1917-18, through which private persons borrowed at the banks in order to secure funds for the purchase of government bonds, should be tolerated. This practice has been allowed in several more devious forms in pre-war Germany; and in England and Canada there is still no prohibition.

³⁰ The inequities of such a program are too flagrant to permit its use for any extended period or over more than a very few postponable, or relatively unnecessary, items in the consumer's market basket. This diversion of funds to government hands is, of course, useless as a preventive to inflation unless the funds are in turn released into sectors which still remain underemployed, or are held idle in a Treasury balance representing an excess of receipts over expenditure.

British method of "friendly societies" and a powerful propaganda, has succeeded in diverting the fantastic fraction of 30 per cent of her national income to the government by means of savings which assertedly are entirely voluntary.³¹ At present, in the United States, these voluntary savings may go into any of the controlled channels, including savings banks, insurance companies, and savings and loan associations, as well as directly into government bonds. If still further exactions become necessary, plans of increased taxation may be accompanied by compulsory saving. The most obvious form of the latter would be through an increase in the Old Age Insurance and Unemployment Insurance payroll taxes under Titles VIII and IX of the Social Security act, providing a claim on the future for those who will be thrown out of employment by old age or by the frictions of post-war readjustment, and providing a useful avenue for the release of new funds to revive normal activity after the war.³²

But, if compulsory savings are to be taken from everyone who is building up an equity in a social security account, both fair play and sound fiscal management require similar sacrifice from those other government creditors, the holders of government bonds. As a supplement to its new policy of removing the tax exemption, the Treasury might conceivably pay a part of its current interest obligations in deferred savings certificates, to be serially redeemed, or redeemed by lottery, in amounts consistent with monetary conditions in the future. The "indents" paid out for the interest on government debt in the 1780's even circulated as acceptable currency for several years without discount. Certainly the Treasury's prestige, coupled with an acknowledged need to control the flow of money payments in order to prevent inflation, could permit issuance of non-transferable notes in partial payment of interest obligations without destroying low government interest rates. To carry out the policy of compulsory savings with full justice, there must also be a levy of the same form on all unearned income, as well as all earned income for which no social security payroll assessments have been made. A graduation similar to that proposed by Keynes would probably have to be worked out.³³ Such a measure would, no doubt, to a large extent, merely secure funds which would have been secured through the channels already specified, and thus constitute only a slight net addition to government revenue. Such "forced savings" have the advantage for all fixed income receivers, at any rate, that they secure a claim on the future income stream,

³¹ *The Statist*, London, August 31, 1940, p. 189, citing the *Tokyo Gazette*. The report states that there are 580,000 savings groups with a total membership of 35 million people in Japan and her overseas territories.

³² It is very likely, too, that such a technique would be much more favorably received by labor groups than was the Keynes plan. An established machinery, whose operations everyone has come to accept, if not to understand, would simply be utilized to save for the working man a part of his war-boom wages in preparation for the day when, as the general public now confidently expects, the post-war depression will strike.

³³ J. M. Keynes, *How to Pay for the War*, New York, 1940, pp. 34-44.

which is far preferable to the "forced loss" imposed by inflation.

All of the foregoing methods, if taken together, would constitute such an effective limitation upon promiscuous consumer spending that the necessity for control of the direction of private investment would thereby be lessened; for there is no inducement to private investment in sectors where no demand is allowed to exist. This is the condition which will prevail when complete full employment has been reached. At that time, all of the weapons just enumerated must be employed to divert income into the Treasury and to avoid the dangers of inflation.

So long as the real national income can be increased, or so long as any propensity to save is dissipated, the government may still use new money to

ESTIMATED MAXIMUM DIVERSION OF "SAVINGS" TO THE TREASURY
(Figures for one year; 000,000,000 omitted)

<i>Source</i>	<i>Potential Revenues</i>
Life Insurance ¹	\$ 4.5
Social Security payroll taxes ²	4.0
Federal credit agencies ³	3.0
Reissued funds of commercial banks ⁴	3.0
Small savers ⁵	2.0
Trusts and corporations ⁶	1.0
Interest reduction on public debt ⁷	.7
Savings and loan associations ⁸	.6
Total	18.8

¹ Estimate based on "Total Funds Available for Investment," *Hearings before the Temporary National Economic Committee*, Part 10-A, Washington, 1940, p. 92. This source includes only "the twenty-six largest legal reserve life insurance companies domiciled in the United States." Adjustment is made for the maintenance of a normal cash balance.

² Estimate assumes an increase of 1 per cent in the employee and employer contribution under Title VIII; the same effect could be produced by an increase in the taxes which support unemployment insurance.

³ This estimate excludes the amount of lending conducted by government agencies for the war effort; it includes the reduction of Treasury (direct and indirect) appropriations and also assumes large scale capital repayment consequent upon contraction of new lending. The estimate is for short-run use. After two years this would be much smaller.

⁴ This item represents the "deflationary" repayments made in liquidation of bank loans; and which banks stand ready to re-lend. Restriction of Federal Housing Administration insurance to mortgages already insured would itself release annually an amount of nearly one billion.

⁵ In 1939, postal savings, savings bonds, and savings bank investment in government securities yielded a total of 1 billion dollars. A mild campaign would certainly double this amount; "friendly societies" might be organized, for example.

⁶ There are no statistical data adequate for an estimate of the holding of government bonds by trusts and corporations; this is an outright guess.

⁷ Adjustment is made for the deferred interest certificates paid to government agencies and trust funds; two-thirds of the remainder are assumed to be paid in certificates.

⁸ This estimate includes only associations affiliated with the agencies of the Federal Home Loan Bank Board.

meet a portion of its needs. Further, as the national income increases, a larger and larger revenue can be secured from that taxation which reaches attempted savings. But in addition, in order to watch more closely all attempted saving, and to divert funds destined for new investment into the avenues required by the arms production program, all of the devices I have suggested above may be employed. I attach here, with a caution that it is an approximation only, a table of maximum potential diversion. The total, interestingly enough, roughly coincides with Currie's estimates of the amount of actual savings consistent with a national income of 90 billion dollars.³⁴

Practically all of the machinery for accomplishing systematic control over the quantity and flow of funds, short of general rationing to consumers, is already in existence. It will become increasingly desirable to use this control machinery as we move through the stage of segmentary full employment. The only questions now remaining in my mind are: (1) whether or not our fear of government will compel us to keep that control uncoordinated and inefficient, and (2) how the administrative responsibility for a program of such vast consequences, if that program does become effectively coordinated, can be "checked and balanced" in suitable democratic fashion.

ROBERT V. ROSA

Harvard University

³⁴ Lauchlin Currie finds 19 billion dollars appropriate for this level of national income; present estimates of national income for the current calendar year run more than 5 billion dollars less than this. (*Hearings before the Temporary National Economic Committee*, Part 9, Washington, 1940, p. 3537.)

CHINA'S FOREIGN EXCHANGE PROBLEMS: A PROPOSED SOLUTION¹

The foreign exchange situation in China is probably the most complicated existing anywhere in the world. Efforts at stabilization have been unsuccessful, and unless a solution is found the loan made by the United States to China to aid in stabilizing the exchanges will be ineffective and is likely to benefit the Japanese. The problem is integrally related to more fundamental problems of economizing China's war efforts and supporting morale. With the coöperation of the United States the problem could be solved by "freezing" Chinese funds in the United States and putting into effect bilateral clearing arrangements. Such a plan would also strengthen the position of the Chinese currency in the occupied areas and Shanghai, halt the inflation of prices, and serve as an economic weapon against Japan.

I. Introduction

The recent loan to China by the United States for the purpose of stabilizing the Chinese currency² was immediately beset with difficulties which diminish the value of the loan. The nature of the difficulties can be briefly stated.

Having abandoned the silver standard in the year 1935, China adopted the foreign exchange policy of pegging the value of the national currency to pound sterling and the United States dollar through the process of unlimited selling and buying at the official rates by the Chinese governmental banks. Eight months after the so-called "China Incident" which started on July 7, 1937, the Chinese national government had to suspend this policy and to institute other measures of exchange control. Since March, 1938, foreign exchange has been obtainable from the governmental banks at the official rates only on application. As many applications were denied, the unofficial (or "black" market) of foreign exchange emerged, the bulk of the transactions being carried out in Shanghai where the national government has no effective control.

The unofficial rates have been progressively lower than the official rates.³ This decline in the unofficial market is the result of a combination of factors. In addition to the flight of capital and the large excess of imports over exports in the occupied areas and in Shanghai,⁴ operations by the speculative interests and the Japanese-controlled agencies having possession of the Chinese national currency have contributed greatly to the demoralization of the Chinese currency.

In order to maintain the external value of the currency, an official Stabili-

¹ This article is a briefer version of a memorandum prepared for private circulation in January, 1941. The author has benefited from discussion with many persons too numerous to thank by name. Mr. Albert R. Beisel, Jr., has been especially helpful in the preparation of the initial draft; and Professor Paul T. Homan, the present draft.

² A loan of \$50,000,000 was granted to China for the purpose of supporting China's currency. See *The New York Times*, section 1, p. 1, Dec. 1, 1940.

³ See Statistical Appendix I, p. 279.

⁴ See Statistical Appendix II, p. 279.

zation Fund was established in March, 1939.⁵ The limited resources of the Fund, however, could not stand the immense buying pressures just explained and at times, after sustaining enormous losses, intervention was withdrawn. While this policy of attempted stabilization to some extent facilitated international trade and reinforced confidence in the national currency in the occupied areas and Shanghai, it clearly has also been to the advantage of the Japanese-controlled agencies, speculative interests and people who "seek haven" abroad for their capital. This fact explains why the Japanese, though doing everything possible to undermine the foundation of the national currency, are also eager to see the unofficial market continued.

To conceive the problem only as a matter of stabilizing the currency is an understatement of the dangerous situation, if not a misconception of the whole picture. It will be pointed out in the next two sections of this paper that the issue is actually a complex of the much more fundamental problems of economizing the Chinese war efforts by conducting China's international trade on better "terms of trade"; reducing the costs of war by checking inflation; strengthening the morale of the people by ending unwarranted profits to speculative interests; weakening the strength of the enemy by ceasing to feed them with precious exchange reserves; and maintaining the people's confidence in the national currency. It is the purpose of this paper to work out a practical solution for this complex of problems.

The British experience of exchange control during the present war⁶ has been a source of inspiration for the present paper. In fact, the central idea of the plan to be proposed is a combination of the amended British regulations (*i.e.*, "bilateral clearing arrangements") with the "freezing" of the Chinese balances by the United States, modified and reinforced by additional measures suitable for the more complicated Chinese situation.

⁵ The Stabilization Fund, established in March, 1939, started with 10,000,000 pounds. One-half of the amount was furnished by British banks (3,000,000 by the Hong Kong and Shanghai Banking Corporation, and 2,000,000 by the Chartered Bank of India, Australia and China) and the other half by the Bank of China and the Bank of Communication.

⁶ The regulations now in effect are given in the following document issued by the British Government: "The Defence (Finance) Regulations, together with a classified list of Orders made under the Defence (Finance) Regulations, 1939, and in force on the 3d of September 1940."

For an excellent outline and analysis of these regulations, see T. R. Wilson, "British Exchange Control after One Year of Operation," *Commerce Reports*, Sept. 7, 1940.

See also the following articles:

T. Balogh, "The Drift towards a Rational Foreign Exchange Policy," *Economica*, Aug. 1940, pp. 248-279; and "Foreign Exchange and Export Trade Policy," *Econ. Jour.*, Mar. 1940, pp. 1-26; P. Einzig, "The Unofficial Market in Sterling," *Econ. Jour.*, Dec. 1939, pp. 670-677; S. E. Harris, "The Official and Unofficial Markets for Sterling," *Quart. Jour. Econ.*, Aug. 1940, pp. 655-664; G. Holden, "Rationing and Exchange Control in British War Finance," *Quart. Jour. Econ.*, Feb. 1940, pp. 171-200; F. W. Paish, "The Free Sterling Rate," Royal Economic Society, Memorandum No. 82, London and Cambridge Economic Service's Report on Current Economic Conditions, May 1940, pp. 11-19.

Much of the factual material on which the analysis is based is of necessity incomplete and may be, in part, inaccurate. Moreover, many technical details which would be essential to the proposed plan have not been worked out. But this should in no way be allowed to obscure or affect the validity of the central idea advocated; namely: no half-hearted and self-inconsistent measures, such as a Stabilization Fund, can solve the complex of problems. Either full steps toward modified "bilateral clearing arrangements" must be taken, or the disastrous consequences of a continuing "black" market must be faced.

In section II, the analysis begins by giving a somewhat elementary account of the types of transactions taking place in the "black" market of Shanghai. This account is necessary for an understanding of the sources of demand for and supply of foreign exchange in the "black" market. In section III, the effects of the operations in the "black" market are scrutinized in detail. This analysis is more or less applicable to any country where a substantial "black" market emerges because of the ineffectiveness of the exchange control. In section IV, the proposed remedial plan is presented in its bare outline.

II. *Demand for and Supply of Foreign Exchange in the "Black" Market*

The existing trade and financial relations between China and foreign countries are the most complicated the world has ever known. The transactions, which can be classified roughly into twelve types (excluding that part of governmental purchases abroad which is paid for either by borrowing or by barter agreements), are as follows:⁷

- I. Imports of commodities and services into the occupied areas (excluding Shanghai) from the United States.⁸
 - a. Some of these imports are paid for with dollars obtained from the Japanese authorities.
 - b. Others are paid for with dollars bought in the "black" market. This constitutes a demand for dollars in the "black" market. *This is demand No. 1 (D_1).*
- II. Exports of commodities and services from the occupied areas (excluding Shanghai) to the United States.
 - a. Most of the dollar proceeds obtained from these exports go to the Japanese authorities because of the Japanese foreign trade control in these areas.
 - b. A small part of the dollar proceeds flows to the "black" market to be converted into Chinese national currency, and thus constitutes a source of supply of dollars to the "black" market. *This is supply No. 1 (S_1).*

⁷ Exports of gold and silver are excluded from the classification. Presumably a large part of these exports have been on governmental accounts. Imports of these metals have been practically nil.

⁸ For simplicity of exposition, we take the United States as representative of all the foreign countries having commercial relations with China.

- III. Imports of commodities and services into Shanghai from the United States.
- a. A small part is paid for with dollars obtained from the Chinese authorities.⁹
 - b. Most of them are paid for by dollars bought from the "black" market. *This constitutes demand No. 2 (D_2) for dollars in the "black" market.*
- IV. Exports of commodities and services from Shanghai to the United States.
- a. A small part of the dollar proceeds goes to the Chinese authorities.¹⁰
 - b. Most of them flow to the "black" market to be converted into Chinese national currency. *Call this supply No. 2 (S_2) of dollars to the "black" market.*
- V. Export of long- and short-term capital, including temporary and permanent flight and speculative operations, from Shanghai to the United States. *This constitutes demand No. 3 (D_3) for dollars in the "black" market.*
- VI. Import of long- and short-term capital, including speculative operations, into Shanghai from the United States. *Call this supply No. 3 (S_3) of dollars to the "black" market.*
- VII. The purchase of American dollars in the "black" market by Japanese-controlled agencies, with Chinese currency obtained in the following ways:
- a. By importing goods produced in Japan and the occupied areas into Shanghai, as well as smuggling them into the unoccupied areas. *Call this demand No. 4_a (D_{4a}).*
 - b. By exchanging the puppet money for national currency, by taxation, etc. *Call this demand No. 4_b (D_{4b}).*
- VIII. American dollars supplied to the "black" market by Chinese authorities for stabilization and other purposes. *Call this supply No. 4 (S_4).*
- IX. Imports of commodities and services into the unoccupied areas from the United States.
- a. Some of the dollars are obtained from the Chinese authorities.
 - b. Others are obtained from the "black" market (those which are not under the Import Control in the unoccupied areas). *This constitutes demand No. 5 (D_5) for dollars in the "black" market (probably relatively unimportant).*
- X. Exports of commodities and services from the unoccupied areas into the United States.
- a. Most of the dollar proceeds go to the Chinese authorities.
 - b. Some flow to the "black" market to be converted into Chinese national currency. *Call this supply No. 5 (S_5).*
- XI. Trade and financial transactions between the occupied areas, the unoccupied areas and Shanghai. For simplicity of presentation these

⁹ Presumably an even smaller part is paid for by dollars obtained from the Japanese authorities.

¹⁰ A part of it naturally goes to the Japanese authorities.

transactions, except the one already given under VII, a, are not included in the following table.

- XII. Commodities and services imported from Shanghai into the occupied areas and Japan and then re-exported to the United States. This item constitutes a part of transaction II, a; but because of its importance in the proposed remedial scheme, it is separately listed.¹¹

For convenience we list the demand and supply sources of American dollars (which, for simplicity, stands for all foreign currencies) in the accompanying table, together with the numbers under which they were classified in the preceding pages.

DEMAND FOR AMERICAN DOLLARS		SUPPLY OF AMERICAN DOLLARS	
No.	Source	No.	Source
D ₁ (I, b)	A part of the imports into the occupied area.	S ₁ (II, b)	A small part of the exports from the occupied areas.
D ₂ (III, b)	Most of the imports into Shanghai.	S ₂ (III, b)	Most of the exports from Shanghai.
D ₃ (V)	Export of capital, including "flight" and speculative operations.	S ₃ (VI)	Import of capital, including speculative operations.
D ₄ (VII, a)	Japanese agencies buy dollars with national currency obtained by importing into Shanghai and smuggling into unoccupied areas.	S ₄ (VIII)	Chinese Stabilization Fund and other governmental supplies.
D _{4b} (VII, b)	Japanese agencies buy dollars with legal tender obtained from exchanging puppet money, taxation, etc.		
D ₅ (IX)	A small part of the imports into unoccupied areas.	S ₅ (X)	A small part of the exports from unoccupied areas.

The relative magnitudes of some of these sources, such as D₁, D₂, D₃, S₁, S₂ and S₃, are known from the statistics of commodity trade;¹² the demands are invariably larger than the supplies. Precise information about the other items is lacking; and these unknown magnitudes must be subject to extreme variations at all times. But common sense reasoning is alone sufficient to form a general idea about the relative strength: the sources D₃ and D₄ must be much larger than S₃ for most of the time. It thus becomes clear that, at critical moments, the source of supply of foreign exchange provided by the Stabilization Fund or other official sources (S₄) was necessary to maintain

¹¹ See pp. 276-278.

¹² See Statistical Appendix II, p. 279.

the external value of the national currency, in the absence of other remedial actions. But admittedly the stabilization fund method is not a fundamental remedy. It is not even logically consistent: while imposing a rather strict exchange and trade control in the unoccupied areas, the national government has often supplied foreign exchange freely to the unofficial market, much to the advantage of the Japanese. The urgency of the need for a fundamental remedial policy will be more appreciated after analyzing the economic effects of the "black" market in the next section.

III. *Economic Effects of the Operations in the "Black" Market*

The effects of the operations in the "black" market can be best analyzed by ascertaining who stand to gain and lose from the fact that a "black" market exists and that the unofficial rates are substantially below the official rates.

Those who stand to lose include:

1. The Chinese official foreign exchange reserves. The losses under this heading are by no means confined to those of the Stabilization Fund. To the extent that some of the proceeds of exports of the unoccupied areas are converted into the national currency in the unofficial market, the Chinese authorities fail to get hold of that amount of exchange; whereas the authorities supply exchange to the importers of the unoccupied areas for the permitted imports. Thus there is a tendency for the Chinese authorities to lose foreign exchange for certain imports without gaining the proceeds of certain exports even in the unoccupied areas.

2. Chinese importers and consumers of imported commodities, including that part of governmental purchases from abroad which is not paid for by borrowed money or through barter agreements. The prices of these imports necessarily rise because of the fall in the rates of exchange.

3. Chinese residents, including the government, who have fixed payments to make abroad in terms of foreign currencies.

Those who stand to gain include:

1. The speculators who are successful in anticipating the market either in selling or in buying foreign exchange.

2. Those who "seek haven" abroad for their capital.

3. The Japanese agencies which get hold of foreign exchange by selling in the "black" market their Chinese national currency obtained by various means. (See items D_{4a} and D_{4b} , in the table on p. 270.)

4. The Japanese importers in the occupied areas who would have no access to foreign exchange, except from the Japanese foreign exchange reserves, if there were no "black" market. Presumably a large part of these imports is at the disposal of the Japanese army of occupation.

5. Foreign consumers and importers of Chinese exports. Because of the excessive fall in the rates of exchange of the Chinese currency in the

"black" market, the prices of Chinese exports in terms of Chinese currency rise, but they are actually cheaper in terms of foreign currencies.

6. Foreign residents who have fixed payments to make to China in terms of the Chinese currency.

7. Chinese exporters and manufacturers of exportable commodities and services.

From the Chinese point of view, the first four classes of gains are not merely undesirable but are definitely detrimental to the war efforts. The fifth and the sixth, while unimportant from the Chinese point of view, cannot be considered as a justification for the existing policy toward the "black" market.

The seventh has been held in some quarters to be an advantage. Indeed, it has been argued that the depreciation would encourage exports and increase the amount of foreign exchange thus obtainable. This argument must be examined from two different viewpoints, the occupied areas (including Shanghai) and the unoccupied areas. Stimulated exports from the occupied areas and Shanghai could only result in an increase of the supply of foreign exchange to the Japanese, either directly through the Japanese export control authorities or indirectly through the "black" market. This means an intensified Japanese exploitation of Chinese labor and resources in exchange for the much-needed imports to equip the army of occupation. In so far as the unoccupied areas are concerned, the physical volume of exports is limited by such factors as the blockade, shortage of skilled labor and material, lack of shipping, and difficulty of interior transportation. While depreciation of the external value of the currency would raise export prices in terms of the Chinese currency, these increased prices and profits of the export industries cannot have any appreciable effect on the physical volume of exports. With the physical volume of exports being fixed by the limiting factors just mentioned, the amount of foreign exchange obtainable through exports is determined by the foreign demands for such exports in terms of foreign currencies. Under this situation, a depreciation of the external value of the currency cannot result in any observable increase in the amount of foreign exchange obtainable.

From the side of imports, it is obvious that every cent by which the Chinese currency depreciates in terms of foreign currencies needlessly increases the cost of imports. An increasing cost of imports with no compensating increase of foreign exchange obtainable through exports cannot fail to shift the "terms of trade" against the unoccupied areas.

Depreciation-induced increases in the prices of both imports and exports certainly would give an impetus to an upward inflationary spiral of cost of living and the general price level. This would further increase the cost of executing the war.

What makes the situation more intolerable is that the depreciation is not

a result of the deliberate choice of the Chinese authorities. It is rather determined by the conditions in the occupied areas and Shanghai where the Japanese exercise full or partial control. Thus China's "terms of trade" and, to a certain extent, the price level are at the mercy of the Japanese. The Japanese have refrained from driving the rates of exchange in the "black" market down to zero only because they are the chief beneficiaries from the existence of the "black" market.

Inflation is going on everywhere in China. How much of this inflation is caused by actual shortage of goods, by illegal hoarding, by excessive issue of exchange medium, by increase in the velocity of circulation, or by the inducement given by an increase in import and export prices cannot be determined here. But no one can seriously argue that the last mentioned factor is not contributing to inflation. Any talk of price control in China without due attention paid to the "black" market is pointless.

IV. A Remedial Plan

It must be clear now that the problem is not merely a matter of stabilizing the currency. To quote from section I of this paper:

"... the issue is actually a complex of the much more fundamental problems of economizing the Chinese war efforts by conducting international trade on better 'terms of trade'; reducing the costs of war by checking inflation; strengthening the morale of the people by ending unwarranted profits to speculative interests; weakening the strength of the enemy by ceasing to feed them with precious exchange reserves; and maintaining people's confidence in the national currency."

There can be no solution for this complex of problems while the "black" market continues to exist. The central problem is not one of stabilizing the "black" market; it is the problem of eliminating it altogether.

As has been made clear by the British experience of exchange control during the present war, there is only one way of eliminating the "black" market: Eliminate its supply of and demand for foreign exchange. The supply can be stopped by cutting off the sources; and the demand can be removed by dispensing with the uses to which the foreign exchange obtained in the "black" market can be put. These results can be achieved only by adopting the kind of bilateral clearing arrangements which the British government has been forced to adopt as the only remedy possible, after sustaining enormous losses.

The immediate question arises: How could the Chinese national government, being unable to control the foreign banks in Shanghai and in other parts of China, conclude such bilateral clearing arrangements with other countries? It is obvious that, without the coöperation of the United States and Great Britain, this difficulty cannot be dissolved. Assuming willing coöperation on the part of these two powers, bilateral clearing arrangements are quite possible.

The essential ideas of the proposed scheme can be shown by setting down the necessary arrangements with the United States.

1. By Section 5(b) of the Act of October 6, 1917,¹³ the President of the United States has the power to regulate transactions in foreign exchanges, transfers of credit and the export of coin and currency. By virtue of this authority, the President has issued a series of executive orders¹⁴ to "freeze" funds of those European countries which have been invaded. Payments to and from the accounts of these countries with any banking institutions¹⁵ within the United States¹⁶ and remittances to and from these countries through the same banking institutions are prohibited, *except as specially authorized in regulations or licenses issued by the Secretary of the Treasury.*

2. Under the same authority the President could "freeze" all the Chinese funds and prohibit payments into and from such accounts. He could also prohibit remittances; movements of gold, silver, coins and notes; and credit and security transactions between the United States and China.

3. Following the meanings of terms already established in executive orders,¹⁷ and with additional support from the extraterritorial powers possessed by the United States in China, the President could exercise the same sort of authority over transactions between American organizations (or individuals) and organizations (or individuals) in any part of China, including those of other nations.

4. The Secretary of the Treasury could issue a general license to the Chinese governmental banks, authorizing transactions (including all pay-

¹³ 40 Stat. L., 411.

¹⁴ All these orders (Nos. 6560, 8389, 8405, 8446, 8484, 8493) are given in *Documents Pertaining to Foreign Funds Control*, issued by the United States Treasury Department, Oct. 1, 1940.

¹⁵ The term "banking institution" includes any person engaged primarily or incidentally in the business of banking, of granting or transferring credits, or of purchasing and selling foreign exchange or procuring purchasers and sellers thereof, as principal or agent. See *ibid.*, sec. 7, p. 4.

¹⁶ The term "United States" means the United States and any place subject to the jurisdiction thereof. See *ibid.*, sec. 7, p. 4.

¹⁷ The term "national" in the regulations is defined very broadly, including in its scope those usually classed as "residents." To quote: "The term 'national' of Norway or Denmark [in our case, China] shall include any person who has been or who there is reasonable cause to believe has been domiciled in, or a subject, citizen or resident of Norway or Denmark [for our case, China] at any time on or since April 8, 1940, but shall not include any individual domiciled and residing in the United States on April 8, 1940, and shall also include any partnership, association, or other organization, including any corporation organized under the laws of, or which on April 8, 1940, had its principal place of business in Norway or Denmark or on or after such date has been controlled by, or a substantial part of the stock, shares, bonds, debentures, or other securities of which has been owned or controlled by, directly or indirectly, one or more persons, who have been, or who there is reasonable cause to believe have been, domiciled in, or the subjects, citizens or residents of Norway or Denmark at any time on or since April 8, 1940, and all persons acting or purporting to act directly or indirectly for the benefit or on behalf of the foregoing." See *ibid.*, p. 6.

ments, remittances, coin and note movements, and securities transactions) between the United States and China.

5. Through the device of the general license to the Chinese governmental banks, they would have all the powers to organize a "Sino-American bilateral clearing committee," whose members would consist of representatives from the Chinese governmental banks, the United States Treasury, the Federal Reserve System, and important private banking institutions of the United States and China. "Sino-American bilateral clearing accounts" could be established.

6. All organizations and individuals who have any transactions to execute between the United States and China would have to apply for permits at the bilateral clearing committee or its designated agencies. In "free China," these agencies would be the Chinese governmental banks. In the United States, they would be organized by the Bank of China in New York City together with American representatives. In "occupied China," the agencies would be organized by the American banks, together with representatives from the United States Treasury and the Federal Reserve System.

7. The proceeds of all the authorized transactions would be cleared through the bilateral clearing accounts. Should it result in a residual in favor of the United States, this residual could be compensated by the loans made by the United States to China.

8. The rates of exchange to be used in the bilateral clearing accounts would have to be determined upon the basis of a comprehensive study. It is not necessary to have a uniform rate since, presumably, certain transactions would be preferable to others.

9. The Secretary of the Treasury could, of course, issue other special licenses to authorize transactions which would not be subject to the approval of the bilateral clearing committee. This would be designed for certain secret transactions (should they arise) or for the convenience of the United States government; but this power should be carefully exercised so as not to give rise to loopholes in the clearing system.

It should be much simpler to make arrangements with Great Britain because of the exchange control in effect in that country. China can simply conclude a bilateral arrangement with Great Britain similar to those which other countries have made. Similar arrangements with other countries are desirable, but actually are of little importance, because American dollars and British pounds sterling are the only important exchange handled in the "black" market in Shanghai.

The institution of the bilateral clearing arrangements not only would reinforce whatever trade and exchange control exists in the unoccupied areas, but would also impose effective control over the occupied areas. By controlling the payments for both exports and imports, excess of imports

into any part of China would not be allowed to occur should it be considered as undesirable by the bilateral clearing committee. These arrangements would need not be entirely bilateral in nature; inter-accounts differences could be taken care of through triangular clearing after both the Sino-American and Sino-British accounts had been set up.

The rates of exchange would be stabilized at deliberately determined levels; and the operations of the speculative interests and Japanese-controlled agencies would no longer be possible. Having become aware that the external value of the currency was being truly and effectively protected, the people would have much more faith and confidence in their national currency than under the present uncertain conditions. The tendency to exchange money for real wealth for hoarding would be halted, consequently reducing the velocity of circulation and bringing down the price level.

After the "black" market had been wiped out, the "puppet money" would no longer be convertible into foreign exchange through the process of exchanging it for the national currency. The very foundation of the "puppet money" would have been undermined, unless the Japanese were prepared to run down their very limited resources of foreign exchange for backing it. In the occupied areas the national currency would become the only kind of money which had any future; and, in all probability, people in these areas would hoard it just like gold and silver.

To conclude this paper, it is important to forecast the Japanese reactions to this plan. Being deprived of the proceeds in foreign exchange of their exports from the occupied areas, the Japanese could possibly take either one of the following two courses:

1. The Japanese agencies could import commodities from the occupied areas into Japan and re-export to the United States.¹⁸ Since the remittances to be made by American importers would be from the United States to Japan (not China), these transactions would not be subject to the control of the clearing committee. Even if no remedial action were taken for this loophole after the proposed scheme was adopted, the evil would still be much less than under present conditions, because only a part of the dollar proceeds of the commodity exports can be obtained through this procedure. Nothing could be done by the Japanese agencies to the capital transactions and other "invisible items."

Moreover, this process could be worked out by the Japanese agencies only after some time. Thus remedial measures would be devised leisurely, after the scheme was put into effect. One possible preventive measure would be to impose a prohibitive tariff on re-exports from Japan¹⁹ except those im-

¹⁸ See item XII on p. 270.

¹⁹ These re-exports are very characteristic and readily recognizable as Chinese commodities, such as goat, lamb and weasel skin, furs, cross-stitch work and embroideries, egg albumen and yolk, oriental rugs and woollen carpets, sheep's wool drawn-thread and wool oil.

ported directly under the authorization of the clearing committee and paid for through the clearing accounts. Actually what would happen is that, after the intention to impose a prohibitive tariff on this particular kind of re-exports to the United States is made clear by American authorities, exporters would become aware of the convenience of exporting through the clearing committee; and the Japanese agencies would readily understand the difficulty of re-exporting. It seems that an announcement of this intention alone would be quite sufficient to forestall a major portion of this re-exporting.

2. The Japanese agencies could stop the international trade of the occupied area altogether, since they could not get hold of the foreign exchange proceeds of the exports from the occupied areas. Even though there are still a few ports in the International Settlement of Shanghai which are, to a large extent, free from Japanese control, the Japanese agencies presumably could stop the importing of raw materials from the interior into Shanghai so that there would not be many exportable manufactures from Shanghai.

Incidentally, the cessation of the international trade of the occupied areas is in line with the Chinese "scorched earth" policy. Japan herself is the one who would be hurt most. On the one hand, the exportable goods in the occupied areas which Japan does not need for carrying on the war would pile up without being able to be sold abroad (because of the prohibitive tariff mentioned above). On the other hand, Japan could not import from Great Britain and the United States into the occupied areas except to be paid for on her own account.

This Japanese measure, however, would cost Great Britain and the United States their trade with the occupied areas. Since the clearing system could not be instituted for China without the coöperation of Great Britain and the United States, the interests of the merchants of the latter two powers in the occupied areas must be taken into consideration. Also these two powers might not be as yet ready to force the Japanese to forego all the international trade in the occupied areas.

Under these circumstances, China would have to accept compromise schemes in so far as these schemes did not deplete the Chinese foreign exchange reserves. A possible method may be given as follows: Let the Japanese agencies import from the United States and Great Britain into the occupied areas to the extent of the corresponding exports. In this way these items would cancel out in the clearing accounts without any drain on the Chinese exchange reserve. From the Chinese point of view this scheme should be considered as an expedient measure which is undesirable in principle. From the Japanese point of view, the arrangement is much better than no trade at all. Since there has always been an import surplus into the occupied areas, people living in those areas would suffer from the reduction of imports after the compensating arrangement was made. But, in

this aspect, people living in the unoccupied areas are suffering even more, this being a part of the sacrifice a fighting people must undergo.

From the point of view of the United States and Great Britain, this situation would be better than the present situation. Their merchants in the occupied area are entirely at the mercy of the Japanese at the present time. After the institution of the clearing system, these two powers at least would have some weapons to bargain with. The bilateral clearing arrangements are of the nature of a monetary agreement between China, Great Britain and the United States; they do not directly concern Japan. They would be less "irritating" to the Japanese than a direct measure such as an embargo of war materials to Japan or a boycott of Japanese silk.

The situation in the Pacific becomes more threatening from day to day; there might be a Japanese march into the International Settlement at any time. By adopting the bilateral clearing arrangements, Shanghai would be deprived of its importance as the financial center of the Orient, thus reducing the temptation to the Japanese for a trial of invasion. On the other hand, if and when the invasion comes, the arrangements would be able to prevent the terrible financial chaos which would doubtless occur if the present conditions were to continue.

TA-CHUNG LIU

Brookings Institution

Statistical Appendices

I. EXCHANGE RATE OF THE CHINESE NATIONAL CURRENCY IN TERMS OF THE UNITED STATES DOLLAR IN THE UNOFFICIAL MARKET¹

Date		Exchange Rate U.S. \$/100 Chinese National Currency	Date		Exchange Rate U.S. \$/100 Chinese National Currency
1937	July	29.494	1939	April	16.015
	Aug.	29.650		May	15.987
	Sept.	29.660		June	13.434
	Oct.	29.463		July	10.637
	Nov.	29.444		Aug.	7.163
	Dec.	29.468		Sept.	6.696
1938	Jan.	29.489	1940	Oct.	7.638
	Feb.	29.602		Nov.	8.353
	Mar.	28.219		Dec.	7.487
	Apr.	26.905		Jan.	7.833
	May	23.804		Feb.	7.012
	June	18.835		Mar.	6.409
	July	18.205		Apr.	5.992
	Aug.	16.618		May	5.083
	Sept.	17.167		June	5.760
	Oct.	16.029		July	6.048
	Nov.	15.796		Aug.	5.476
	Dec.	16.110		Sept.	5.206
1939	Jan.	16.256		Oct.	5.682
	Feb.	15.885		Nov.	5.845
	Mar.	16.016		Dec.	5.690

¹ Figures taken from the *Federal Reserve Bulletin*, currently reported.

II. CHINA'S COMMODITY TRADE STATISTICS FOR THE YEAR 1940

The figures in the following table are calculated from the detailed statistics given in a report of the U. S. Department of Commerce,²⁰ the accuracy being admittedly doubtful. For instance, purchases abroad by the national government at Chungking and imports by Japanese authorities for use in China are not included. These data, however, give a rough picture of the dis-equilibrium of China's world trade.

CHINA'S TRADE WITH "NON-YEN BLOC" COUNTRIES
(Figures in U. S. Dollars)

	Imports	Exports	Imports Surplus
Occupied Area and Shanghai	199,000,000	129,297,000	69,713,000
Unoccupied Area	61,300,000	59,700,000	1,600,000

Imports from the "yen-bloc" areas (Japan, Formosa, Korea and Manchuria) into China (the occupied areas and Shanghai only) amount to about 1 billion yen, whereas the corresponding exports are only about 800 million yen.

²⁰ "Special Aspects of China's World Trade in 1940," *Foreign Commerce Weekly*, U. S. Dept. of Commerce, vol. 2, no. 8, 1941.

THE FEDERAL FINANCIAL SYSTEM¹

This article discusses especially the subjects of the federal budget and the system of accounting control and audit. The author takes full advantage of *The Federal Financial System* by Daniel T. Selko and undertakes at the same time to present a review of that book.

The budget system of the United States government fails to present a unified financial plan. Revenues are not considered in connection with expenditures; expenditures are not considered as a whole; large expenditures and receipts of government corporations are outside the budget. Economy is not enforced. Among reform proposals the most promising is that of the Chamber of Commerce of the United States, which would set up a single budget committee at whose recommendation Congress would by law set a fixed limit to total appropriations.

The present system of accounting control and audit, centralized in the hands of a Comptroller General who is independent of the executive branch and responsible to Congress, is definitely more logical and useful than the "executive control plan" recently recommended by the President's Committee on Administrative Management.

Introduction

Events of the past decade have compelled the American people, whether they like it or not, to give attention to the finances of their government. Expenditures of the federal government have reached a level utterly beyond precedent in time of peace. Increasing numbers of the people look to the national Treasury for support. Another group feels the heavy load of taxes and stands aghast at the prospect of still heavier burdens. Recurring deficits in federal finance are a constant and growing cause of widespread uneasiness. It is no longer possible to be ignorant of the unprecedented size of the national debt or to brush it aside as a matter of trifling importance. We have recently been treated to a battle of words over the Comptroller General and his functions and responsibilities. There are those who believe that the existing distribution of financial authority and responsibility has failed to remain in harmony with the principles of democratic government as set forth in the federal Constitution. To many intelligent observers it appears that national finances are running wild, with disaster awaiting somewhere ahead. These matters—never to be lightly regarded—take on especial importance as the nation faces a crisis which may end in war, and which in any event calls for extraordinary efforts in behalf of preparedness for defense. At such a time a nation's financial organization and financial policy are not the least of the factors which may contribute to success or defeat.

Under these circumstances the appearance of an authoritative book dealing in a comprehensive way with the whole financial system of the United States federal government is timely. Dr. Selko is himself an authority on these matters, and he has had the invaluable aid that derives from his con-

¹ This article is suggested by, and is in large part based upon, *The Federal Financial System* by Daniel T. Selko. (Washington: Brookings Institution. 1940. Pp. xii, 606. \$3.50.) Page references in parentheses refer to this book.

nection with the Brookings Institution. He has been able to secure useful information and advice from the many government officials with whom he has been in close contact. Internal evidence from this book, as well as the record of Dr. Selko's other writings, indicates the balanced point of view of the impartial scholar and inspires the reader's confidence.

Following three introductory chapters on the "origin of the federal financial system," Dr. Selko develops his subject under four main topics; namely, "the budget system," "the revenue system," "the fiscal system," and "accounting and reporting." It is obvious that the discussion of each topic is focused upon the present-day problems of organization and functioning. But such discussion is in every case based upon a careful and detailed historical record, taking its starting point in the year 1789, when the national Constitution was adopted and the national government set up. The reader thus gains historical perspective and profits by the light which the experience of a century and a half is able to shed upon present-day problems. For his materials the author relies generally upon original sources, mostly official, with which he is evidently quite at home.

The chief value of this book, it appears to me, is that it will bring to the student who wishes to perfect his understanding of current problems of American federal finance a comprehensive combination of detailed historical background, essential technical descriptive matter, sound critical analysis, and sober judgment. This is all presented with the simplicity and clarity of style which are essential for the treatment of financial subjects. In spite of the necessary mass of technical detail at certain points, the book is interesting reading.

In the present essay I shall undertake to offer some observations especially on the subjects of the federal budget and the system of accounting control and audit. In taking full advantage for this purpose of Dr. Selko's book, I hope that I may be able to present an adequate review of the essential contribution which he makes. I shall assume freedom to go beyond the scope of his contribution as occasion may dictate, and in so doing the reader may assume, unless otherwise stated, that my own observations are in harmony with Dr. Selko's statements and conclusions.

Origin of the Federal Financial System

As everyone knows, the American national government under the Continental Congress and the Articles of Confederation was so weak as scarcely to deserve the name of government. It is an ever-recurring cause of wonder that a people so lacking in national organization were able to prosecute the War of the Revolution to a successful issue and hold together for even a few years thereafter. But they did survive, and in the process they learned some valuable lessons. They discovered, after bitter experience, that there can be no real government without the power to raise revenue by taxing

the people. Lack of this power was the basic cause of the futility of the Continental Congress, and also made substantially certain the failure of the Articles of Confederation. So in framing the national Constitution they grudgingly conferred upon the new national government power to lay and collect taxes without dependence upon the states. In the year 1781, under force of compelling circumstances, they reluctantly surrendered their traditional mistrust of executive power and their faith in committees and consented to place the financial management of their government in the hands of one man, Robert Morris, who as Superintendent of Finance replaced the former Board of Treasury. They accomplished this reform without ever sacrificing the ultimate authority of Congress over the nation's finances. After experiencing the consequences of concentrating incompatible functions in a single agency, they had succeeded by 1781 in a sound specialization among appropriate Treasury and accounting officers. And proceeding thus by the method of trial and error, they had before 1789 developed "all the essential elements of a system of financial management and control" (p. 28).

"Adoption of the Constitution," as Dr. Selko observes (p. 54), "made necessary a complete overhauling of the financial system." Up to this time Congress had both made the laws and supervised their execution. There had been no separation of governmental powers and functions. "Had the Constitution been confined to providing Congress with governmental power adequate to its task of governing the United States, the next logical step in organization would have been the evolution of a cabinet composed of members of the majority in Congress. One of the officers of this cabinet would undoubtedly have been a Superintendent of Finance, however he might have been designated" (p. 54). A national government would thus have developed on the British pattern.

But instead the principle of checks and balances prevailed, and the three essential functions—legislative, executive, and judicial—were lodged in three independent branches of the national government. Congress was thus deprived of the ability to supervise directly the execution of its laws and was compelled "to provide for the conduct of executive and judicial functions by agencies located in separate branches of the government" (p. 54). Thus were presented problems and initiated controversies—especially with reference to the budget and the system of financial accounting and control—which have continued down to the present day.

These matters Dr. Selko brings out in his first three chapters (pp. 1-72). While obviously there was here little opportunity for original contribution, these chapters present a clear and interesting record and are to be commended for the acuteness with which they direct attention to those features which were destined to be of significance in later national development.

The Budget

Any real budget system requires three essential steps; namely, (1) the preparation of preliminary estimates of receipts and expenditures, (2) the enactment of appropriate financial measures, and (3) control of the execution of the budget.

Prior to the year 1921 the United States government can scarcely be said to have had any budget system at all. As to the first essential step, the Secretary of the Treasury, though nominally in charge, never assumed any real leadership, doing little more than pass on to Congress the estimates of the various spending officers of the government. As Dr. Selko observes, "No one was responsible for formulating a coördinated budget program for the entire government" (p. 82).

For the purposes of financial legislation, the House of Representatives at the beginning set up the Committee on Ways and Means, and the Senate a similar committee, whose name was later (1816) changed to Committee on Finance. To these committees was assigned the task of considering and formulating the legislative acts dealing with both expenditures and revenues. This was the obvious arrangement for a sound legislative budgetary procedure. But the rapidly increasing burden of work that devolved upon the Ways and Means Committee and the jealousy of its great powers which soon arose brought demands for division, which at the time of the Civil War led to the transfer of the subject of expenditures to a Committee on Appropriations. Shortly thereafter the jurisdiction over appropriations began to be divided among separate committees, and by the year 1885 there no longer remained any vestige of coördinated consideration of expenditures and revenues as a whole. During the same period similar development was taking place in the Senate.

As to budgetary control, pretty much everything was left to the spending agencies themselves. Congress made more or less futile attempts to exert its authority, by minutely itemized appropriation acts, by enacting regulatory legislation, by investigations of administrative methods and expenditures, and by setting up occasional administrative agencies to supervise or conduct specified operations. In spite of all such makeshifts, Dr. Selko is right in saying that "provision for centralized control was altogether absent" (p. 98).

It was only after a century and a quarter of this chaotic lack of any semblance of real budgetary procedure that Congress finally gave thoughtful consideration to the whole subject and enacted the Budget and Accounting act of 1921. The essentials of the resulting budget system were: (1) placing upon the President the duty of transmitting to Congress an annual budget statement of estimated revenues and expenditures; (2) forbidding any other officer or employee of the executive branch to submit any recom-

mendation dealing with expenditures and financing methods, except at the request of one of the houses of Congress; (3) establishment of the Bureau of the Budget, under the direct authority of the President, to aid him in his budgetary function; and (4) (not prescribed by law but accomplished by a change in the rules of House and Senate) concentration of all appropriations in the hands of one committee on appropriations in each house.

Dr. Selko tells in considerable detail the story of the federal budget as it developed under the system set up in 1921. From this record it appears that even now the United States government does not have a really effective budget system. Budgetary theory implies that the entire financial program, including all expenditures and all revenues, shall be embraced in the annual budget. This has not been attained in our federal budget.

In the first place, we note that large sums are expended each year which are not included in the President's annual budget estimates. Through ineffective control over the spending officers and occasionally because of an unforeseen emergency, the failure of administrative agencies to keep within their appropriations is a common occurrence. This necessitates "deficiency appropriations," neither foreseen in the budget message nor included in the annual appropriation acts. This situation was improved by the inauguration of the budget system in 1921, but it is still serious.

Of similar character are the "supplemental appropriations." These are due to exigencies or plans which arise too late to be included in the President's annual budget estimates or to new functions for which Congress has made no provision in the regular annual appropriation acts.

The present administration has adopted the practice of keeping the estimates of "emergency" expenditures outside the original budget and transmitting them to Congress later in special messages. These items are then handled by Congress like deficiency or supplemental expenditures. Very large sums have thus been appropriated in recent years.

Probably the most serious departure from sound budgetary procedure is presented by the large expenditures—and in some cases receipts—of certain specially constituted agencies, especially the government corporations, such as the Reconstruction Finance Corporation and the Home Owners' Loan Corporation. A recent report of the Secretary of the Treasury² lists thirty-two of these governmental agencies, the finances of which, running into large sums, are largely outside the budget. As Dr. Selko says, "The General Budget Summary in the annual budget does not indicate the total expenditures of government agencies from funds made available by Congress. Certain agencies are provided with so-called revolving funds, and the budget shows only the net difference between their receipts and expenditures. A number of agencies carry on large financial operations with

² 76th Cong., 3rd sess., Senate Document No. 172, *Financial Statements of Certain Government Agencies*. Presented to the Senate by the Secretary of the Treasury in response to Senate Resolution 152 at Senator Byrd's request.

large sums of money passing in and out of the Treasury without appropriations therefor. Frequently appropriations to these agencies are made only for administrative expenses or for a portion thereof. Some agencies operate from year to year on revolving funds which are not annually appropriated" (p. 130).

Another weakness in our budgetary system is the presence of "permanent appropriations." All through our history Congress has been in the habit of enacting statutes setting up permanent appropriations which have automatically permitted withdrawal from the Treasury year by year of various sums of money without even the knowledge of subsequent Congresses. From time to time investigations have been made by Congress, and some reforms have been instituted. Dr. Selko reports that the budget of 1935 (which was transmitted to Congress on January 3, 1934) contained 117 items of permanent appropriations and that a committee investigating the matter at this time discovered 253 additional items (p. 141). Most of these laws were repealed in 1934. But some remained, and some new ones have since been enacted, so that permanent appropriations still constitute a major budgetary problem.

The consequence of these practices is that the entire expenditures of the government are never considered as a whole. Some are entirely free of the annual scrutiny of Congress. Deficiency, supplemental, and emergency appropriations are not included in the regular annual appropriation program. In spite of the jurisdiction of a single appropriations committee in each house since 1921, the expenditure program is enacted in a series of separate appropriation acts. Thus no single unified plan of public expenditure is achieved, either in the President's budget estimates or in the budgetary legislation of Congress.

One of the criteria of sound budgetary practice is the closeness of the approach of each year's actual expenditures to the budget estimates. The British government has had an extraordinary record in this matter. Our own record is also extraordinary. Here are the figures for the last half dozen years:

EXPENDITURES OF THE UNITED STATES GOVERNMENT
(In millions of dollars)

Fiscal Year	Budget Estimate	Actual	Increase over budget estimate	
			Amount	Per cent
1935	4,486	6,802	2,315	51
1936	7,884	8,477	593	7
1937	6,172	8,001	1,829	30
1938	5,756	7,626	1,870	33
1939	6,869	8,707	1,838	27
1940	8,996	9,537	541	6

Source: Annual Budget Messages of the United States.

A nation with a record such as this can hardly be said to have a budget.

Turning now to the other side of the account, we observe a striking anomaly of American budgetary method in the scant regard usually paid to revenues in our financial planning. Dr. Selko shows that, prior to the adoption of the budget system in 1921, it was not the practice to consider estimates of expenditures in the light of estimated available revenues. He mentions two important causes: federal expenditures up to the time of the World War were comparatively small; and the revenues, even at moderate tax rates, were generally in excess of expenditures (p. 123).

There is still another important cause; namely, the preponderance of customs duties in the federal revenue system, together with the fact that the American people have been interested in the tariff more as a dispenser of protection to favored industries than as a provider of revenue. From the beginning of the national government down to the Civil War (as Dr. Selko points out in another connection), the tariff was almost the sole revenue source; from the Civil War to the World War, the tariff shared this function half-and-half with the internal revenue system. When tariff rates were changed, it was usually by general tariff revision acts, which opened up the perennial issue of protection. The ensuing discussion, within Congress and without, generally served to overshadow consideration of the need of revenue to balance estimated expenditures. Therefore, even if other conditions had not operated against the joint consideration of revenues and expenditures, it is unlikely that Congress would ever have developed the practice of making annual revisions in tariff rates in order to make revenues balance expenditures.

Even though, since the Budget act of 1921, the inclusion of revenues in the President's budget estimates has been required, this side of the budget is still comparatively neglected. The present administration has taken the position that revenue planning is not a function of the administration. Note the remarks of Secretary Morgenthau to this effect before a House sub-committee (quoted by Dr. Selko at p. 125). Congress itself does not regard revenue revision as an annual affair. Nor does it consider the revenue program as a whole; in revenue legislation it gives separate consideration to customs and internal revenue.

Thus the federal budget offers no unified program of expenditures, no unified program of revenues, and no real balancing of expenditures against revenues. It thus fails to serve the budgetary purpose of presenting and enacting a comprehensive financial plan for the government.

It is a primary purpose of a normal budget system to enforce economy—to see that the functions which the legislature has decreed shall be provided at the least possible cost. Though the Budget and Accounting act of 1921 definitely had this purpose in view, it will readily be appreciated that the actual operation of our budget, as described above, is not wholly favorable

to it. In particular the lack of an annual consideration of all expenditures as a whole and the failure to consider total expenditures in relation to revenues tend to deprive the budget of its usefulness as a check on expenditures.

To this tendency powerful impetus has been given by the disturbed economic conditions of the past decade. First came the sharp decline of tax receipts, throwing the budget far out of balance. Then as revenues gradually recovered came the program of extraordinary expenditures for recovery and relief. Supported by current economic theories as to the beneficent influence of deficit spending toward restoring economic prosperity, the official attitude toward the deficit has become more and more complacent. Government spending has been justified, not merely as the necessary means of paying the cost of government services, but as an end in itself. We have been tempted to abandon our interest in government economy. Congress has more and more inclined to relax its critical oversight of expenditures and to approve without much resistance all proposals submitted by the President. The President himself has shown little interest in economy.

The federal Budget Bureau was originally intended to enable the chief executive to exert pressure to compel economy in the operations of the spending departments and other agencies of the government. This function was rather vigorously performed by the Bureau in the beginning, under the direction of General Dawes. Of late the Budget Bureau, doubtless reflecting the attitude of the Administration, has not been so active in its enforcement of economy, and the amount of expenditures has been left more than ever before to the determination of the spending agencies themselves.³

In the year 1937 two expert studies of the federal administrative organization were made: one by the Brookings Institution at the request of the Senate and the House of Representatives,⁴ the other for the President by the President's Committee on Administrative Management.⁵ Both reports called attention to defects in the budgetary system and recommended: (1) general strengthening of the methods of central executive budgetary control, (2) extending the investigative and research activities of the Bureau of the Budget, and (3) increasing the size of the Budget Bureau's staff (p. 169).

These reforms are evidently addressed to the problems of the executive branch of the government. But it should be clear from the foregoing

³ Gen. C. G. Dawes, *The First Year of the Budget*. (New York: Harper, 1923.) Cf. also an address by General Dawes before the annual meeting of the Chamber of Commerce of the United States at Washington on April 30, 1940.

⁴ 75th Cong., 1st sess., Senate Report 1275, *Investigation of Executive Agencies of the Government*, 1937.

⁵ President's Committee on Administrative Management, *Administrative Management of the Government of the United States*, Supt. Docs., 1937.

analysis of budgetary weaknesses that the defects go deeper than mere executive facilities and procedure and that for remedying the fundamental weaknesses attention should be directed to the part played by the legislative branch. In the final analysis it is the Congress that bears full responsibility for the financial policies of the government, and the Congress of late has not been meeting its responsibilities.

It would appear that if Congress is to be restored to its proper position in control of the national finances, two principal defects must be corrected: (1) The independent and successive consideration of financial measures by House and Senate means unnecessary duplication of effort and results in compromise rather than clear-cut policy. (2) Separate consideration of revenue and expenditure bills prevents intelligent judgment upon a unified financial program.

Dr. Selko discusses rather briefly some recent suggestions for correcting these defects (pp. 175-185), and there have been other suggestions not mentioned by him. Some of these plans are chiefly concerned with equipping Congress with a source of information and advice on appropriations. While such arrangements would doubtless help, they appear less fundamentally useful than certain other plans which look toward unified consideration of revenues and expenditures and closer coöperation between the two houses.

Thus the Chamber of Commerce of the United States of America has been recommending, first in 1934 through a referendum of its members and since 1938 through its Committee on Federal Finance, a budget committee in each house of Congress which would give broad general consideration to the whole financial problem of revenues and expenditures and recommend a definite total for appropriations. The report of such a committee, coming soon after the receipt of the President's budget message, would be likely to precipitate an extremely interesting and constructive debate in each house, following which there would be voted a certain definite limit to appropriations. As appropriation bills were thereafter considered and enacted, all members would be on notice that their sum could not exceed the amount fixed by law. Individual members of Congress would be relieved from some of the pressure for particular appropriations. Since the granting of each such favor would necessarily reduce the margin available for other appropriations, the pressure would tend to be felt by Congress as a whole and not bear so heavily on the particular member. It is not proposed that the new committees should usurp the powers or functions of the Appropriations Committee in either house of Congress, but only set a ceiling to total appropriations. It is interesting to note that a plan similar to this was proposed as early as 1913 by the Hon. Swager Sherley, who was then chairman of the House Committee on Appropriations.

Secretary Morgenthau early in 1939 suggested to the Ways and Means Committee that the present four financial committees of Congress (Finance

and Appropriations Committees of the Senate, and Ways and Means and Appropriations Committees of the House) meet each session as one Joint Committee on Fiscal Policy "to consider the over-all aspects of the expenditure and revenue programs."⁶ A year later the Secretary repeated his suggestion and again urged Congressional action. In January, 1939, Senator Harrison, chairman of the Senate Finance Committee, introduced a resolution in the Senate providing for a joint committee of twelve members, six from each house of Congress. This committee would be charged with the duty of making a thorough analysis of the budget with the purpose of aiding Congress in formulating a comprehensive financial program. Senator Davis introduced a bill in the 76th Congress (S. 3715) which provided for a joint committee on appropriations, made up of members selected from the two existing appropriations committees and aided by a Congressional budget service.

Dr. Selko himself comes back to the original notion of a single committee in each house dealing with both revenues and expenditures, and he rather modestly suggests that it might now be possible, by means of proper sub-committee organization, thus to consolidate the Ways and Means Committee and the Appropriations Committee without making the work too arduous.

Doubtless the ideal would be a joint Congressional budget committee of the two houses, adequately staffed, which would consider the President's budget message and formulate a unified financial plan, covering both revenues and expenditures and the relation between them. This plan it could thereupon recommend to the two houses. There is precedent for this in the Joint Committee on Internal Revenue Taxation, which has been serving most usefully since its creation in 1926.

Next to this, the most promising suggestion would perhaps be the union of the Ways and Means Committee and the Appropriations Committee in the House, with similar reorganization in the Senate, as recommended by Dr. Selko. In the House of Representatives, for example, this committee would either hold all separate appropriations in abeyance till their final combination and passage in a single appropriation bill, or it would do what the Chamber of Commerce proposes; *i.e.*, at an early stage recommend to the House a definite limit to appropriations, which the House would then fix by vote.

Neither of these plans appears, however, to have aroused very strong official or public support. If they must, therefore, be considered not likely to receive Congressional favor, then the next best proposal would seem to be that of the Chamber of Commerce. This plan has been attracting much favorable attention and receiving increasing support in recent months. Its

⁶ Statement before the Ways and Means Committee of the House of Representatives, May 27, 1939.

adoption would be of great immediate service, and it would in no way block subsequent forward steps toward still more effective devices, such, for example, as the joint Congressional committee on the budget. The plan could readily be strengthened by imposing upon the suggested Committee on Federal Finance of each house of Congress the duty of considering revenues as well as expenditures. If it were in existence today it would naturally be the body to consider also the problem of the debt limit. Its normal procedure would then be to recommend, first, the total amount of appropriations, second, the total revenue to be raised, third, the sum to be obtained by borrowing, and fourth, any increase in the debt limit needed to permit such borrowing. Such a plan would go far toward enabling Congress to perform its part in the budget system in accordance with the apparent intent of the Constitution.

In this connection it may be in order to suggest certain minor changes which would tend toward economy through freeing the hands of the executive. As everyone doubtless knows, the President is now hampered by inability to veto particular items of appropriation bills. Appropriation bills in these days carry millions or even billions of dollars and provide financial support for large spending units of the government. They may carry items of which the President does not approve, yet he can not prevent appropriations for such items except by vetoing whole appropriation bills and so threatening to paralyze large sections of the administration. A majority of the states now give their governors authority to veto separate items in appropriation bills. Granting such power to the President of the United States would serve the ends of public economy.⁷ On the other hand, it must be recognized that this power might conceivably be used for political purposes by a President who would find in it the means to coerce particular members of Congress by threatening to veto appropriations in which they were especially interested. Since, however, the cards are at present so heavily stacked against economy, I think the balance is still in favor of this suggestion.

The President today is required to make some provision in his budget estimates for each existing activity of the government, even though there may be some of which he disapproves. This practice tends to grant perpetuity to any spending agency or government activity once it has been inaugurated. It has been suggested, wisely I believe, that the President should be permitted and expected to indicate in his annual budget message that no funds are recommended for certain activities which Congress has authorized but which in his opinion should be discontinued. This would put back upon Congress the responsibility of passing again upon such activities.⁸

⁷ Cf. Committee on Federal Finance of the Chamber of Commerce of the United States, *Control of Federal Expenditures and Debt*, Washington, December, 1940.

⁸ *Ibid.*

Accounting Control and Audit

From its very beginning, before 1789, to the present day the accounting system of the federal government has presented two basic problems. Dr. Selko summarizes these: (1) to provide a system of central control and accommodate it to an ever-increasing volume of business, and (2) to give independence to the accounting officers and finality to their decisions (p. 383). He then presents an interesting historical account of the development of these problems and the long-drawn efforts to solve them.

The act of 1789 created the Treasury Department and centralized the accounting functions in that department. But it soon transpired that, as the operations of the government became more widespread and its business increased in volume and complexity, the centralized accounting organization was unable to withstand the strain of dispersive influences. One department after another obtained jurisdiction over its own accounting, and the resulting diffusion of financial responsibility was such that "the accounting officers lost virtually all control of government expenditures before the War of 1812" (p. 390). "By the end of the war centralized control had been reduced to a meaningless routine" (p. 385).

In 1817 Congress undertook to solve the problem, but "although the act of 1817 returned to the accounting officers of the Treasury the control of Treasury receipts and issues and the authority to make final settlement of all public accounts, it did not represent a return to the completely centralized system of 1789" (p. 395). Moreover, although it was evidently the intent of Congress in 1817 to make the accountants wholly independent of the administrative departments, questions of jurisdiction arose, and there was a more or less continual state of dispute between the various departments and the accounting officers in the Treasury.

An act of 1868 confirmed the authority of the accounting officers and required the heads of departments to accept the accountants' settlements as final and conclusive upon the executive branch of the government and subject to revision only by Congress and the proper courts. Still the system was not generally satisfactory, and criticisms were frequent during the next twenty-five years (pp. 413-14).

The final step in the return to centralized accounting control was taken in the Dockery act of 1894. In connection with a complete reorganization of the accounting system, this act concentrated accounting control in the office of the Comptroller of the Treasury. This was an important step toward the present organization, and the accounting and auditing procedure introduced by the act is followed substantially today (pp. 416 and 421). The struggle for centralized accounting control thus reached its conclusion, from which there has been no retreat to the present time.

There still remained the problem of providing for the independence of the accounting officers. So long as these officers were located in an executive office—the Treasury Department, or any other department or departments

—they could not be independent of the heads of their departments and of the chief of the executive branch, the President.

This defect was finally corrected by the Budget and Accounting act of June 10, 1921. Opinion after 1894 had gradually crystallized upon the principle that "the accounting officers of the government should be directly responsible to Congress, and to Congress alone." The act accordingly provided for the creation of a General Accounting Office, headed by a Comptroller General, to take over the duties of the Comptroller of the Treasury and the six auditors; it provided for the appointment of the Comptroller General by the President for a single term of fifteen years, but forbade his removal except for cause by a joint resolution of the two houses of Congress (pp. 424-25). President Wilson's veto of the original bill in 1920 was because of denial of the power of removal by the President. This, Dr. Selko thinks, would have been the logical position as regards an executive officer, but not a quasi-legislative or quasi-judicial officer, as the Comptroller General was intended by Congress to be. The General Accounting Office was set up as a legislative rather than an executive agency and the intent of Congress was to make its chief independent of the executive branch and have him recognized as an agent of Congress (pp. 384, 425-27).

This act, in thus establishing the independence of the accounting officers, made what Dr. Selko regards as the most important advance in perfecting the accounting system since the very beginning. He says: "For the first time since the adoption of the Constitution it became possible to develop a system of accounting uniformly applicable to all agencies of the government and properly designed not only to furnish the spending agencies with information suitable to their needs but also to furnish Congress with a prompt and satisfactory accounting for all public moneys" (p. 432). For this conclusion there appears to be ample foundation both in fact and in theory, and I think the conclusion is sound.

This short essay cannot undertake to review all the details of accounting and reporting procedure, which Dr. Selko discusses in chapters XXIII-XXVIII. There is one point, however, which may properly claim brief notice.

The hearings in 1919 before the Select Committee on the Budget of the House of Representatives indicated nearly unanimous opinion to the effect that a satisfactory budget could not be developed without radical improvement in administrative accounting. The Budget and Accounting act therefore directed the Comptroller General to "prescribe forms, systems, and procedure . . . for accounting in the several departments and establishments," and this section of the act "was regarded as definitely requiring the establishment of a uniform system of administrative accounting" (p. 433). A certain degree of uniformity is, as a matter of fact, essential to

centralized accounting control. But, as Dr. Selko points out (p. 443), centralized accounting means centralization of accounting control and not centralization of the keeping of accounts such as every administrative agency must have for its own information and the guidance of its operations. ". . . complete uniformity in respect to all the details of administrative accounting is manifestly impossible owing to the variety of operations conducted by the several agencies. . . ." And such complete uniformity is not necessary. It should be possible to enforce the degree of uniformity necessary for centralized control, while leaving latitude for such variety in details as would meet the administrative needs of the several agencies (pp. 433-34).

The General Accounting Office began investigating the subject of accounting forms and procedure in 1923 and has made rapid and substantial progress toward a uniform accounting system for the federal government (pp. 434-35).

Before proceeding to critical analysis of the present state of government accounting, it is necessary to give attention to the controversy which has recently arisen over certain features of the accounting organization established by the Budget and Accounting act of 1921. This controversy is concerned with one of the two generally accepted basic principles of government accounting; *i.e.*, the independence of the accounting officers. It was brought to a head in connection with the plans of the Roosevelt Administration for revising the administrative organization of the executive branch of the federal government. Two studies (to which reference has already been made at p. 287) were prepared in 1937, one by the Brookings Institution, the other by the President's Committee on Administrative Management. While in agreement on many matters, these two reports took diametrically opposed positions with regard to control over the accounting system and the expenditure of money. The existing system, under which such control is invested in the Comptroller General, an officer independent of the executive branch and regarded as an agent of the Congress, may be called the legislative control plan. This plan has the support of the Brookings Institution report. The President's Committee on the other hand supports what may be called the executive control plan, which advocates transfer of all control over the accounting system and the expenditure of money to the executive branch of the government, leaving to Congress only the power to make an audit of the completed transactions.

As Dr. Selko summarizes it, "The executive control plan is based on a three-fold criticism of the theory of the existing system, charging (1) that financial control is a function of the executive branch and should be distinguished from auditing, which is a function of the legislative branch; (2) that the exercise of any financial control by an agency which is independent of the executive branch inevitably interferes with administration

and leads to conflicts with administrative officers and delays the payment of obligations; (3) that there is a fundamental inconsistency in having the same officer act as comptroller and auditor in the settlement of accounts and that this prevents Congress from holding the executive branch truly accountable" (p. 528). The executive control plan proposes to transfer to the Treasury Department the authority to prescribe administrative accounting systems and procedures and to settle and adjust all claims and accounts. For the sake of preserving executive accountability to Congress, this plan provides for a Congressional auditing office with power to audit all expenditures and report discrepancies to Congress "through such committees or joint committees as the Congress may choose to designate."

Dr. Selko discusses at length the issue between these two plans by posing and answering five questions. Let us undertake a brief recapitulation of the argument under these five heads.

(1) The first question is whether under the Constitution "the exercise of proprietary control through the settlement of fiscal officer's accounts belongs properly to the executive or to the legislative branch." Dr. Selko concludes from what the Constitution has to say that the legislative branch is the one that bears responsibility to the people in this respect and must have the appropriate authority. As a matter of fact, "Congress, as the ultimate authority for the raising and granting of public funds, has always undertaken to determine both the purposes for which public money should be spent and also to see that it is spent in accordance with provisions stipulated by law" (pp. 530-31). This conclusion is obviously supported by the history of the nation since before the Constitution was adopted. The power of Congress to exercise the control in question has never been directly challenged in the courts, and it has been continually exercised.

(2) In answer to the second question, Dr. Selko reaches the conclusion that, should Congress relinquish its control of disbursements, it would find it impossible to hold the executive branch accountable by means of an auditing agency which lacked authority to disallow payments. The sort of audit envisaged by the executive control plan would largely duplicate the work which this plan would have the Treasury Department perform in its audit of accounts for settlement, and it would involve corresponding needless expense. Even so it would fail to accomplish the purpose. "Thus if Congress desires to hold the executive branch of the government strictly accountable for the use of appropriated funds, fiscal officers' accounts must be settled by an agency directly responsible to Congress. Under the executive control system the only thing that Congress could do in the event of illegality or irregularity would be to exhort against the continuance of such practices, to tighten the laws so as to make it more difficult for funds to be misapplied in the future, possibly to impeach the President, if such expenditures were made under his direction and if he failed to discharge or discipline the officers responsible" (p. 533).

(3) Proponents of the executive control plan have suggested that there is "inconsistency in having the same officer act both as comptroller and auditor" and that "no public officer should be authorized to audit his own accounts or financial acts and decisions" (pp. 533-34). Dr. Selko suggests that such notions indicate confusion as to the nature of the existing comptroller's functions. He is not an officer of the executive branch. The expenditures he passes upon were authorized not by him but by administrative officers in the executive departments and independent establishments. He is "in no sense passing on the legality and regularity of his own actions. He is an independent officer working for Congress both in auditing and settling the accounts of executive agencies" (p. 534).

(4) Dr. Selko denies that "the exercise of proprietary control by an agency responsible to Congress inevitably interferes with administrative action" or that the actions of the Comptroller General cause "delays, uncertainty, and unavoidable conflict with administrative officers" (p. 534). His denial is supported at some length by what appear to be conclusive arguments.

(5) Finally Dr. Selko refers to the questions and conflicts of jurisdiction which the advocates of the executive control plan admit might arise in the operation of their plan between the Secretary of the Treasury and the heads of the other departments and expresses doubt as to the efficacy of the remedy proposed; *i.e.*, "vesting in the Attorney General authority to decide questions of jurisdiction between the Comptroller General and administrative officers" (p. 540).

Altogether, the weight of the argument appears to be definitely in favor of the legislative control plan as embodied in existing law. Dr. Selko's analysis is accurate, and I think he has reached the sound conclusion.

The existing system of accounting control, while demonstrably based on sound principles, admittedly falls far short of perfection. Space will permit only mention of a few of the most serious defects, with brief attention to proposed remedies.

(1) The present system does not provide adequate audit by the General Accounting Office of public debt transactions as to either principal or interest (pp. 475-76). There should be special study of this matter looking toward prescription of a suitable procedure of control (p. 543).

(2) Many of the departments, establishments, and corporations follow the custom of maintaining special deposit accounts in the Treasury. Deposits in these accounts are made to the credit of disbursing officers and are not subsequently covered into the Treasury. "Disbursements are made without appropriation and are without audit by the General Accounting Office" (p. 464). There result many transactions in which the Treasury acts merely as a bank; it handles funds not controlled by warrants. The Treasurer of the United States cannot be properly held accountable for such transactions.

Dr. Selko calls attention to a statement in the Annual Report of the Comptroller General for 1939, which reports that the Treasurer had liabilities to the amount of \$643,684,362.55 in the form of special accounts (\$122,509,851.65) and depositary accounts of governmental corporations and agencies (\$521,174,510.90). "It is," he observes, "remarkable that such a large volume of business is transacted and that such large expenditures are made by governmental agencies, wholly without audit, without accountability, and without reports to Congress except such as the agency itself sees fit to render or such as Congress by special legislation requires" (pp. 464-65).

(3) There is no provision for periodic audit of assets and liabilities to provide the means of holding custodial officers responsible, as collecting and disbursing officers are now held responsible. "The absence of such provision in the federal accounting system prevents complete audit of the government's financial operations, and makes it impossible for the Comptroller General to supply Congress with audited reports of the government's financial condition." This would require a periodic inventory of cash on hand and other assets and liabilities. The audit should include also a detailed verification of all deposits in the hands of depositary agencies (pp. 477-78).

(4) There are important gaps in the system of reporting by government agencies, especially in the case of government corporations and credit agencies. These agencies are in large measure free from Congressional review of their financial acts. Yet they handle enormous sums of money, and they have large outstanding obligations which are either guaranteed by the national government or have been purchased by the Treasury. There is no general law requiring uniformity of reporting by these agencies. A few make no annual report to Congress, and a large number are not subject to regular audit by the General Accounting Office. This makes it impossible for any agency of the government to prepare a statement showing the proprietary condition and operations of the national government as a whole (pp. 514 and 524).

It is by means of the correction of these defects and by other similar reforms rather than by any revolutionary change in the existing organization or procedure that Dr. Selko hopes to see the federal system of accounting control and audit perfected. He has, I believe, established his position by the evidence of history and the application of sound theory.

Other Subjects

I am aware that, in devoting my essay chiefly to the two subjects of budget and accounting control, I have not done justice to portions of Dr. Selko's book dealing with other topics. The portions thus neglected are Part III, the Revenue System, and Part IV, the Fiscal System. In these parts there

are detailed technical description and critical analysis of many important agencies and services of the federal government, such as the administration of the customs and internal revenue laws, the adjudication of revenue disputes, the organization of the various fiscal agencies in the Treasury Department, the financing and investing operations of the government, procedure in connection with deposits, disbursement procedure, and fiscal management and control. These parts of the book fill an essential and important place in a comprehensive discussion of the federal financial system. They are here treated with the same scholarly erudition and sound judgment as characterize the book as a whole. The student of public finance whose researches lead him into any of these fields is likely to find here just the help he needs to tide him over some of the rough spots in his path.

FRED ROGERS FAIRCHILD

Yale University

ECONOMIC PLANNING AND THE SCIENCE OF ECONOMICS

An analytic treatment of a planned economy must proceed on the basis of some kind of philosophy of science and must be predicated upon a theoretical framework. A theoretical model may provide a provisional construction for illuminating the relations between phenomena or it may serve as a blueprint for something to be constructed. Requisites and conditions for economic action can be defined, but this does not give the content of the concepts. To be usable they must be implemented. A logical model can deal with only the mechanically economic aspects of human behavior and can solve only a formal problem. This is inadequate as a presentation of the processes of human behavior.

To serve as a basis for reconstruction, the model must be integrated with the political structure and must deal with the management of resources in the light of existing technology. The fixing of output where marginal cost equals price is a relation limited to the production of homogeneous units under assumptions of perfect competition or its regulatory equivalent. Monopolies, product differentiation, joint and non-allocable costs make this "rule" inapplicable. Depreciation adds further to the difficulty.

The theory of socialist planning categorically denies evolution in social and economic processes. It predicates a state of finality the conditions of which can be determined in advance of achievement. The limitations of mechanistic and universalistic theory eliminate it as a foundation for a planned economic order.

I

The feature which distinguishes economics as a science from economic and social philosophy is the genuine endeavor of the former to conduct analysis on a plane that is independent of the economist's own particular social bias. Judged by this standard, an economist as a scientist should be as much at home in one set of social institutions as in another, no matter what his social philosophy may be. Though it is difficult to conceive of human thought untrammelled by a specific frame of institutional reference, some progress has been made in the more or less scientific economic analysis of proposed societies.¹

An analytic treatment of a planned economy must proceed on the basis of some kind of a philosophy of science, expressed or implied. Furthermore, if the formulation of the structure is to be scientific, it must be predicated upon a system of theory, or perhaps more accurately, upon a theoretical framework. Much of the economic discussion of a planned economy in recent years has been based upon theoretical "models" using either the Marshallian or Walrasian approach. Whether the logical conditions which limit the use of these constructions have been adhered to, deserves careful examination.

A model, in theoretical analysis, may serve one of two purposes. It may be used as a provisional and preliminary construction as a basis for more accurately understanding the relations between the phenomena under

¹ For a good working bibliography see: Robert Mossé, "The Theory of Planned Economy," *Internat. Labour Rev.*, vol. xxxvi, no. 3, Sept., 1937.

scrutiny. Or it may serve as a blueprint—a plan—for something which is to be constructed. This is the purpose for which models of a planned economy are designed.

As a preliminary and provisional construction, a theoretical structure is little more than an ingenious and elaborate code of regulations which lays the foundation for experimental procedure. Given the postulate that economic action means the maximizing of income from the utilization of resources, the requisites for achieving this result will be the same under any form of economic organization. The general conditions seem to be agreed upon by all economists, and no difference of opinion exists on grounds of social theory. The divergence arises in connection with implementation. The requisite of "maximum use" can be defined, within the particular or general equilibrium framework, as perfect competition (or its equivalent²) with the optimum firm as the ideal unit of operation. But this only defines the conditions. It does not give the content of the concepts. Marginal cost "defined" is not marginal cost "ascertained," and within the limits of the definition all the problems of ascertaining the content are present in the model for a planned society as they are in those designed to describe any other order. Theoretical economics has not solved the problems of cost accounting under private enterprise, it has defined them, and a change in administration to a planned society leaves them just where they were. The analysis proceeds from assumptions and postulates to definition and to the logical implications arising therefrom.

If a model is to serve as a blueprint for reconstruction or a new order, it must be more than provisional or preliminary; it must be more than a set of definitions with formal implications deduced therefrom. It must be final and complete, and it must implement the definitions by giving them precise and practical content. The plan must be able to comprehend within its framework all the detail which will arise, and furthermore, there must be the certainty that details not thought of, or perhaps unascertainable at the time, will not affect the framework but will only cause shifts within its limits. In addition, it must be assumed that all of the social forces which are not taken account of by the plan will not vitiate its operation.

From a methodological point of view, it may be useful to explore the possibilities of a planned economy. Such a study not only serves frequently to focus the logical implications of forces examined under other assump-

² Logically, there is no equivalent to the optimum firm of perfect competition. The equality of marginal cost, minimum average cost and market price is possible only under perfect competition. Where this condition does not obtain, the attempt may be made to achieve the benefits that result from competition by using the concept of the optimum firm as the standard. The difficulty is that the difference in conditions changes the content of the cost curves and comparison between the two situations involves comparison in different levels.

tions, but it also brings out issues that will be encountered and conditions that must be fulfilled by a planned economy. But these endeavors to construct the economic framework of a socialist state are merely exploratory and perhaps explanatory devices in part only. They are in the same category as astro-physicists' models. Fortunately, the universe and the world in which we live do not have to run on the scientists' models and are in little danger of reconstruction from that source. If this were not the case, most of us would not be so sure that the sun would rise tomorrow. There is no more reason to have confidence in economists' models as the basis upon which a planned economy might be operated than there is to have confidence in the physical scientists' models as the basis upon which the universe could be run.

II

A theoretical, mathematical or purely logical model of an economic society can deal with nothing more than the mechanically economic aspects of human behavior. This is just what the theoretical constructions of economic society do.³ The concept of economics as a science which underlies this approach is that of a purely theoretical discipline moving to universal statements by induction from isolated particulars.⁴ Economic science from this point of view is strictly a matter of mechanics,⁵ and the "economic man" achieves his complete stature in such an order.

The philosophy which limits the concept of science to the universal and

³ See especially: E. Barone, "The Ministry of Production in the Collectivist State," reprinted in F. von Hayek, *Collectivist Economic Planning* (London, Routledge, 1935); H. D. Dickinson, "Price Formation in a Socialist Community," *Econ. Jour.*, vol. xliii, no. 170, June, 1933, pp. 237-250; E. F. M. Durbin, *Econ. Jour.*, vol. xlvi, no. 184, Dec., 1936, pp. 676-690; O. Lange, "On the Economic Theory of Socialism," *Rev. of Econ. Stud.*, vol. iv, nos. 1 and 2, pp. 53-71 and 123-142; A. P. Lerner, "Statics and Dynamics in Socialist Economics," *Econ. Jour.*, vol. xlvii, no. 186, June, 1936, pp. 253-270; F. M. Taylor, "The Guidance of Production in a Socialist State," *Am. Econ. Rev.*, vol. xix, no. 1, March, 1929, pp. 1-8.

⁴ Theoretical economics may be regarded as purely deductive in character. This is true when it adopts, from the outset, the methodology of mathematics or pure logic. It seems to be described by the above statement, however, when from a limited number of observable facts it proceeds to derive universal statements. This appears to be the situation with regard to most formal theory.

⁵ Professor F. H. Knight appears to sum up the dominant attitude on the scope of economic theory today: "Economic theory is not a descriptive or an explanatory science of reality. Within wide limits, it can be said that historical changes do not affect economic theory at all. It deals with ideal concepts which are probably as universal for rational thought as those of ordinary geometry." *Ethics of Competition* (New York, Harper, 1935), p. 116. Professor Robbins presents the same point of view and emphasizes the analogy with mechanics when he says: "... Economic analysis turns out to be ... the elucidation of the implications of the necessity of choice in various assumed circumstances. In pure mechanics we explore the implication of the existence of certain given properties of bodies. In pure economics we examine the implication of the existence of scarce means with alternative uses. The assumption of scales of relative valuation is the foundation of all subsequent complications." *The Nature and Significance of Economic Science* (London, Macmillan, 1932, p. 83). See also R. F. Harrod, review of J. R. Hicks, *Value and Capital* in *Econ. Jour.*, vol. xlix, no. 194, June, 1939, p. 299.

mechanistic is being seriously challenged today.⁶ It seems safe to say that such a concept no longer represents the predominant attitude. The development of genetic method under post-Darwinian influences has opened up new fields for scientific research that cannot be fashioned into a theory of universal design. The recognition that human society is distinguished from animal groups (or societies) by behavior patterns socially acquired and transmitted,⁷ has served to make an even greater break so far as the social sciences are concerned.

This does not mean that pure theory, as that term is currently used in economics, has no value. The practical results which have flowed from such an approach are themselves sufficient proof to the contrary. The point of challenge to the theory of socialist planning, and to pure theory, is that they have done no more than solve a formal problem. The tools created have been indispensable aids, but *all* of the economic issues of planning have been no more resolved at best, than have the theoretical aspects of competitive and capitalistic theory. This would not constitute such a serious indictment if it were not so confidently asserted that: "The burden of proof has been shifted to the capitalist economy which must now show why it should not be replaced by a socialist one, in view of its evident feasibility and superiority."⁸

As a matter of fact, this is completely wrong. Even if it were conceded that the debate has been settled conclusively in favor of planners, this concession would apply only to a formal solution. To demonstrate the formal superiority or possibility, is not to prove its practicability. The formal solution is inadequate as a presentation of the processes which constitute economic behavior and inadequate as a basis for the formulation of a planned economy in action.

If pure economics is in the final analysis merely a matter of mechanics, the content of economics and what constitutes an economic problem are defined by the conception of the science and by the limitations of methodology imposed by that conception. The solution of the economic problems is achieved by making whatever assumptions are necessary to make the solution possible with existing technique. The details of economic activity in such a system must fit into the picture, being deductions from the assumptions which are made. This conforms perfectly to Professor Robbins' conception of methodology. Whether such assumptions as a socially correct system of incomes,⁹ or that the speed at which capital accumulates

⁶ See for example: H. Miller, "Philosophy of Science and History of Science," *Isis*, no. 80 (vol. xxx, no. 1), Feb., 1939, pp. 52-64; L. Hogben, *The Retreat from Reason* (London, Watts, 1936); J. E. Boodin, *The Social Mind*, New York, Macmillan, 1938.

⁷ See C. A. Ellwood, "Culture as an Elementary Factor in Human Social Life," *Social Science*, October, 1935, pp. 313-318.

⁸ B. E. Lippincott, *On the Economic Theory of Socialism* (Minneapolis, Univ. of Minnesota Press, 1938, p. 24).

⁹ F. M. Taylor, *op. cit.*, p. 2.

is fixed arbitrarily by the Central Planning Board,¹⁰ are economic questions excluded from the solution is not debated. So long as economic items are assumed, the problem of socialist planning is not soluble. It is (or may be) soluble only within the limits of the assumptions given; and, in view of the fact that some of our most vital economic questions revolve around the items assumed, confident assertions that such planning is workable are of rather dubious validity.

III

Even though it be granted that "pure" theory of economics is legitimate, strictly scientific, and indubitably useful, the question still remains whether a general theory of planning is yet possible. The most formal aspects of modern theory are shot through with controversy. Capital theory, interest theory, and monetary theory, to mention only three items, are in a most unsettled state, to put it mildly. The controversies of theorists over these and other issues cannot inspire confidence in the ability of theory to present a model of a planned society. At best, such a model can be only a tentative formulation of problems for further study and empirical investigation.

Formal theoretical models pay no attention to the body politic nor to the economic problems created by political boundaries. The existence of these two factors cannot be dispensed with by assumption because a planned society must be implemented. In fact, in a planned society economics becomes political economy once more—the management of resources.

A Central Planning Board is postulated but one question that emerges is what geographic area it would cover. It can scarcely be assumed that the most efficient size of the producing unit in every industry would be achieved with just one enterprise; a large number of units in almost every line of production would be necessary. Production by natural monopolies, such as electric light and power, would present essentially the same problems as they do now, for these problems are only incidentally a matter of ownership. Where the products are freely transportable, competition would ensue. How would it differ from competition today? Presumably, product differentiation would still exist, and even an economic dictatorship could not eliminate non-allocable and joint costs.

What, then, becomes of the rule that producers must fix output where marginal cost is equal to price? Marginal cost is defined as the additional cost incurred in producing an additional unit of output. This, however, gives little clue to the content of marginal cost. The distinction between fixed and variable costs is not clear-cut in practice as it is in theory. For example, does marginal cost contain any item of depreciation? If depreciation is regarded as a function of output rather than as a function of time,

¹⁰ O. Lange, *op. cit.*, p. 65.

it would seem that marginal cost cannot exclude it.¹¹ But what is depreciation? Even if a free market be assumed the specific amount to be depreciated and the part of that total to be allocated to any quantity of production in order to ascertain total costs is still unsolved both in fact and theory.

The dilemma faced by economists who try to determine the optimum for a public utility enterprise is not all due to their ignorance of economic theory. If the concept of the optimum could be given some specific content, the answer would be clear at least as to the general level of rates. It is because the simplified assumptions of perfect competition and general equilibrium are inadequate that the issues of prudent investment, cost of reproduction, cost of replacement, and land values plague us, and these difficulties are not eliminated by dispensing with private ownership. The Central Electricity Board in England faces the identical problem and it is not bound by any "due process" or judicial review.¹²

Finally, the rule governing output cannot be applied where the product is not homogeneous; where joint and non-allocable costs prevail; and where peak and off-peak load problems occur. It may act as a minimum but this is not satisfactory as a pricing or output guide. Nor will the substitution of the idea of marginal opportunity cost simplify or clarify the problem, for gradations between alternative uses are not continuous except under the assumptions of refined theory.

The "ideal" of economic theory is achieved under conditions of perfect competition, but to insist that perfect competition is, in fact, superior to a situation where there are varying degrees of competition all the way up to almost complete monopoly is sheer nonsense. Perfect competition is superior to anything else only in formal theory and might be more advantageous in practice if it could be achieved—but it cannot be. Furthermore, no one can possibly describe what technology would be like under perfect competition. Indeed, it is the essence of pure theory that technology is taken for granted as are most other "institutional" factors. Perfect competition has no place, for example, for public utility monopolies. They are part of our economic world, however, and the superiority of perfect com-

¹¹ The mere definition of marginal cost is a far different thing from stating precisely what must be included in it. It is the latter problem which gives rise to difficulty. Mr. J. M. Keynes, in his *General Theory of Employment, Interest and Money*, introduces the concept of "user cost" which includes some depreciation in marginal costs. The writer is not clear as to what Mr. Keynes means by depreciation, but his discussion leaves unsettled the question whether depreciation occurs when a plant is idle. The problem of arbitrary accounting periods intrudes, but if costs are incurred for production then accurate accounting would assess them against the goods produced. Only if they are assessed against a period of time and not against production, would depreciation be counted during idleness. Possibly, other items of "fixed" costs should be included in marginal costs if costs of production are to be calculated on any other than a purely time basis.

¹² See, D. F. Pegrum, "The Public Corporation as a Regulatory Device," *Jour. of Land & Public Utility Econ.*, vol. xvi, no. 4, pp. 335-43.

petition means nothing when applied to them because they cannot be competitive.

Similarly, the analyses which show the economic disadvantages of imperfect competition, oligopoly, and duopoly give an incorrect picture to the extent that they pay no attention to the technical and institutional foundations from which they arise. If the economies of large-scale production are such as to make economical production by only a few producers possible, the attempt to secure pure competition would result either in the breaking up of existing enterprises so as to destroy many of the existing economies, or in the introduction of more large concerns than the market could support. In either case imperfect competition would be more economical than pure competition.¹³

If it is urged that the ideal is the perfectly competitive price or the one which simulates it, the reply is that the simulation is impossible because the necessary conditions do not exist. Since the ideal and facts do not even approximate—and the facts are stubborn—we should examine the ideal to see what the trouble is. Mr. Maurice Dobb's challenge that the main propositions of economic theory do not apply with undiminished force to a socialist state is well taken. They do not and cannot.¹⁴ If one may borrow an anthropological term, the conception of a planned economy is anthropomorphic, and belongs in the same category as the paintings of angels and heaven.

IV

The question how the goal of socialist planning is to be reached raises another fundamental issue. This is not discussed by most of the writers on the subject, but Professor Lange comes out frankly and says that it must be catastrophic:

A socialist government really intent upon socialism has to decide to carry out its socialization program at one stroke, or to give it up altogether. . . . Any hesitation, any vacillation and indecision would provoke the inevitable economic catastrophe.¹⁵

¹³ Professor Chamberlin's elaborate analysis which demonstrates that prices under monopolistic competition are higher than prices under pure competition is valid only if there is a choice between the two under similar circumstances. If technical conditions are such that minimum average costs can be obtained only by large-scale production and if the market can absorb the product of only a few of these producers, then pure competition could exist only at less efficient scales of production. Comparisons of equilibrium under imperfect and pure competition are valid only if the cost curves remain unchanged. This is not possible unless the scale of operations is a matter of indifference. The comparison made is between operations on two different planes, not between alternatives under similar conditions.

¹⁴ Maurice Dobb, "Economic Theory and the Problems of a Socialist Economy," *Econ. Jour.*, vol. xliii, no. 172, pp. 588-598. Mr. Dobb's statement, however, that a planned economy will have its economic laws but they will not be those of present-day theory, is utterly devoid of content.

¹⁵ O. Lange, *op. cit.*, pp. 134-5.

It may be urged that the problem of transition may be eliminated legitimately from the theory of socialist planning because the latter is merely designed to show how a socialist state could operate, and the question how to get there is quite another matter. If such a clean-cut separation could be made, it might be advantageous for analytical purposes. This is not the case, however, and if more attention had been paid by economists to the *process* of achieving a planned economy or to the hurdle to be cleared if the change-over were catastrophic, less certainty as to results would be in evidence. At least, the results would be vastly different.

In failing to deal with the problem of transition, or by making it catastrophic, the pure theory of planning conforms closely to physical theory and pre-Darwinian concepts of science. It eschews gradualness, experiment and development; it eschews working with existing materials and data, modifying concepts and ideas as new problems and new sets of conditions emerge. It is the philosophy of despair in that it concedes implicitly or explicitly, that revolution is necessary in order to fit facts and realities into a preconceived ideal, the attainment and maintenance of which require a static structure in the face of cumulatively changing conditions.

Apart from unsettled questions in economic theory today, the validity of the contention that a planned society is feasible rests on the assumption that other things remain equal, or if they do not, that such changes as might take place will have no effect on economic behavior. If the first of these assumptions is conceded, then the whole case for planning falls to the ground because other things could not remain equal. The very process of the change itself would bring about radical transformations in other parts of the social structure. When these had taken place the theoretical framework to which presumably they had adjusted themselves, or had been adjusted, would have to be changed.

If the second assumption is adopted then interaction of the various aspects of human behavior is denied. This involves a complete denial of even a modicum of truth in the economic interpretation of history. A perusal of the history of economic thought and theory should prevent any economist from taking such a stand. Economic thought has been strongly conditioned not only by economic activity but also by other social forces. Modern theory has developed under the influence of western industrialism and capitalism. If competition had not been a significant feature of economic life, would economic theory have proceeded largely from perfect competition concepts? Have the recent developments been uninfluenced by the fact that competitive theory is inadequate to explain the behavior of economic forces? What then becomes of the idea that economic theory deals only with the universal? And what validity is there to the assertion that a planned economy is feasible, when we do not know the social conditions which would obtain under the new order? It may be that to Professor Mises there should be

erected an heroic statue in the hall of fame of the Ministry of Socialization.¹⁶ Possibly also Walras, Pareto and others who supplied, wittingly or otherwise, the ideal theoretical framework for the economic and social structures of the totalitarian states should be similarly honored. But that is only because economics *in vacuo* can do anything.

The fundamental weakness of utopias is that the utopian ideal or "end" is an absolute concept. All the problems embraced by the utopia are solved. There can be no change which will affect the solution. Logically, and in practice, this results in "statism," with the individual submerged or ruthlessly crushed in the all-consuming quest for the ideal. To talk of the maintenance of democracy in a planned economy seems to be to talk about an impossibility. Moreover, the planned socialist economy is final, except for shifts which could take place within the framework. Yet one cannot but ask the question: After the socialist state, what? Economic theory can shed little light on this, but its authority is used to construct the ideal economic society.

It would be incorrect to assert that historical background and immediate institutional problems are ignored by socialist theorists. Indeed, the reverse is generally true. The difficulties which society has faced and is facing are emphasized in order to lay the foundations for the proposition that the logical conclusion is socialist planning. This is the approach of scientific socialism. The inescapable logic of this method is, however, abandoned. Once the necessary conditions are adduced and the stage is set for the presentation of the utopia, the developmental concept is discarded in favor of catastrophic change and a final state of perfection. This is to be expected because recognition of the empirical conclusions of history would involve a surrender to the very principle which the proposals must deny. Either the historical evidence used is hypothetical or the argument stops short of its logic.

It has already been pointed out that recent discussion of socialist planning in economic literature has taken place principally within the confines of formal theory. Writers adhering to essentially the same concepts of economics as a science and employing practically the same methodology have, however, come to diametrically opposite conclusions. Thus, Professor Hayek concedes that socialist planning is not a *formal* impossibility and then proceeds to offer proof that socialist planning is practically impossible. What he means by formal is left to the imagination, but he achieves his escape from the dilemma by discussing the problem within the framework of modern institutions. Professor Lange, on the other hand, argues the possibility of a formal solution and then endeavors to demonstrate its practicability without paying any attention to the effect upon economic behavior of the institutional arrangements which would be necessary to implement

¹⁶ O. Lange, *op. cit.*, p. 53.

the plan. Each assumes both too much and too little. Both are discussing the actual possibility of planning in a real world. Here, as in many other cases of theoretical disagreement, the difficulty arises from the fact that economic theory cannot be universal but on the contrary must be conditioned by historical developments and contemporary circumstances. Such being the case, one cannot be limited by the concepts of perfect competition or general equilibrium, or by any theoretical framework based upon nothing but formal logic.

V

The contention that economic theory, or at least pure theory, can have little to say either for or against planning is sound. Pure theory deals only with formal problems. If the logic is incontrovertible, the conclusions are as valid as any other conclusions of formal logic. Under such circumstances the administration of economic activity which obtains is inconsequential to the results, since in any case all that is necessary is that the formal rules laid down shall be followed. This, however, assumes that economic activity conforms to a strictly logical pattern, that the content of the rules is readily ascertainable, and that administration is merely automatic application of the rules. That these conditions do not and cannot obtain in the world in which we live is all too evident. The resulting hiatus plagues contemporary economic theory.

Economics, to be a science, however, does not need to be, indeed cannot be, purely theoretical and formal. If it does not change, it cannot retain its respectability as a scientific discipline. Economic theorists by refusing to come to grips with reality and by refusing to recognize issues of the real world are forfeiting their intellectual leadership to those who, unequipped with scientific apparatus, blunder into mistakes that could have been avoided. What is most urgently needed is a reorientation of theory to a more realistic approach so that the contributions of both pure theory and empirical study can be successfully integrated. The trend in theory today toward a more abstract and hypothetical approach threatens to hoist economists by their own petard. Mathematical theorizing has its value, and to the use of the methodology which it implies economics owes much of its esteem. But those who use that theorizing in its unvarnished form to give scientific support to programs of reconstruction and projected utopias, or to the preservation of the *status quo*, are doing the discipline as much harm as those who are offering leadership without knowing what the issues are all about.

DUDLEY F. PEGRUM

University of California at Los Angeles

THE RESIDUAL ITEM IN THE BALANCE OF INTERNATIONAL PAYMENTS

The familiar "residual item" in the *Balance of International Payments* published by the Bureau of Foreign and Domestic Commerce is not wholly due, as is frequently supposed, to errors and omissions in the collection of the data, but rather to the failure of the Bureau to understand fully the theory of international trade which is fundamental to the *Balance*.

Credits established abroad through exports at one exchange rate are normally drawn down in payment for imports at a different exchange rate. If exports and imports invoiced in foreign currency are converted into dollar values at the rate of exchange prevailing on the date of shipment, it will frequently appear that a given export may finance an import of much greater or less value.

The Bureau must, therefore, record the foreign currency value of exports and imports invoiced in foreign currency. If, at the end of the year, these foreign currency values are converted into dollars at a weighted average exchange rate, the Balance of Payments will then balance in fact as well as in theory.

There has appeared each year in the *Balance of International Payments of the United States*, published by the United States Department of Commerce, a somewhat mysterious figure known as the "residual item" or, more properly, "other transactions and residual." The Department explains this item as follows:

The item includes, in addition to possible errors and omissions in the estimated items, unreported stabilization fund operations and other transactions not exactly reflected for balance-of-payments purposes in the reported figures. Since the active portion of the stabilization fund is limited to \$200,000,000 (whereas the residual item in 1938, for instance, was \$508,000,000), fund operations would not affect the size of the residual either way by more than this amount.¹

Evidently not satisfied with being forced to admit a discrepancy of, at the minimum, \$308,000,000 owing to its own "errors and omissions," the Department makes some attempt in subsequent pages² further to explain this elusive item. It finally concludes,³ however, that no immediate explanation is forthcoming.

The appearance of such a residual item raises three questions which will be taken up in order in the three sections to follow.

I

First, what reason, other than the activities of the stabilization fund and expected errors and omissions in the data, can be advanced to explain this difference in the total value of United States international credits and debits?

The failure to explain this item can be traced to the Department's initial assumption, which it formulates as follows:

Since, by definition, the balance of international payments of a country consists

¹ *The Balance of International Payments of the United States*, U. S. Dept. of Commerce, Bureau of Foreign and Domestic Commerce, Washington, 1938, p. 2.

² *Ibid.*, pp. 8-11.

³ *Ibid.*, p. 11.

of payments effected, within a stated period of time, between residents of that country and residents of foreign countries, and since, also by definition, international payments include changes in the short-term foreign assets and liabilities of the country, it follows that aggregate receipts and aggregate payments to foreigners are equal; for any cash claims upon foreign countries not taken up by those with payments to make in foreign countries (an apparent excess of credits) would appear automatically as a net addition to short-term banking assets in foreign countries (or as a net reduction in short-term banking liabilities to foreigners)—that is, as an exactly offsetting debit. Conversely, cash claims in favor of foreigners not matched by cash claims against foreigners (an apparent excess of debits) would appear as a net addition to short-term liabilities to foreigners (or as a net reduction from short-term assets abroad)—that is, as a counterbalancing credit.⁴

In reply to this statement by the Department, it should at once be pointed out, that, in the absence of a perfectly stable international currency, the *aggregate* receipts from foreigners and *aggregate* payments to foreigners, as measured by the Department, not only are not equal, but also could not possibly be equal. This can be shown by means of an illustration. (To simplify the explanation, it may be assumed that the United States trades only with England, and that during the period under consideration only three transactions are consummated. The rate of exchange will be taken to stand at \$5.00 = £1.)

The first transaction is a shipment of goods from the United States to Great Britain. The price of these goods (£200) is, as is usual in the case of raw or semi-processed commodities, quoted in terms of the importer's currency, *i.e.*, in this case, in pounds. To secure payment, the American exporter draws a sight draft on the English importer for £200.⁵ This draft he may sell to his bank for \$1,000, less commission and interest for the period necessary for collection. As far as the Balance of Payments is concerned, this transaction constitutes an export of merchandise to the value of \$1,000, since it will be so entered in the customs at the rate (\$5.00 = £1, in this case) certified daily by the Federal Reserve Bank of New York.⁶

The American bank, having forwarded the £200 draft to its correspondent bank in England, will receive a £200 addition to its account with the English bank as soon as the sight draft is paid by the English importer. The Balance of Payments will now stand:

United States Exports
(credit)
\$1,000 (Mdse.)

Movement of Short-term
Banking Funds (debit)
£200

⁴ *Ibid.*, pp. 8-9.

⁵ It is customary for the seller to draw on the importer. Most drafts are in terms of the currency in which the price is quoted.

⁶ Section 522 of the U. S. Tariff Act of 1930 (sub-section C) specifies that the buying rate of exchange in the New York market at noon on the day of importation shall be the conversion rate for purposes of customs entry. The dollar values for goods invoiced in foreign currency on U. S. Shippers Export Declarations will be arrived at similarly.

At the current rate of exchange, $\$5.00 = \text{£}1$, the payments balance.

The second transaction is in all respects similar to the first, except that the American bank, which now possesses a balance in England, and which finds that there is apparently no demand for sterling exchange in the United States, will not be so eager further to increase its balance in England. It will, therefore, not be willing to give as many dollars for this second $\text{£}200$ draft as it did for the first draft. In other words, it will quote a rate of exchange less favorable to the seller of the sterling draft. The new rate may be, say, $\$4.00 = \text{£}1$. When the exporter presents his second draft of $\text{£}200$ to the American bank he will, therefore, receive $\$800$, less commission and interest for the period necessary for collection. The entry in the Balance of Payments will be an $\$800$ merchandise export. The draft, being sent to England as before, increases the balance of the American bank to $\text{£}400$. The Balance of Payments will now stand:

United States Exports
(credit)
 $\$1,800$ (Mdse.)

*Movement of Short-term
Banking Funds (debit)*
 $\text{£}400$

At the current rate of exchange, $\$4.00 = \text{£}1$, the payments obviously do not balance.

The third transaction is a shipment of goods from England to the United States. The price of these goods ($\text{£}400$) is, as is usual in the case of manufactured goods, quoted in terms of the exporter's currency, *i.e.*, in this case, in pounds. In order to simplify the illustration, it may be assumed that the American importer initiates payment.⁷ He proceeds to his bank and requests a sterling draft for $\text{£}400$. The bank, having just that amount in its balance in England, sells the required sterling draft to the importer at the current rate of exchange, *i.e.*, for $\$1,600$ plus commission. The Balance of Payments now reads:

United States Exports
(credit)
Merchandise $\$1,800$

United States Imports
(debit)
Merchandise $\$1,600$

The balance of international payments no longer balances.⁸ It is significant that its failure to balance dates from the fluctuation in the exchange rate. The reason may be stated quite simply: If a balance is created in a foreign country by, say, the export of goods to that country, and the rate

⁷ The reasoning throughout this article is equally valid whether it is the importer or the exporter who initiates payment. The particular examples were chosen simply because they afford the clearest explanation.

⁸ The balance of payments would balance only if the last bill had been sold at an exchange rate of $\$4.50 = \text{£}1$. There is no reason, however, for assuming that it will be sold at that rate. It is, in fact, the main thesis of this article that bank credits abroad are drawn down at rates other than those at which they were established.

of exchange alters *before the balance is wiped out*, when the balance is finally returned to this country in, say, the form of goods, it must obviously possess a different dollar value from the dollar value of the original goods export. This is true by definition of a change in the exchange rate. The balance of payments will, therefore, never balance unless account is taken of the fact that the individual items which go to make up the aggregate exports and imports are achieved at different rates of exchange.

The example selected above, it is admitted, is somewhat removed from actual practice. Bankers do not ordinarily establish balances abroad, and then draw them down. They are instead continually buying (presumably at the most favorable rates) bills of exchange which, when sent to foreign correspondent bankers, will serve to maintain a reserve balance against which they may continually sell drafts. The fundamental process is, however, the same whether an isolated transaction is considered (as in the example above), or whether the bank is looked at in its real activity as a going concern.

To make the point clearer, another example may be considered: American bank X is, from day to day, buying sterling bills. One important source of such bills is exports of American goods invoiced in sterling. An American exporter, it may be supposed, ships goods priced at £1,000 to an English importer. He draws a sterling draft for that amount and sells the draft to his American bank. It is against this draft, and others like it, that the American bank sells sterling drafts. If this £1,000 shipment of goods passes the customs on, say, January 15, and the rate of exchange certified for that day by the Federal Reserve Bank of New York is $\$4.02 = £1$, the shipment will be entered in the customs (and later recorded by the Bureau of Foreign and Domestic Commerce) as a \$4,020 export of merchandise. The number of dollars which the American exporter receives from his bank for the £1,000 draft is unimportant for balance-of-payments purposes. It is sufficient if it is determined that a £1,000 draft actually was drawn to secure payment.

Now suppose that on the following day, the rate of exchange being $\$4.00 = £1$, an American importer receives a shipment of goods from England priced at £1,000. This will be entered in the customs (and later recorded by the Bureau) as a \$4,000 import of merchandise. The importer will purchase from his bank the necessary £1,000 draft to remit payment. It is unimportant how many dollars he must sacrifice in order to obtain the £1,000 draft. The significant fact is that it is only because of the export of goods, valued at £1,000, by an American exporter that the bank is able to sell a £1,000 draft to the importer. The original export, in other words, gives rise to a sterling credit which may be used in paying for the later import.

It is at this point that the Bureau fails to take account of a really sig-

nificant point in the theory of international trade underlying these operations. The only figures recorded by the Bureau as the result of the two transactions above will be Merchandise Export, \$4,020; Merchandise Import, \$4,000. The Bureau has overlooked the fact that, although every individual transaction in international trade gives rise to a debit and a credit which exactly balance, this debit and credit can balance at only one exchange rate, and at no other. An export, it is true, gives rise to a credit, which credit may be used to pay for an import, the export and the import supposedly being of the same value. The export and the import *are* of the same value in the currency (say, sterling) in which their prices are quoted, and in which the bills of exchange are drawn; but in order to be of the same value in some other currency (say, dollars) it must first be postulated that the rate of exchange between sterling and dollars remains fixed over the period necessary to make both the export and the import. Such a postulate is obviously not in accordance with the facts.

II

When the reason why a residual item appears each year in the *Balance of International Payments* is understood, can it not be said that this item represents some significant figure? In other words, should the Bureau continue its present method, changing its presentation only by including an explanation of just what the residual item represents?⁹

Several tentative explanations suggest themselves: (1) The residual item might be a measure of the speculative profits (or losses) of all the exchange dealers of this country for the period under consideration; (2) it might represent the speculative profits (or losses) of both exchange dealers and other traders engaged in international trade; (3) it might represent the dollar value of the increased amount of goods, services, and credits which this country is forced to give in exchange for the goods, services, and credits of other countries, *above* what this country would have had to offer to obtain the same goods, services, and credits of other countries, had the value of the currency of foreign countries not altered relatively to the dollar; and, finally (4), it might not represent any significant figure, but serve simply to measure the net error in the data due to the incorrect method followed by the Bureau. These possibilities will be taken up in order.

(1) The first of the two illustrations employed above—that dealing with the three transactions between England and the United States—suggests that the unexplained portion of the residual item may form a fairly accurate measure of the speculative profits (or losses) made by the exchange dealers of this country during the period under consideration. It

⁹ Other than stabilization fund activities and possible errors and omissions already mentioned.

will be noted that the American bank paid \$1,000 for the first bill drawn by the American exporter, and \$800 for the second bill. The third bill, which was sold to the American importer, brought only \$1,600. The speculative loss to the banker on these three operations, therefore, amounted to \$200, which is exactly the amount by which the balance of international payments fails to balance.

If exchange dealers actually carried on business in the manner described above, the conclusion that the remainder of the residual item represented their net speculative profit or loss would, in fact, be correct. Not all profits or losses due to fluctuations in the exchange are, however, borne by exchange dealers. A small amount of the business is carried on between importers and exporters themselves, the exporter selling foreign drafts to the importer. This is especially true where one concern is both importer and exporter.

Besides this relatively small volume of business carried on without broker or banker as intermediary, there is further reason to conclude that others than exchange dealers take the profits or losses of exchange fluctuation. The process of buying and selling futures in exchange allows exchange dealers to avoid the losses which they might be forced to undergo when foreign currencies depreciate relatively to the dollar. Suppose that, in the illustration above of the three transactions between the United States and England, the future rate on the day of the first transaction (when the spot rate was $\$5.00 = \text{£}1$) had been $\$5.02 = \text{£}1$, and that the banker had sold a £400 sterling future to the American importer. All the transactions are exactly the same as before except that the banker now sells (in the third transaction) his £400 sterling balance according to the future contract, *i.e.*, for \$2,008. The Balance of Payments reads as before:

United States Exports
(credit)

Merchandise \$1,800

United States Imports
(debit)

Merchandise \$1,600

But the banker, instead of showing a net speculative loss as before (the amount of the residual item), now enjoys a net speculative profit of \$208, *i.e.*, \$2,008 — ($\$1,000 + \800). The remainder of the residual item can, therefore, not be said to represent the speculative profits or losses of exchange dealers.

2. The fact that the banker appeared to shift his loss to the trader in this last example might seem to indicate that the residual item may safely be said to measure the net speculative profit or loss of exchange dealers *and* traders for the period under consideration. It is, however, only in one sense (namely, that which claims that any profit presupposes a corresponding loss) that the speculative loss above may be said to have been shifted to the importer. A more realistic analysis would point out that the importer

is trading on the basis of a $\$5.00 = \text{£}1$ exchange rate, and that if he finds it profitable to do so, he has not suffered a loss merely because he could have bought his sterling bill at the rate of $\$4.00 = \text{£}1$, had he not entered into the future contract. The importer is following good business practice and allowing the banker to risk the exchange fluctuation. He continues to trade on the basis of a $\$5.00 = \text{£}1$ exchange rate. It is therefore not he individually who can be said to lose.

(3) Although the speculative profit or loss cannot be definitely allocated to the exchange dealers, either individually or as a group, nor to traders, either individually or as a group, it nevertheless might seem that the United States as a whole must be affected by a change in the exchange rate, even though no special group can be pointed to as bearing the main effect of the change. Does not the unexplained portion of the residual item therefore reflect the change in our barter terms of trade, *i.e.*, does it not measure the dollar value of the change in the amount of goods, services, and credits which the United States is forced to give in exchange for the goods, services, and credits of some other country? Brief examination will show that this last attempt to attach special significance to the residual item is, like the first two, invalid. For it appears that the unexplained portion of the residual item may be either a positive or a negative quantity, irrespective of whether the exchange rate is depreciating or appreciating.

This may be shown as follows: At an exchange rate $\$4.00 = \text{£}1$ on January 15, an American exporter ships goods valued at $\text{£}1,000$ to England, draws a sterling draft for that amount, and sells it to his banker. The goods are entered in the customs (and later recorded by the Bureau) as a $\$4,000$ export. On January 16, at an exchange rate $\$3.98 = \text{£}1$, an American importer receives a shipment of goods valued at $\text{£}1,000$, buys a sterling draft for that amount from his banker, and sends it to England in payment for the goods. The goods are entered in the customs (and later recorded by the Bureau) as a $\$3,980$ import. There is no entry other than the merchandise import and export, since the movement of short-term banking funds is just canceled. The Balance of International Payments shows that, due to a depreciation of sterling, the United States has been forced to ship goods valued at $\$4,000$ in exchange for the import of goods valued at $\$3,980$.

Suppose, however, that on January 15, the exchange rate being as before, $\$4.00 = \text{£}1$, an American importer receives a shipment of goods valued at $\text{£}1,000$ but does not buy the sterling draft to make payment until the following day.¹⁰ The goods are entered in the customs (and later recorded by the Bureau) as a $\$4,000$ import. On the following day, the exchange

¹⁰ Where goods are shipped D/A or D/P (*i.e.*, where importers would remit sooner), the tendency would be for the residual item to reflect an excess dollar value of American exports over American imports, when foreign currencies were depreciating relative to the dollar. This would be, however, only a tendency.

rate being as in the preceding example, $\$3.98 = \text{£}1$, an American exporter ships goods valued at $\text{£}1,000$ to England, draws a sterling draft for that amount, and sells it to his banker, the banker then being able to sell a sterling draft for the same amount to the importer. The latter shipment of goods is entered in the customs (and later recorded by the Bureau) as a $\$3,980$ export. There is no entry other than the merchandise import and export since the movement of short-term banking funds is just canceled. The Balance of International Payments shows that, due to a depreciation of sterling, the United States has received goods valued at $\$4,000$ in exchange for the export of goods valued at $\$3,980$.

(4) The fact that the unexplained portion of the residual item does not represent any significant figure but is rather an arbitrary, or chance, figure arising from the mistaken method pursued by the Bureau in compiling its *Balance of International Payments*, has been sufficiently illustrated. When the effect of open account and commission exporting as well as the use of time, rather than sight, bills in increasing the errors of the Bureau's method is considered, it must be concluded that the residual item is prevented from reaching astronomical magnitudes only through the fact that it is a net, rather than a gross, figure, and a great part of the Bureau's error is therefore canceled by other offsetting errors.

III

Given the conclusion just stated, the third question is how to construct an alternative method of compiling the Balance, which will not suffer from the practical and theoretical invalidities discovered in the present system. This fortunately appears fairly simple. It should be apparent that no problem presents itself where the prices of goods, and the bills drawn to cover them, are expressed in the domestic currency. Where prices of exported or imported goods are quoted in a foreign currency, and the bills of exchange are drawn in that currency, the Bureau must maintain the values of such imports and exports, at least for the time being, in that foreign currency. Suppose, for instance, that an American exporter shipped goods to England at an exchange rate of $\$4.02 = \text{£}1$, quoting their value as $\text{£}1,000$, and drawing a sterling bill for that amount. A reverse transaction may also be assumed in which an American importer receives a shipment of goods at the exchange rate $\$4.00 = \text{£}1$, value $\text{£}1,000$, and purchases a sterling bill for that amount. The two transactions balance at $\text{£}1,000$. If the Bureau wishes to state this export and import in terms of dollars, it may convert at an average exchange rate, *i.e.*, $\$4.01 = \text{£}1$, and record that the United States exported goods to the value of $\$4,010$ and imported goods to the value of $\$4,010$. This is obviously preferable to the figures: U.S. Exports $\$4,020$, U.S. Imports $\$4,000$, which would be secured under the present method of the Bureau.

There is, however, a difficulty involved in the suggested method of collection of the data. It is true that, if the Bureau follows the practice of collecting data in foreign currencies for those transactions for which foreign currency drafts are drawn, the credits and debits will always balance, both in foreign currency figures and after the final conversion to dollars. The final dollar values, however, though they will balance, will not necessarily reflect the true value of these exports and imports unless the exchange rate used for the final conversion is not only an average of the exchange rates obtaining throughout the year, but also a weighted average. This difficulty could be surmounted if the Bureau arranged to have the customs data compiled, for its own purposes, in the currency in which price was quoted and the draft drawn, and also arranged to have the exchange rate certified by the Federal Reserve Bank of New York for that date noted along with the foreign currency invoice value.¹¹ This would permit the calculation of a weighted average exchange rate for the year to be employed at the end of the year in converting into dollars those figures held in foreign currencies.

This brief treatment does not, of course, attempt to consider all the problems with which the Bureau may be faced in following the suggested method of collection of the data. The use of finance bills, for example, and three-cornered international transactions, may require special attention. The principle—that transactions in foreign currencies must be maintained in foreign currencies and converted at a weighted average exchange rate—nevertheless remains true throughout.

G. W. MCKINLEY

Lehigh University

¹¹ The exchange rate could, of course, be determined equally well by reference to the daily list of exchange rates circulated by the Customs Information Exchange.

PROFIT MAXIMIZATION UNDER MONOPOLISTIC COMPETITION

Current theory nominally recognizes that the individual firm maximizes profits, not through output adjustments alone, but also by determining price, the attributes of the product and selling effort. In this article the rôle of product variation and the interrelations of these three variables are emphasized. Diagrammatics analogous to those customarily used in price-output problems are developed and these are later employed to demonstrate that the incidence of relevant technological innovations upon the quality of the product of the firm are independent of abnormal profits or of monopolistic advantage. Finally, the joint determination of output, product and promotion is considered. Normally, the exploitation of every profit possibility until marginal costs and receipts were equated would be expected. Available funds may, however, be limited and certain policies may earn losses unless more intensively pursued. In this case certain profit possibilities must be passed over in favor of others, the marginal net return on working capital will vary with different employments, and as the amount of such funds available changes the manner of their expenditure may differ markedly.

Entrepreneurs must determine, *inter alia*, the price and output of their product, its specifications, and the amount and type of selling effort.¹ The logic and illustrative diagrammatics of the entrepreneurial determination of output and price are familiar. Similar methods, developed below, are applicable to the problems of determining the optimum degree of durability and of other product attributes. The procedure used is shown to be relevant to a consideration of the incidence of improved technology on prices and quality. Finally, the joint determination of price, product,² and promotion³ is attempted. In the following discussion it is assumed that the products of immediate rivals are heterogeneous and are considered by consumers to be close but not exact substitutes: they are "differentiated" one from another either because the product (or service) is tangibly different, or because it has been made to seem so, or because of location. The time period relevant to the considerations of this paper is not the long run, but a short period in which there is, however, sufficient time for some rather fundamental adjustments by entrepreneurs: the product of each firm is held capable of considerable modification, but the possibility of changing over to a radically different type of product with altogether dissimilar uses and attributes is excluded. The location of the enterprise is considered given, but distribution facilities or delivery services may be modified. The reasoning throughout assumes that entrepreneurs desire profits, have perfect knowledge, and act rationally.

¹ If the firm has a less than infinitely elastic demand schedule, and one assumes that output and sales will be equated, then a price decision simultaneously determines output (or *vice versa*) and this theoretically comprises but one decision.

² "Product" throughout includes the material good plus all associated intangibles *except* those resulting from promotion and the peculiar site of the place of sale. Thus "differentiation" due to location or advertising is excluded: all other types are included.

³ "Promotion" throughout includes all selling effort, whether advertising or personal salesmanship. Although advertising is only a particular form of promotion it will be used synonymously.

I

The relationship of price, promotion, and product, as it might be viewed by management, is set forth in the schema in Figure 1. Management is seen constantly attempting to alter, in its favor, the balance between total receipts and costs. Output is assumed always to equal sales, and gross receipts to be the product of price and sales. While promotion and product affect total costs directly, they determine total receipts only indirectly via sales or price.

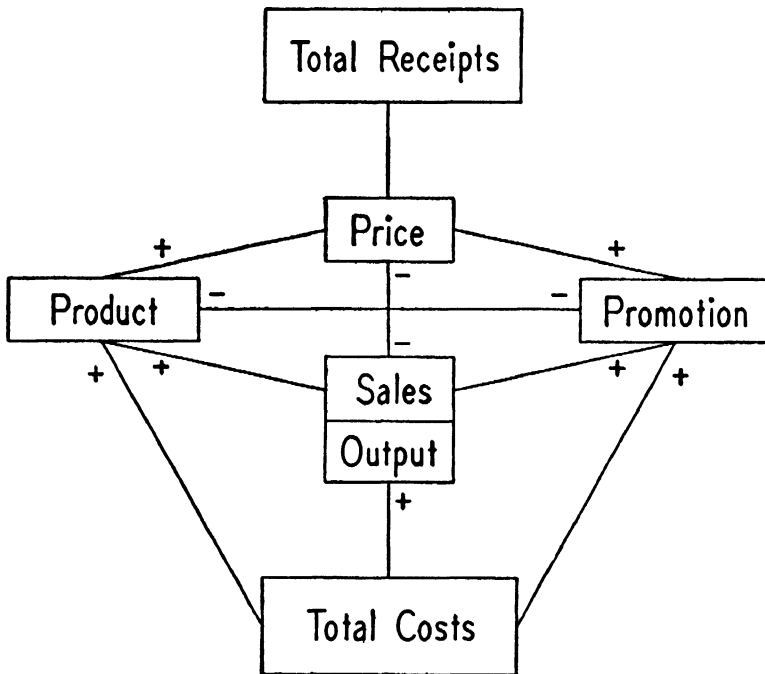


FIGURE 1

Theoretically, the relationship between any two of the variables indicated may be considered while the remainder are held temporarily constant. Suppose the rate of expenditure on promotion to be increased and that this increases the acceptance of the unchanged product by the public so that demand is increased in the schedule sense and a higher price or greater sales can be realized. If the entire effect is upon price, both sales and output costs will be unchanged; and the cost of promotion can readily be set against increased receipts. However, if price is unaltered, sales will increase and per unit costs will probably be changed; the additional advertising will then be of advantage to the firm only if there are increasing returns with augmented output sufficient to outweigh the cost of promotion. Whether the increased demand is exploited through sales or price will depend upon the magnitudes and slopes of the marginal costs and receipts curves. A further possibility is that management does not wish to increase either the price or sales

but prefers to change the specifications of the product so as exactly to offset the increased market acceptance resulting from promotion and reduce its cost of production. This will be profitable if the savings in manufacturing are greater than the expense of the selling effort.

If the functional relationship of every connected pair of variables were known, the most profitable way in which any change in a specific variable might work itself out on total costs and receipts could be calculated. In the following sections some of the relationships are considered.

II

We are all familiar with the diagrammatics by which the effect of variations in output upon profits, via average receipts and costs, is demonstrated. Variations in output change total costs and total receipts, but not commensurately, and it is this fact which makes the entire conventional apparatus necessary. Exactly this same procedure can be used to find the optimum determination of promotion or of the product. Instead of output we might measure, probably along the X-axis, the number of full-page advertisements run per unit of time, or some quality attribute of the product (*e.g.*, durability, economy of operation, etc.).

Let us suppose that a concern is engaged in the production and distribution of silk hose. Promotion and also the quality and number of sizes have been determined. This individual firm may superficially appear in equilibrium if it has chanced upon the optimum price-output relationship. Let us further suppose, however, that it has been decided to make only one color available; and, after market surveys, the optimum single color—flesh pink—has been adopted. The question arises as to whether a different number of color options would not prove more profitable.

In Figure 2 a hypothetical relationship between number of color options and total receipts (or price) and total costs (or per unit costs) is illustrated. A special case of individual equilibrium with zero profits has been selected, and in a competitive industry where the products of rival concerns are close substitutes, there is probably a tendency to approach, if not to arrive, at this situation.⁴ The intersection of the marginal curves confirms OX as the optimum number of color options.

The more colors offered, the greater the probability that each individual consumer will find exactly the color she wants for her *ensemble*. Hence, she will likely prefer this brand to others and be willing to pay a premium for it. In other words, the demand schedule for the hose of this firm will

⁴This is simply Professor Chamberlin's tangency solution but in a different context. It is, therefore, subject to essentially the same assumptions and limitations. As rival branded and advertised goods are not perfect substitutes, and because all rival firms will not normally have the same scale of plant and average cost curves, a final tangency solution for the group in equilibrium would seem to be accidental rather than necessary, although perhaps closely approached.

be shifted to the right and upwards. This improved market acceptance can be exploited in either of three ways: by charging higher prices, increasing sales, or reducing selling effort. We shall assume that the full effect of changing the number of color options is countered by a price adjustment so that promotion, sales, and output remain constant irrespective of the degree of standardization. For each given number of color choices the experts must decide which colors will maximize the aggregate outlay the market

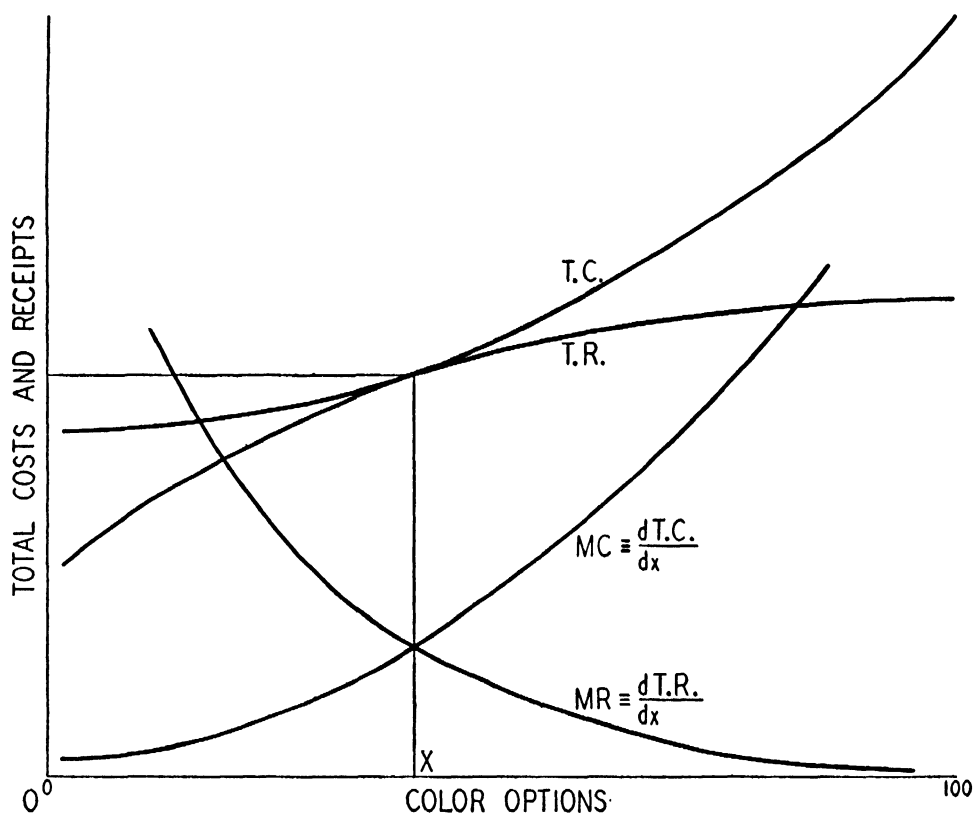


FIGURE 2

will make for the constant output sold.⁵ If the output was 1,000,000 pairs a year, the corporation could perhaps realize \$500,000 with flesh pink, \$600,000 with flesh pink and rust, \$670,000 with black, tan, and beige, etc.⁶ The offering of 100 instead of 99 color choices, however, will probably be unnoticed by the market. Thus in Figure 2 the receipts curve rises at an ever-decreasing rate and terminates in an asymptote. On the cost side

⁵ This assumption, that the entrepreneur is able to determine the most profitable combination of colors for each different number of color options, is analogous with the supposition that he is able to determine, for each given output, the optimum number and manner of employment of the factors.

⁶ The realizable receipts will, of course, depend largely upon the prices of close substitutes.

there is reason to suppose that, as the number of colors increases, total costs of producing the given output will increase at an increasing rate. As sales and output are assumed constant, the receipts and costs curves represent either totals or averages.

In this case the costs curve has been assumed convex from the x-axis and the receipts curve concave. Had the reverse been assumed, there would have been no stable equilibrium adjustment. Had we assumed a cost curve

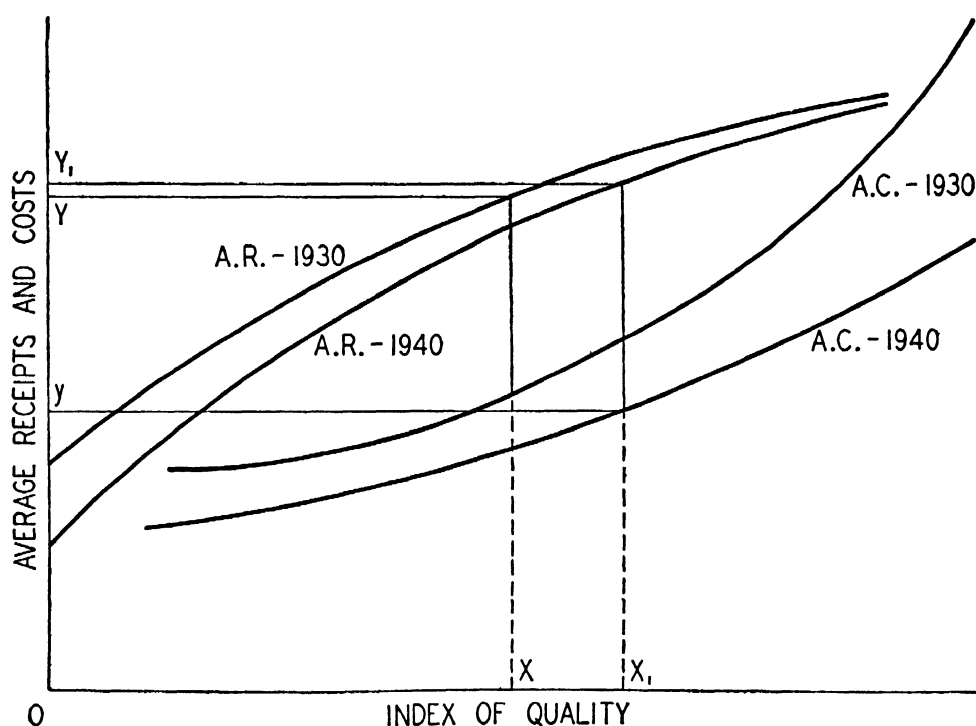


FIGURE 3

concave from below, with marginal costs falling, there would be a determinate solution only if the concavity of the receipts curve were more pronounced.⁷

III

What will be the incidence of an improved technology on costs, prices and products? We might suppose that because the cost of making a specific product is reduced, prices will be reduced if competition is effective; or we might argue that a more acceptable product, and one which previously would have cost more to fabricate, will now be sold at the customary price level. For example, although technical progress has continued apace in the automobile industry during the last decade, the price of a certain representative car in the low-price field was almost identical in 1940 with that

⁷ The preceding analysis ignores the rare product change which does not affect both costs and receipts in the same direction.

ten years before, the benefits of scientific invention for the consumer having taken the form of an improved rather than a less expensive automobile. There has been controversy over whether this outcome is owing to the allegedly monopolistic position of the largest units in the industry, as evidenced by a high rate of return on invested capital in certain cases, or whether this entrepreneurial reaction is also compatible with keen competition between rival producers.

In Figure 3 variations in quality, expressed in terms of some "hedonic" index,⁸ are measured along the X-axis: aggregate receipts (or price) are measured, together with aggregate costs (or average costs), on the Y-axis. Output and sales are assumed equal and constant. And again, unfortunately, all disturbing factors must be "impounded" in *ceteris paribus*.

Hypothetical receipts and costs curves for Corporation X are shown for 1930. The receipts curve is positively inclined, but, reflecting the decreasing marginal utility of additional quality, rises asymptotically. Aggregate costs will also certainly tend to increase with additional quality, but at first the increase in costs will be moderate. As technical limits are reached, however, each improvement (*e.g.*, another mile per gallon without sacrificing other performance characteristics) will be realized only with increasing difficulty and cost. Profits are shown as being maximized with a quality determination of OX.⁹

Ten years later in 1940, after further invention and innovation, the consumer has modified his scale of values and now expects rather more for his money, and accordingly the price which the market will pay for a given quality has decreased. There is reason for supposing that this reduction will be greatest for the lower qualities. The market places a premium on those quality features (*e.g.*, sealed-beam headlights, column gear-shifts, hydraulic drives, etc.) which are new or have not yet been universally introduced.¹⁰ Mr. Jones is also eager to enjoy features formerly to be had only on the expensive car of Mr. Bucks. But previous improvements, such as safety glass, four-wheel brakes, and self-starters, are taken for granted and all cars have them. We can ignore the factor of styling because the 1940 fashions probably looked no better last year than the 1930 ones did then. So we assume that the receipts curve becomes lower and *more positive* in inclination in 1940 than it was in 1930. Compared with the cost curve

⁸ Cf. A. T. Court's paper, "Hedonic Price Indexes with Automotive Examples," presented at a joint meeting of the American Statistical Association and the Econometric Society in Detroit, Michigan, December 27, 1938. Perhaps this index might include miles per gallon, acceleration, retardation, maximum speed, ratio of sprung to unsprung weight, etc.

⁹ The marginal curves are omitted to simplify the diagram. At OX the vertical distance between the receipts and costs curves is at a maximum.

¹⁰ While all new models may have these features the majority of automobiles, which are several years old at any given date, do not have them.

in 1930, however, the cost curve in 1940 is also lower but probably *less positively* inclined. It is reasonable to suppose that there are diminishing returns in the solution of any problem, particularly after it has been fairly satisfactorily solved; and industrial invention is characteristically concerned, not with making simple things easier, but hard things less difficult. The 1940 adjustment (see Figure 3) shows that Corporation X has now selected OX_1 degree of quality, for this will realize maximum profits.

It is clear from Figure 3 that, if a consumer representative were given entrepreneurial authority subject to the limitation that price must not be less than cost, the quality determination in the 1940 case would again be OX_1 and the price and costs would be Oy , thus eliminating profits. The receipts curve is by definition an indifference curve for the consumer;¹¹ similarly, if prices must equal costs, the costs curve becomes an indifference curve from the point of view of the corporation. The distance between the curves might be likened to a "surplus," *i.e.*, cash profits for the corporation, if the price exceeds Oy , or free utility for the consumers if the price falls short of OY_1 . If we assume that the corporation always charges the maximum that it can for each degree of quality, its determination of quality *per se* is of no consequence for the consumer. Injury to the consumer, in so far as it may exist, would seem to result from the fact that the corporation can command a price in excess of costs for each several quality: this may be due to peculiarly low costs or to limited rivalry in the industry.

The optimum determination of quality will depend upon the *twist* given the curves by each new innovation and not upon the resulting mean change in their vertical positions, although the latter will of course determine prices, costs and profits, once the degree of quality is known. If we can assume the receipts curve to become more positive and the cost curve less positive, then, irrespective of what happens to price, costs, and profits, technical progress will result in increased quality of product. The new price (OY_1) may be greater than, less than, or equal to the old price (OY).

Whether or not relevant technological advances result in an improved product has nothing to do with the existence of monopoly elements, or abnormal profits or losses, but depends upon the *twists* given the receipts and costs curves.¹² The product will be improved if the receipts curve becomes more positively inclined *relatively* to the costs curve (or the latter less positively inclined *relatively* to the former). For a change in quality it

¹¹ The combination of price and quality is a matter of indifference to the consumer, provided it can be represented by a point on the receipts curve. The position of this curve is, of course, based in large measure upon the valuation placed by the consumer on substitute goods and the prices charged for them. A reduction in the price of a rival "make" will lower the receipts curve of Corporation X, particularly over the range of quality equivalent to that of the competitor's product.

¹² What happens to price is another matter. For example, lessened competition might raise the entire receipts curve in 1940. Such possibilities have been disregarded.

is not necessary, as supposed above in the automobile case, that the changes in slopes be opposite in an absolute sense. The more general requirement is simply that the changes in slopes be relative.

IV

Finally, if the entrepreneur knows the relations of marginal costs and receipts to variations in (1) output and sales, (2) the quality of the product, and (3) the extent and kind of selling effort, this knowledge must be employed in the simultaneous determination of these three strategic variables.

As a general principle the entrepreneur will, "taking account of his own means . . . push the investment of capital in his business in each several direction until what appears in his judgment to be the outer limit, or margin, of profitableness is reached."¹³ To give concreteness, we can conceive of the management of an existing enterprise, controlling a certain fund of circulating capital, deciding in which of the three directions mentioned above it will invest. Of course there are many alternative means by which these ends may be sought: there may be M ways of augmenting output, N ways of improving the product, and O ways of increasing promotion. However, just as we do not usually bother about the less efficient ways in which the factors can be combined to give a certain output, so in this case are we concerned only with the most economical way of improving the product or of increasing promotion by a given amount.¹⁴

The marginal net return on an additional dollar of working capital invested to augment output (MNP_o) can be readily calculated if the customary relations of marginal costs and receipts to changes in output and sales are known. The increase in output resulting from an additional dollar expended will be the reciprocal of the marginal cost at that output range, and the value of this output will be given by the prevailing marginal revenue: for the investment to be profitable the increment of expenditure (or the cost of the last unit produced) must be recovered.¹⁵ If marginal costs increase soon and rapidly, and the price elasticity of demand is approaching zero, the marginal output possible for each increment of expenditure will be decreasing and the revenue from the extra output will be falling: thus, in time, additional investment for output will no longer be recoverable.¹⁶

In exactly the same way working capital may be expended to enhance the acceptance of the product by altering its specifications. Given the rela-

¹³ Alfred Marshall, *Principles of Economics*, 8th ed., Book V, iv, 4.

¹⁴ In each case a longer run envelope curve is fitted to the subsidiary relationships.

¹⁵ Symbolically, $MNP_o = (MR_o/MC_o) - 1$ where MR_o and MC_o are marginal costs and receipts for the appropriate output. It follows that MNP_o is zero when MC_o and MR_o are equal.

¹⁶ Interest on the investment can be included as a cost.

tions of marginal costs and receipts to changes in the product,¹⁷ the marginal net profit on investment to improve the product (MNP_p) can be calculated. Similarly MNP_s , the marginal net profit on investment in selling effort, can be ascertained.

In Figure 4, MNP_o , MNP_p , and MNP_s (curves O, P, and S) are brought together. The X-axis represents the rate of investment and the Y-axis the marginal net profit at different rates of expenditure.¹⁸ Profits are maximized, for any given total expenditure, when the greatest possible net area above the X-axis is secured.¹⁹ If each marginal net profit is initially positive,

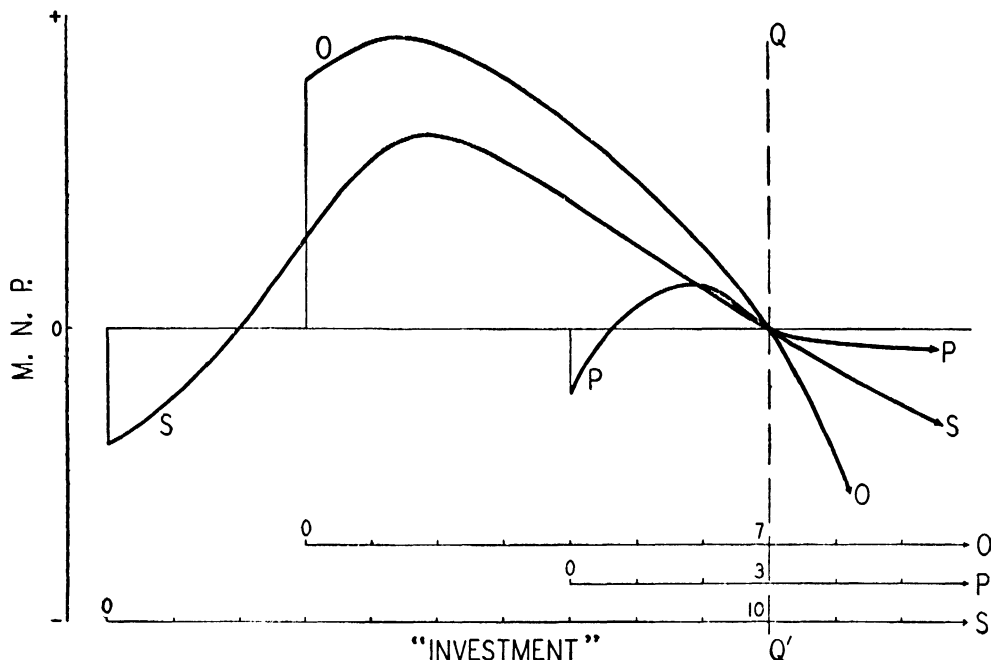


FIGURE 4

and declines uninterruptedly, the optimum adjustment will necessitate that all be equal; and, if adequate capital is available, investment will be pushed in each direction until each marginal net profit is zero, at which point MC_o will equal MR_o , etc. It is very possible, however, that when the index of output (or of quality or promotion) is low, marginal costs may temporarily exceed marginal receipts: in this case the curve of MNP_o (or of MNP_p or

¹⁷ As were assumed known in Figure 2.

¹⁸ In Figure 4 we have, as it were, three parallel planes which are adjusted horizontally by management. (In many cases this adjustment will be such that all three marginal net products coincide at QQ' .) The actual investment in each direction is represented by the distance from the origin of each plane on the left to QQ' : as investment is increased, the relevant plane is slid past this line from right to left, the others remaining unchanged. Theoretically these planes continue indefinitely to the right, but only the profitable ranges have been given substance by actual investment.

¹⁹ Areas above and below the axis do not represent absolute surpluses and deficits but only profits or losses in the sense that the position of the enterprise is improved or worsened.

MNP_s) would at first be negative, but later would rise to a maximum positive value and then commence to descend.²⁰ In these instances a certain minimum investment, sufficient to cancel earlier losses, must be made before there can be net additions to profits, and adjustments will necessarily be discrete instead of continuous. Thus in Figure 4 we have supposed the firm to be in equilibrium when spending \$700,000 for output, \$300,000 improving the product, and \$1,000,000 for promotion. Had the total capital available for investment been only \$700,000, this would all have gone for output: investment in another direction would be unprofitable unless on a scale sufficient to offset initial losses incidental to improving the product or undertaking selling effort. If various policies can prove profitable only when supported by a certain minimum rate of expenditure (because the marginal net profit will otherwise be negative), then the availability to each firm of adequate surplus capital funds becomes important.

It is recognized by the writer that these different curves are in practice interrelated and that any change in the determination of one variable may change the positions of the other two curves. In the simple case here considered the range of variation is of course far too great. For small changes in any one variable, however, this interdependence might frequently be ignored. Another difficulty is that the increased receipts resulting from an improvement in the product, or from promotion, may not arise from higher prices being charged but from increased sales—which in turn means a change in output, unit costs, and price. Notwithstanding the many difficulties, this theoretical procedure illustrates the logic of the entrepreneurial determination of output, product and promotion. It also indicates the limited rôle which output adjustments may play in profit maximization under conditions of monopolistic competition.

STEPHEN ENKE

Harvard University

²⁰ It will cross the X-axis twice—when MC equals MR—but only in the second case will the equilibrium be stable. See Curve S, Figure 4.

COMMUNICATIONS

Professor Hicks's Theory of Money Interest

In *Value and Capital*,¹ Professor Hicks has put forward a novel explanation of money interest. A demand for money in terms of securities, hence discount and money interest, are possible only because money and securities are *imperfect* substitutes for each other. Professor Hicks proposes to explain money interest by showing what fundamental factor prevents securities from becoming *perfect* substitutes for money.

Most securities are inferior to money on account of default risk; but this cannot be fundamental, since even "perfectly safe" securities can stand at a discount. A second inferiority is the risk of change of capital value of securities due to the uncertainty of the rate of discount during their currency. This cannot be fundamental, either, since it would be circular to explain the existence of discount solely by the uncertainty of its extent.² Money interest cannot, then, be ultimately explained by risk. To find the fundamental factor, Professor Hicks accordingly examines³ the reason for the imperfect substitutability of a security free of both these secondary inferiorities, namely, one that is (1) "perfectly safe," (2) "perfectly short" (*i.e.*, so short that the rate of interest cannot change during its currency).⁴

Unless there be some factor not yet mentioned, there would be no obstacle to prevent people from investing all their *surplus* funds in such securities, so long as these offered any interest whatever. Professor Hicks claims that if this were so, it would prove that such securities were a perfect substitute for money, so that they could not stand at a discount. But since all payments are made in money, a separate, troublesome transaction is necessary to invest the money one receives in securities. It is this trouble of investment which, under the assumptions made, constitutes the only conceivable obstacle preventing people from investing all their (surplus) money in securities; it must thus be the fundamental reason for the imperfect substitutability of securities for money; hence, for the existence of money interest.⁵ Except for this trouble, interest must vanish.

Professor Hicks does not consider this explanation wholly satisfactory. If payments were made, not in money, but in the securities defined above, their acquisition would involve no trouble of investment. The reason that payments are not so made must then be the genuinely ultimate reason for the inferiority of these securities and for money interest. Professor Hicks gives as explanation that these securities are perfectly safe, yet, unlike money, not completely free from the suspicion of default risk and therefore not generally acceptable. That is to say, these securities are completely trusted by some but, unlike money, not

¹ Oxford University Press, 1939. Especially chapters XIII and XIX.

² This is Professor Hicks's interpretation of Mr. Keynes's Theory. The accusation of circularity is repeated by Kaldor, "The Theory of Speculation," *Rev. of Ec. Stud.*, Feb., 1940. Mr. Keynes, however, never claimed that in the absence of liquidity preference—*i.e.*, of a risk of change of interest rates—the demand for money, hence interest, would vanish altogether; he merely believes that both would be much lower than they are.

³ *Op. cit.*, p. 164 *seq.*

⁴ In terms of Professor Hicks's model, markets are open only once a "week," on "Mondays," and the currency of these securities is from one "Monday" to the next.

⁵ The rate of interest at any time must equal the trouble of investment to the marginal lender.

by all members of the community. Those who do trust a person's securities completely may not be those to whom he has to pay. To the latter he cannot in that case pay bills, but must pay money. Thus it is impossible, in general, to substitute money payments by payments in securities, and so to avoid the trouble of investing in securities.

The fundamental factors, therefore, preventing perfectly safe and short securities from being perfect substitutes for money, thus making money interest possible, are: first, the trouble of investment; but ultimately, the incomplete absence of default risk, from which even "perfectly safe" securities suffer.

I submit that Professor Hicks is mistaken and that neither of these factors is fundamental. To demonstrate this, it is necessary to reexamine their effect on the substitutability of these securities for money in *both* its principal functions, *qua* store of value, and *qua* medium of exchange.

Take, first, the (practical)⁶ disappearance of the trouble of investment. This would, indeed, make these securities perfect substitutes for money *qua* store of value. But *qua* medium of exchange, money would still be superior to, hence demanded in terms of, securities; for the function of means of payment depends merely on general acceptability and has obviously no connection with the trouble of investment. With Professor Hicks, too, it is at first sight only the demand for *surplus* money, *i.e.*, for money *qua* store of value, which is affected by the disappearance of the trouble of investment. Now as long as money is at all demanded in terms of securities, interest is possible; why then his claim that in the absence of this trouble interest must necessarily be nil (except for something to overcome the indifference as to holding money or securities)?

The reason for the mistake is revealed, it seems, in his analysis of the demand for money.⁷ It is there implied that the disappearance of the trouble of investment would suffice to destroy the demand for money altogether. For all money received would then be spent or invested *literally at once*, so that, apparently, there would at no point of time be any holding of, or any demand for, money. There being no demand for money, there could obviously be no interest.

Professor Hicks appears to see no absurdity in transactions that are perfectly timeless, nor in the continued existence of a money the demand for which is nil. Perhaps, however, he has been misled by his model. For he seems to identify "no demand for money" with "no demand for money during the 'week.'"⁸ The two, of course, are not identical; during business hours on "Monday" the demand for money would still exist, and it is this demand which matters. It would continue to exist, because the use of money, of whatever kind, *qua* medium of exchange is by itself sufficient to compel those using it to hold it after receipt for a certain time, at least for the time necessary to decide its future use and to

⁶ It cannot become zero, or infinitely small, since every transaction must at least cost (finite) time. But it might fall below the *minimum sensible* and become (finitely) negligible. The substitution of "negligible" for "zero" trouble of investment can in no way affect Professor Hicks's theory.

⁷ *Op. cit.* ch. XIX, p. 240, esp. §2.

⁸ *Cf.* p. 240: "Then . . . his demand for money will be nil. All the money he receives will be paid out again at once; he will need to keep over from one week to another no money balance at all to finance his transactions." The only difference between the actual world and one without a trouble of investment would be that in the latter, apart from a higher velocity of circulation, there would necessarily be some people who at the close of business would be left with money they did not want to hold; while this can, but need not, happen today.

carry out this decision by physical or book transfer. This time may be very short; but it must always remain finite, since nothing can be timeless.

Consequently, so long as money retains, over securities, its superiority *qua* medium of exchange, the disappearance of the trouble of investment cannot destroy the demand for it, nor, therefore, the possibility of money interest.⁹

It is now necessary to re-consider the influence of Professor Hicks's second and ultimate reason for the imperfect substitutability of securities for money, namely, incomplete absence of default risk. It may be remarked that in this way Professor Hicks returns, albeit in a roundabout manner, to the precise view he had set out to disprove: that the ultimate explanation of interest is risk.

Is his claim justified, that a security which all members of the community regard as completely free of default risk, would be a perfect substitute for money *qua* medium of exchange? It would seem that this alone would not be sufficient; there is a further difference between money and perfectly safe and short securities. Money is essentially *present* purchasing power; securities—even "perfectly short" ones (one "week's" bills)—are essentially *future* purchasing power. This is because there is at least one person in the community, the issuer, who has declared that he will not pay the securities before maturity, which is the same thing as to say that he will not accept them in settlement of present debts or in payment for present goods. Therefore, to any payee who does not wish to postpone his purchases,¹⁰ these securities, even if completely free of default risk, are inferior to money. It is thus time preference which turns out to be the fundamental cause of the imperfect substitutability of securities for money, hence of money interest.

This result, of course, is anything but surprising. It was strange that time preference should have been so completely eliminated from the determination of money interest (and substituted for, in a roundabout way, by risk).¹¹ This does not, however, affect the obvious truth of Professor Hicks's contention—which he regards as the most important result of his analysis of money interest—that money and securities are close substitutes. Only that this is due, not to the small difference in *risk* between them, but to the small difference in *date*.¹²

ALEXANDER KAFKA

Rio de Janeiro

⁹ There is no reason why interest should in general be lower than today, merely because there is no trouble of investment. For any given value of transactions, the demand for money (*k*) would be lower (higher) than today. But in time prices or the stock of money must become adapted to the permanently higher velocity of circulation, thus driving interest up again.

¹⁰ The minimum conceivable time for which a holder of securities must postpone expenditure after having obtained the security is the minimum time taken for one transaction, that of getting the security repaid or rediscounted.

¹¹ It is legitimate to substitute risk for time-preference in the explanation of the determination of the difference between rates on securities of various durations; for the market provides possibilities of substituting the choice between different amounts of "waiting" by the choice between different amounts of risk—the difference between the risk of obtaining invested funds back again in the future by means of short investments, or by means of the rediscount of a longer one. But there is obviously (*cf. fn. 10*) no such possibility of substitution with regard to the choice of "waiting" for the minimum conceivable period of investment, once one has acquired a security, and of taking money. It is for this reason that the difference in value between money and securities cannot be merely explained by risk, but must also be explained by time preference.

¹² In terms of Professor Hicks's example (p. 167) the difference between money and securities is not that between wheat of different quality but between wheat of different date.

Wage Increases and Employment

In recent literature there has been considerable discussion about the possibility of increasing employment through raising wages. The discussion of this topic generally stems from one of two sources: (1) general business cycle analysis, or (2) partial equilibrium analysis. General business cycle analysis has shown that it is at least conceivable that an increase in wages in a large section of the economy should lead to a greater total volume of expenditures and therefore to increased employment. In partial equilibrium analysis it has been more difficult to find such possibilities, since it is generally assumed there that the demand curve for the product is independent of the wage rate. It has been shown, however, that one such possibility exists if the market for labor is monopsonistic.¹

A recent issue of the *American Economic Review* contains an attempt by Mr. Mikesell² to lay down conditions under which a wage increase might lead to more employment even if the market for labor is perfectly competitive, provided that the market for the product is monopolistic. Beginning with the correct statement that in equilibrium the marginal net value productivity of labor must equal the wage rate, Mr. Mikesell goes on to identify this productivity curve with the demand curve for labor. He then tries to find conditions under which the productivity curve will be positively sloping, and assumes that the demand curve for labor will therefore also be positively sloping. Unfortunately for his thesis, however, the productivity curve is identical with the demand curve only if the former is negatively sloping, but not if it is positively sloping. In any equilibrium position the productivity curve cannot be positively sloping. Mr. Mikesell makes the fundamental mistake of relying only on the first order equilibrium conditions which are valid both for minimum and maximum points of profits, and he fails to take into account the second-order stability conditions that are necessary to insure maximum rather than minimum returns. This error warrants some detailed attention, since it serves as a striking illustration of the fact that the laws of the working of any equilibrium system cannot be deduced unless the second-order stability conditions are known.

For the sake of simplicity I shall confine myself, as does Mr. Mikesell, to the case where the firm produces only one product, the output of which is a function only of the number of laborers employed. It can easily be shown, however, that the results hold also in the more generalized case where the firm produces many products with the aid of many productive services.

Assume that the output q is a function $f(L)$ of the number of laborers, the other variable agents varying in proportion to the number of laborers employed. The net revenue for the firm is therefore

$$1) \quad V = pq - wL - kL,$$

where p is the price of the product, q the output, w the wage rate, L the number of laborers, and the constant k is the additional cost of the variable agents other than labor which must be added with each additional laborer employed. The demand function is given by the equation

$$2) \quad p = p(q).$$

It is assumed that the firm attempts to maximize its net revenue. The first

¹ Joan Robinson, *The Economics of Imperfect Competition*, Macmillan, 1938, chapter 26.

² Raymond F. Mikesell, "The Possibility of a Positively Sloping Demand Curve for Labor," *Am. Econ. Rev.*, vol. 30, Dec., 1940, pp. 829-832.

order condition for profits to be a maximum is that the derivative of profits with respect to employment shall be equal to zero.

$$3) \quad \frac{dV}{dL} = \frac{d(pq)}{dq} \frac{dq}{dL} - k - w = 0.$$

This is the well-known condition that in equilibrium the marginal net value productivity of labor must equal its wage rate.

This condition, however, is true not only when profits are a maximum but also when they are a minimum. To insure that profits will be a maximum requires an additional condition, namely, that employment must be such that profits will decrease for any small increase in employment. For if profits were to increase with a larger volume of employment, it would obviously pay to continue hiring laborers, and the original situation could in no sense be considered an equilibrium situation. Mathematically, this second-order stability condition for maximum profits is:

$$4) \quad \frac{d^2V}{dL^2} = \frac{d}{dq} \left[\frac{d(pq)}{dq} \frac{dq}{dL} \right] \frac{dq}{dL} < 0.$$

Mr. Mikesell argues that if the opposite sign holds, the demand curve for labor will be positively sloping. But this is just the condition that cannot be fulfilled in any equilibrium position, for if the reverse inequality holds, the producer is obviously minimizing rather than maximizing his returns. If the marginal net value productivity curve is positively sloping, it cannot be considered a demand curve for labor.

The error in Mr. Mikesell's reasoning can easily be seen without the use of any mathematical formulae. Since the wage increase serves only to increase the marginal cost, but by assumption leaves the demand for the product unaffected, it is clear that any rise in employment which might be profitable after the wage increase would have been even more profitable before the wage increase, and would therefore have already taken place. If with the given wage rate it is not profitable to increase employment, it will certainly not be profitable to expand it after the wage rate is raised. Obviously the reason it is not profitable to increase employment at the given wage rate must be that an additional laborer would add less than the wage to the total revenue, *i.e.*, that the marginal net value productivity of labor decreases as employment rises. It can not therefore be profitable to expand employment when the wage rate is increased.

Perhaps this error would not require so much attention if it were not fairly common. In a note on "Monopolies and Labor Regulation," which appeared in the *American Economic Review* of September, 1939, Mr. Sidney C. Sufrin seems to have made the same mistake. He there argues that an increase in the wage rate will increase a monopolist's demand for labor if the demand for his product becomes sufficiently more elastic as prices decline and output expands. Thus he writes:

"If hourly rates [are] raised, the monopolist is faced with the problem of redetermining his output. . . . If the demand for the product is of progressively greater elasticity along its lower reaches, the net income to be derived from the sale of the bigger output will be greater than the net income to be obtained from the smaller output. . . . Under [these] conditions the program of raising wages . . . will increase a monopolist's output and employment and also reduce his price" (p. 552).

Mr. Sufrin fails to see that if the bigger output is more profitable after the wage increase, it must have been all the more so before the wage increase.

The same mistake of neglecting the second-order stability conditions appears also to have been made by Professor Zeuthen in one part of his *Problems of Monopoly and Economic Warfare*.⁸ Sufrin assumes an initial situation in which the monopolist produces too little; in Zeuthen's case he produces too much.

Assuming that the firm attempts to maximize its net revenue V , it is clear that an increase in the wage rate cannot possibly lead to an increase in em-

ployment unless the marginal net revenue $\frac{dV}{dL}$ for the previous equilibrium level

of employment rises as a result of the wage increase. In the case treated by Joan Robinson the increase in the wage rate actually represents a decline in the marginal cost of production. This is possible in a monopsonistic market for labor if the new supply curve of labor to the firm is sufficiently more elastic than the old. Under such circumstances a rise in the wage rate leads to an increase in the marginal net revenue and, therefore, to an increase in employment.

Another such possibility exists when the demand curve for the firm's product is itself an increasing function of the income of its employees, so that the marginal net value productivity of labor corresponding to any given level of employment is a function of the wage rate. In this case, even though the marginal cost of production may rise as a result of the wage increase, if the marginal net value productivity rises even more, the volume of employment will increase. Assuming that the laborers spend only a fraction of any increase in their income upon the output of this firm, such a result is possible only if an increase in their income leads to a sufficient rise in their income elasticity and/or price elasticity of demand.

A third possibility presents itself in those cases where the firm has to operate under a limited budget. Just as the consumer who comes to the market with a limited budget may have a positively sloping demand curve for some consumption goods, so the producer who is forced to operate with a limited budget may conceivably have a positively sloping demand curve for labor. This would be true, however, only if labor were an "inferior" productive service, for which the quantity demanded declined as the producer's total expenditures increased. In this case a rise in the wage rate might leave the producer with insufficient funds to invest profitably in capital equipment, so that he would hire additional labor instead.

JACOB L. MOSAK

*Cowles Commission
University of Chicago*

The Concept of Linear Total Cost-Output Regressions

The examination of cost-output relationship has been developing with an increasing intensity and complexity within the last decade. The similarity of both the general approach and the final conclusions of these studies is quite striking in as much as their sources are so widely different. Total cost and total output statistics rather than the average or marginal elements are the data usu-

⁸ Routledge, London, 1930, pp. 127-29.

ally analyzed.¹ The findings are almost universally linear total cost-output relationships, and therefore marginal costs derived from such linear functions are naturally constant over the observed range of output. The problem of the validity of these conclusions splits up into two parts. First, are the data reliable enough to yield a correct function, and second, is the linear function both the best possible and the only regression which will fit the data?

Serious objections may be made to the total cost data given in these studies. For example, the statistical data are always dynamic, and the static conditions of economic theory can never be fulfilled. Also the data are rough due to the lack of refined short-period accounting. The failure of the cost incurred within a given period to correspond to the output of that period is another serious problem since time-lag procedure is always in some degree incorrect even under the most favorable circumstances. Likewise, if joint products are made, any shift in the relationship of these products renders an accurate measurement of output very difficult. Depreciation itself is vague and almost meaningless in many of these studies. No satisfactory division into time and use depreciation is made and the assumption of constant depreciation itself is a factor contributing to the creation of constant marginal cost. Finally, a small variation of out-

¹ Actual statistical studies in this field have been made by accountants, economists, engineers and entrepreneurs. Many of these have either assumed linearity of total cost or have not investigated the possibility of using curvilinear functions. For example, in the article by J. H. Williams, "A Technique for the Chief Executive," *Bulletins of Taylor Society VII* (1922), maximum and minimum costs are sought and connected by a line which then represents total cost. Likewise the study by Floyd F. Hovey, "Present Cost Facts Graphically," *Factory and Industrial Management*, vol. 81 (1931), pp. 599-601, utilizes hyperbolic graph paper in determining the relationship between unit costs and the changing volume of production. Similar disregard for curvilinear total cost regressions, and yet greater exploration as to the factors involved in the cost of production at varying rates of output is made by Walter Rautenstrauch in his article, "The Economic Characteristics of the Manufacturing Industries," *Mechanical Engineering*, Nov., 1932, pp. 759-770. G. H. Bates in "Actual Examples of the Advantageous Use of Operating Budgets," *Yearbook of the National Association of Cost Accountants*, 1923, has similarly treated total cost in his statistical examples. In Germany K. Rummel and O. Cromberg, *Die Proportionalität der Kosten als Grundlage für die Betriebskostenrechnung*, mimeographed, Verein deutscher Eisenhüttenleute, Düsseldorf, 1931, have started with the assumption of linearity and then, on little statistical basis, justified their assumption.

Perhaps the most technical and scientific studies in cost have been made by Joel Dean. In an early study, *Statistical Determination of Costs with Special Reference to Marginal Costs*, Univ. of Chicago Press, 1936, he attempts to fit other data to the total cost data, but with what he feels is less success than linear regressions. In this work also is contained a survey of the previous literature in this field. In a work about to be published, *How Cost is Related to Output: An Experimental Study of a Leather Belt Shop*, mimeographed, Dr. Dean tests the linearity of his total cost regressions by a probability measure. This had been done also by R. T. Livingston in his article, "Control of Operating Expenses," *Mechanical Engineering*, vol. 54 (1932), pp. 711-717. T. O. Yntema has presented an impressive study, *United States Steel Corporation*; TNEC papers, United States Steel Corp., vol. 1, Pamph. no. 6 (1940). In this there are some grounds for the linearity of total costs. Likewise Ehrke in the momentous study, *Die Überproduktion in der Zement-industrie*, Jena, 1933, pp. 275-310, does not present statistical proof but does give the problem some consideration. Hildebrand treats several manufacturing industries (in "Geschäftspolitik auf mathematischer Grundlage," *Technik & Wirtschaft*, Jahrg. 24, 1931.) in order to test whether linearity does actually exist, and he feels that the proof for such linearity is quite strong.

put gives an inadequate range of observation, but an adequate range may often contain a trend.

In addition to all these objections there still remains the problem as to whether a linear regression is the only line of best fit. In the majority of these studies no statistical test is employed, and in a few the investigator is content to show that the scatter of means of regression line may be accounted for in the light of the standard deviation of the individual arrays. In other words the scatter of the means may be explained by the probable error around the regression line. This test is not entirely satisfactory since it might be quite possible to have an infinite number of curves within a given probable error estimate. The purpose of this note is to demonstrate that considerable variation may occur in the marginal cost curve without causing the total cost function to depart widely from apparent linearity.

For example, in a given output range from 0 to 150 a U-shaped marginal cost curve with about 38 per cent variation could be described by the parabola

$$\frac{x^2}{150} - x + 135 = y; \text{ where } x \text{ equals output and } y \text{ equals marginal cost.}$$

The total cost curve would naturally be the integral of this function, *i.e.*,

$$\frac{x^3}{450} - \frac{x^2}{2} + 135x + C = Y, \text{ where } Y \text{ equals total cost. In Figure 1 the para-}$$

bolic equation is plotted with cost on the vertical axis and output on the horizontal axis. The dotted line is the average cost curve. This curve does not take into account any fixed cost. Likewise in plotting Figure 2 the constant C is omitted since the assumption of fixed cost merely alters the height and not the slope of the total cost function. Individual points rather than a continuous line are shown for the total cost function. For output quantities greater than 150, total cost would rise at a continually increasing rate.

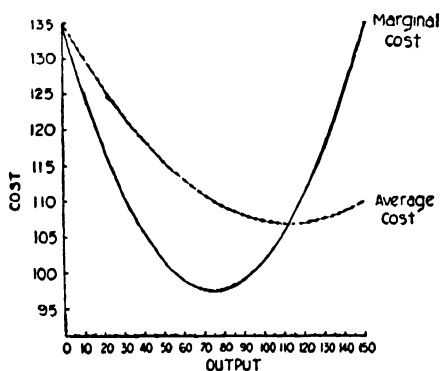


FIG. 1

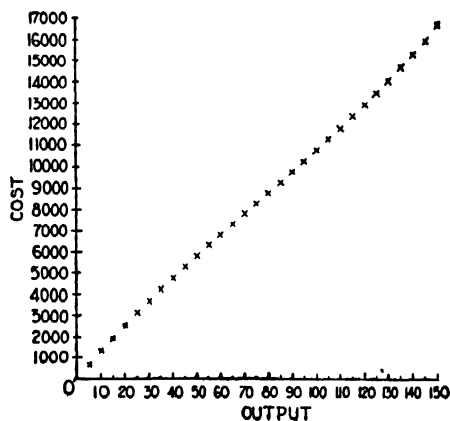


FIG. 2

If empirical cost studies are reconsidered for the moment, it can be seen that the above theoretical example exceeds the usual range of output. A usual output variation expressed in index numbers would be about from 40 to 135. Consideration of this shorter range of output in the above model would give about 23 per cent variation in marginal cost, and now total costs would seem prac-

tically linear. The theoretical scheme does not represent any scatter or "error," but the empirical studies naturally possess scatter for each degree of output. This being the case, it would be almost impossible to ascertain what particular regression fit might be suitable. The difference between the above total cost curve and a linear total cost curve would certainly be obliterated by the roughness of the data. In other words slight deviations in the regression are important, but empirical data can give only approximate regressions.

The degree of linearity of the total cost functions integrated from second degree parabolic marginal cost curves could be calculated by three determinants:

1. Range of marginal cost variation,
2. Range of output variation,
3. Deviation of minimum marginal cost from the midpoint of the output range.

If 2 and 3 are constant, then the greater the variation in marginal cost, the less linear total costs will be. If 1 and 3 are constant, the smaller the range of output, the less linear will be total costs. Finally, if 1 and 2 are constant, then the nearer the minimum point of the parabola (*i.e.*, marginal cost minimum) is to the midpoint of the range, the less linear will be total costs.

RICHARD RUGGLES

Harvard University

Note on Constant Marginal Cost

Two papers presented at the Round Table on Cost Functions at the December, 1939, meeting of the American Economic Association dealt in part with the behavior of marginal cost in industrial case-studies. The following suggestive points from these papers were among those published in the summaries in the *Proceedings* for March, 1940:

"JOEL DEAN: Six case-studies of short-run cost were summarized. . . . Theoretical analysis usually posits rising marginal cost over the relevant output range, yet no instance of rising marginal cost within the range of actual operation was found. . . ."

"ROSWELL H. WHITMAN: The total store variable cost function . . . has constant marginal costs within the normal range of output. . . ."

"GEORGE J. STIGLER: The statistical cost curves presented by Dean and Whitman seem somewhat in conflict with our expectations, based as they are in large part on the classic law of diminishing returns."¹

The speakers appear to suspect the validity of constant marginal cost curves in cases of diminishing physical returns. Two points should be made in criticism of such a viewpoint. In the first place, proof of the presence of diminishing, rather than of increasing or of proportional, physical returns is lacking.² In the second place, it is incorrect to assume, despite the position taken by some economists, that constant marginal costs can appear only in the stage of proportional returns.

Increasing, proportional, and diminishing returns conveniently may be defined in terms of the behavior of the average output of the variable factor of produc-

¹ *Am. Econ. Rev., Suppl.*, vol. 30, Mar., 1940, pp. 400-401.

² Indeed, in a previous study by Dr. Dean in which the presence of constant marginal costs also was claimed, examination of the production data given suggests the presence of increasing, and not of diminishing, average returns. See Joel Dean, *Statistical Determination of Costs, with Special Reference to Marginal Costs*, Univ. of Chicago Press, 1936.

tion. It is commonly assumed that the marginal product will be a variable in the first and third cases, but it also is possible that the marginal product will be a constant in any one of the three possibilities. Since the latter situation apparently is not clearly understood, it would be well to clarify the point.

The behavior of marginal product and so of marginal cost in the stage of proportional physical returns is well known, since both marginal series are constants due to the fact that total output increases in step with the input-doses utilized. Consider next the case of increasing average returns. Here the output per unit of the variable input-factor must be expanding by definition as more units of the factor are utilized, but if average output expands asymptotically the marginal product may be a constant. In this event marginal cost also would be a constant, if the price per unit of the variable factor of production is fixed (the usual assumption). In the same way, diminishing average returns exist where the output per unit of the variable input-factor declines as more units of the factor are utilized; but if this average output declines asymptotically the marginal product and marginal cost curves become straight lines.

These conditions are illustrated in Figure 1. Physical output is plotted against the relevant doses of the variable input-factor in each example,³ and in each case a portion of the total output curve has been drawn as a straight line XY . Both marginal product and marginal cost will be constants for the output region from X to Y .

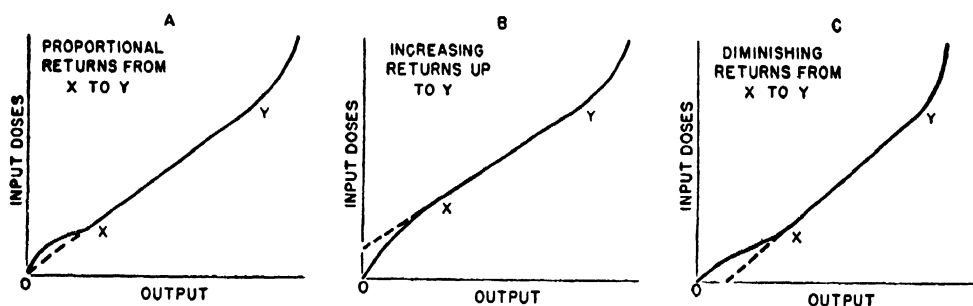


FIG. 1. Total Physical Output with Constant Marginal Product from X to Y in Proportional, Increasing, and Diminishing Average Returns.

The point at which the stage of diminishing average returns begins in each example may be determined by inspection if a straight-edge is placed on the abscissa (output axis) and is rotated, with the zero point as a pivot, until it first becomes tangent to the total output curve. In case A, the straight-edge will be tangent to all points between X and Y simultaneously, which shows that this range of output composes the stage of proportional returns. In other words, average output here is a constant, and an extension of the straight segment of the output curve (broken section) to the abscissa will cut this axis at zero output.

In case B, the point of tangency is at Y , so that all points to the left of Y are in the stage of increasing average returns where the average output is an increasing series. The extension of the straight segment cuts the abscissa at negative values of output. Thus constant marginal output and constant marginal cost would be found between X and Y in a stage of increasing returns. In case C,

³ Contrary to the customary way of drawing productivity curves output is here shown along the abscissa and input along the ordinate. This reversal from tradition seems preferable in view of the analogous use of the coördinates in cost and demand analysis.

on the other hand, X is the point of tangency and all output points shown thereafter are in the stage of diminishing average returns with declining average output. The extension of the straight segment cuts the abscissa at positive values of output, and constant marginal product and cost between X and Y would appear in diminishing returns.

In view of these possibilities, it should occasion no surprise if constant marginal costs actually are found in cases of increasing or of diminishing average returns, as well as in those of proportional returns. The traditional curve of increasing marginal costs in the stage of diminishing average returns is not the only form that may be exhibited by these costs. Indeed, there seems to be no *a priori* reason to expect to find one form rather than another in the analysis of data from real life.

One interesting consequence of the possibility of constant marginal costs in the "usual" output range may be noted in connection with some of the labored explanations of rigid prices presented for depression periods. Many examples of inflexible prices may prove to be simple cases of nearly constant marginal costs combined with demand and marginal revenue curves which are shifted sharply to the left without noticeable change in elasticity by depression conditions. Thus prices might not be reduced even with marked declines in physical production, since the best adjustment of marginal revenue to marginal cost might be found at a price scarcely different from that which obtained under full production.

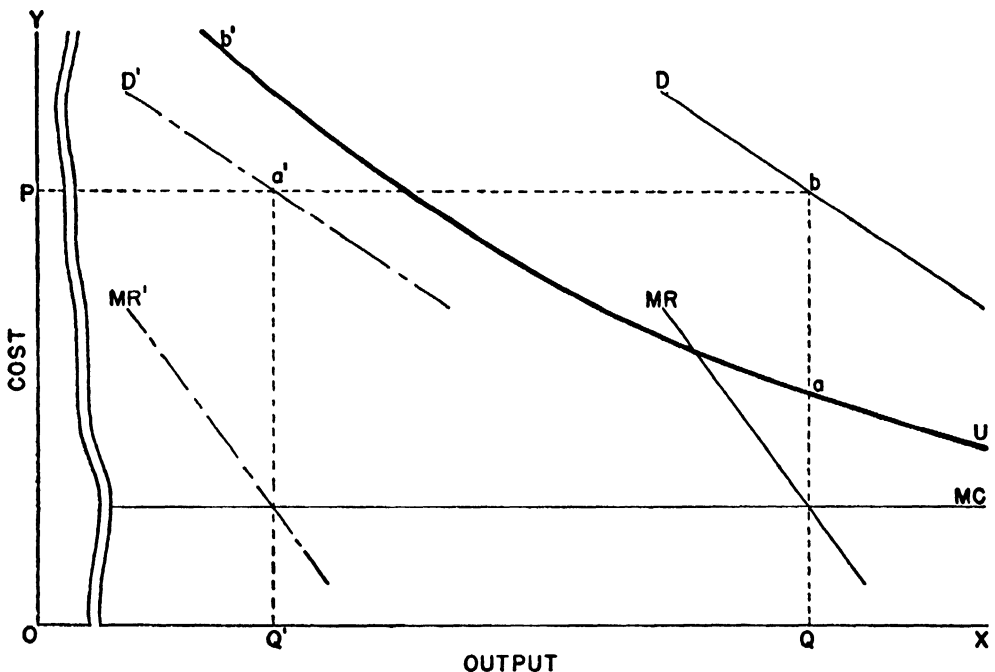


FIG. 2. Cost and Revenue Curves for Rigid Prices.

This point is illustrated by Figure 2. Constant marginal cost is represented by MC , while U is the curve of full average cost of production per unit. When the demand and marginal revenue are as shown by D and MR respectively, OQ is the quantity produced and sold at price OP . Net profit per unit is ab and total net profit is $(ab)(OQ)$. If demand and marginal revenue are shifted to D' and MR' as a result of depression conditions, the quantity produced is OQ' .

but the price remains at OP . Net profits have been changed into losses, however, for the loss per unit sold now is $d'b'$ and the total loss is $(d'b')(OQ')$. Losses can be transformed into profits when improved business conditions shift D' once more to the right of U , or when reductions in fixed charges bring U below D' .

R. H. ROWNTREE

Ohio State University

100 Per Cent Reserves: Comment

The issue of the *Review* of June, 1940, contained articles by Professors Harry Gunnison Brown and Rollin G. Thomas on the proposal for 100 per cent cash reserves against the demand deposits of banks. Professor Brown's article seems to me to be sheer casuistry. The contentions of Professor Thomas are weightier but they apply only against those advocates of 100 per cent reserves whose enthusiasm has outrun their discretion. Professor Thomas' own enthusiasm in aspersing the proposal has led him into some counter-extravagances of statement. I write this note, therefore, in the hope of defining the issue more clearly, both by refuting what Professor Brown asserts and by showing the bearing of the valid part of Professor Thomas' criticism.¹

Professor Brown is concerned to exonerate the banks from the charge of lending what they do not have. Banks, he says, do not lend except as intermediaries or agents for the depositors. The latter are the real lenders. To make his point, however, he assumes that banks start by lending, in the aggregate, several times as much money as they have on hand. (He does not say how this can be done without an *ad hoc* creation of money.) He then goes on to show that, thereafter, the banks may act only as intermediaries. But, in the inception of the process, the banks are clearly acting as principals, and the process is frequently repeated *ab ovo* though not on the scale that Professor Brown assumes for its beginning.

An ordinary loan is an exchange of a present asset for a promise. A bank loan made in the form of a deposit credit is, on the other hand, merely an exchange of one promise for another. The volume of loans of the former type has a maximum limit in currently available assets; the volume of loans of the latter type

¹In the March, 1941 issue of the *Review*, Mr. Benjamin Higgins has made some "Comments on 100 Per Cent Money" which are based on the articles by Brown and Thomas. This note was written before the appearance of Mr. Higgins' comments. The editors of the *Review* suggested to me that I might like to modify my remarks in the light of what Mr. Higgins had said. It seems best, however, to let them stand as written. While the bias, if any, of the two notes is different, there is practical agreement between Mr. Higgins and myself in those parts of our remarks which touch on common topics. This agreement, independently attained, must carry more conviction than if it had arisen out of Mr. Higgins' persuasiveness.

I would merely add that under some versions, at least, of the 100 per cent reserve plan, new issues of purchasing power are not, as Mr. Higgins seems to suppose, precluded. They would, however, be made only by the central monetary authority and never by member banks. Contractions would be accomplished under the same authority. The notion is that aberrations in the more or less uncontrollable velocity of money would be *compensated* by appropriate and adequate changes in its volume. This would perhaps not work smoothly but it would work. Mr. Higgins is right, however, in suggesting that, with money of the traditional type, we must choose between an unstable automaticity and a measure of potential stability under fallible administrative discretion. The 100 per cent reserve proposal, in itself, does not alter this situation.

has no inherent limit since mutual promises can be indefinitely multiplied. It is the willingness of the public to accept bank promises as money, without, in the mass, ever calling for their redemption, that permits the manufacture of money by the banks. This gives a color of validity to the allegation that it is the public that, without interest, is lending the banks the money, or its equivalent in goods, but the contention does not touch the real issue. An assetless issuer of wildcat bank notes might, after the notes had spent some time in circulation, receive many of them back on deposit, or, as Professor Brown would have it, on loan from the depositors. The issuer might then re-lend them (as agent, if one likes, of the depositors) and could do a very profitable and permanent business on the original output, though the issuer would be unlikely to be so modest as to refrain from increasing it. In any event the depositors could not have lent the notes to the bank if the bank had not first issued them. Demand deposits offer the same facilities to a modern bank as the private issue of notes did to its forbears and it is to the private issue of money that the adherents of a 100 per cent reserve requirement are opposed. This is the reason why, in Professor Brown's language, 100 is a "sacred number." One hundred per cent reserves will stop the private manufacture of money and nothing short of this will serve.

It is true that, in the past, banks have been impelled by competition to diffuse in free services to their customers part of their gains from the issue of money on partial reserves. The steady tendency toward local monopolies in banking is, however, operating to render this diffusion less likely in the future. It was, in any case, made possible by a subtle form of subsidization to which Professor Brown professes to be in general opposed and there is a strong possibility that, without a 100 per cent reserve requirement, we shall continue to pay the subsidy without getting the services. This is, in fact, what is now happening in the development of charges on checking accounts.

Professor Brown foresees the possibility of the use of time deposits as money if a 100 per cent reserve is required against demand deposits and he objects to any measures to stop this on the ground that such would prevent the coincident use of the same money as a liquid fund and as an investment. But it is just this attempt to eat one's cake and also have it—to preserve liquidity without loss of interest—which is responsible for most of the financial crises of history. Those who seek to reconcile such inconsistent aims are, of course, opposed to the 100 per cent requirement and are probably immune to argument.

Let us turn now to Professor Thomas. The burden of the argument here is that the 100 per cent reserve requirement could not prevent a reduction, on occasion, in the rate of money turnover, even if the drastic step of prohibiting all short-term loans were taken. This must be conceded. The 100 per cent reserve system can affect monetary velocity only through volume and is designed, on its automatic side, to prevent those perverse expansions or contractions of volume which today greatly intensify the influence of hoarding and dishoarding.

Since 100 per cent reserves would not stop hoarding, whether or not short-term loans were prohibited, the charge of Professor Thomas that the plan requires the abolition of such loans is clearly gratuitous. He is right, however, in his contention that 100 per cent reserves are not enough to give us a fully satisfactory currency, though nothing that he proposes would be more rather than less effective. The appropriate remedy for hoarding is a commodity reserve money which, in conjunction with the 100 per cent proposal, would provide a currency uniquely correlated with a production to which it would fur-

nish steady stimulation. This would give us an automatically determined supply of money functioning in the manner appropriate both to price stability and to stability in the economy at large.

FRANK D. GRAHAM

Princeton University

Gold Imports: Cost and Benefits

In the discussion of "Gold and the Monetary System" at the December meetings,¹ all four speakers seem to have agreed that our huge gold imports, amounting to about \$16,000,000,000 from January, 1934, through 1940, were practically costless to the American public and had beneficial effects upon employment here in so far as they resulted in additional exports from this country. These gold imports, which amounted to as much as total relief expenditures, or to four-fifths of the deficits of the federal government during those years, have been paid for by the Treasury simply by issuing an equivalent amount of non-circulating paper money to the Federal Reserve Banks.

In his paper Dr. Hardy stated that the gold purchases will continue to be costless to the American public, except consumers of gold, until we approach "normally full employment" when the large gold output [in this country?] "will necessitate a correspondingly curtailed output of useful goods" [in this country?]. Professor Neisser seemed to conclude that, with idle productive resources, the only possible cost of gold purchases consists of the irreplaceable natural resources embodied in the additional exports resulting from gold imports, and spoke of the multiplier effect of the additional exports, whereby "gold imports increase the national income by more than their value"!

Qualifications to their conclusions on the costless character of the purchase of \$16,000,000,000 of gold from abroad may be indicated by such questions as the following: If the U.S. Treasury had continued the 1936-38 gold sterilization program, would the gold purchases have been costless to the American public? Have the higher required and excess reserves, as the result of gold imports, not cost the banks or bank customers something? Would the gold already imported cost us more if we experience a marked price inflation, permitted and encouraged by the increased reserves that have arisen from huge gold imports? Is it costless to this country if we exchange interest-bearing securities or profitable investments for barren and "rather useless" gold imports? Is it costless if we exchange productive capital goods for non-productive gold which we could not use to buy the same amount of goods from foreign countries?

The speakers failed to indicate clearly that most of the proceeds foreigners obtained for imported gold during the period from 1934 through 1940 were used to acquire capital items (securities, property, bank deposits, etc.) rather than to purchase American goods, so that the stimulating secondary effects on American employment through exports, which were mentioned by Professors Machlup and Brown and stressed by Professor Neisser, were distinctly limited to a fraction of the \$16,000,000,000 paid for gold imports. None of the speakers pointed out that in this respect our silver purchases were, dollar for dollar, more potent and beneficial to domestic employment than were our gold purchases, for less than one-seventeenth of the gold purchased during those years was currently produced in the United States, whereas about one-fourth of the

¹ See *Amer. Econ. Rev., Suppl.*, vol. 31, Feb., 1941.

silver purchases by the Treasury during the same period were from domestic producers. Direct purchases from American producers should have a much greater multiplier effect per dollar spent than the roundabout operation of gold imports, only a fraction of which are used to buy American goods at the time or in the near future. Presumably the silver purchases were as "costless" as the gold purchases, and our stock of silver is and will be more useful to us both for monetary and industrial purposes than the gold. Furthermore, when the purchases are made directly from domestic producers there is less threat of sudden withdrawals of fickle short-term balances from this country, which also might not be costless to us in real terms. Such withdrawals might increase unemployment in this country considerably.

One could pursue the reasoning of these speakers one step further. If the exchange of money for American commodities has such a beneficial multiplier effect, it would seem desirable that the monetary standard be one that would result in automatic purchases of American-made goods (not foreign-produced gold or silver) during periods of reduced employment. There are a group of economists, members of the Committee for Economic Stability, who are advocating just such a multiple-commodity or "goods" standard for our money as a means of stimulating domestic production and reducing cyclical swings in expenditures, employment and prices.

RICHARD A. LESTER

Duke University

Competition and Monopoly in Land Markets

Professor Ise's recent discussion of "monopoly elements in rent,"¹ and his criticism therein of the views of Professor Chamberlin, indicates a divergence of present-day attitudes among economists concerning a long-standing subject of controversy. If the points of view of Professors Ise and Chamberlin are added to two widely accepted attitudes expressed in earlier writings of representative economists, at least four quite different points of view have been expressed on this controversial topic: (1) that land rent is the result of monopoly;² (2) that such rent is, with infrequent exceptions, a competitive return;³ (3) that the rent of agricultural land is a purely competitive return and the rent of urban (retail) sites is purely monopolistic;⁴ and (4) that the rent of both agricultural and urban lands is determined in an imperfectly competitive market.⁵

Several factors appear to be responsible for such a variety of opinions. To begin with, the term "monopoly" has not had consistent usage. In some instances it has been used to imply a position of complete or exclusive control over something; in others it has been used to designate a "power to control price." Another factor giving rise to uncertainty has been variation in the size of land area given consideration as an area of possible exclusive control. A third factor has been variation in the degree to which land is differentiated and, therefore, classified into objects of possible monopolization. It should be quite apparent that if the term "monopoly" is used to imply (a) exclusiveness of control over any differentiated

¹ *Am. Ec. Rev.*, Mar., 1940, pp. 33-45.

² This point of view is expressed, among others, by Smith, Mill, Gide, and Hobson.

³ This point of view is stated, for instance, by Davenport, Ely, and Taussig.

⁴ Professor Chamberlin adopts this position in his *Theory of Monopolistic Competition*, 3rd ed., Appendix D.

⁵ Professor Ise's attitude, as stated in the *Am. Econ. Rev.* for Mar., 1940.

object (b) within a considered area, the number of such *recognized* monopolies would be enhanced—under a given system of diffused ownership—as the considered (market) areas are reduced to smaller and smaller territories and thereby multiplied in number and as the number of objects of possible monopolization is increased by a more careful application of the principle of commodity differentiation. If land is not differentiated and if only rather large market areas are considered, there will be few, if any, instances of recognized exclusive control (monopoly) under such a condition of widely diffused ownership.

If, therefore, the term "monopoly" is used in its customary manner to imply exclusive control with respect to something and if "competition" is used to imply economic rivalry, the following conclusions would seem to be possible with respect to competition and monopoly in rental (and sale) markets for land:

(1) The owner of any land unit (rural or urban, large or small, valuable or near-worthless) is, in actuality, in possession of an object which is differentiated from all others by its *location* and which, in addition, may be differentiated by other *unique* attributes or *unique combinations* of common, or duplicable, attributes. In other words, the owner of any given tract of land is in possession of the total supply of land of a given, differentiated, type and is, therefore, a "monopolist" of such land.

(2) The presence of a monopoly position in connection with control of a land tract does not preclude, however, the presence of competition. Any given owner of land does not compete with others in supplying a *like* object. He does (or may) compete, nevertheless, with others who supply (a) a similar type of land for the *same* use or (b) quite different lands from which may be provided substitute commodities (or services) for those supplied from his own land.

(3) If "monopoly" is used to imply *exclusiveness of market position* with respect to something, it is inconsistent to determine the presence of such monopoly on the basis of the degree of economic power conferred by it. Such non-duplicability is as truly present in the location of a near-worthless rural acre as in that of a Fifth Avenue lot. The two monopoly elements, naturally, confer differing degrees of monopoly *power*.

If the above conclusions are accepted, certain observations would naturally follow with respect to the various points of view referred to above. In brief, they would be as follows:

(1) The view that monopoly is an ever-present factor in the determination of the rent (or price) of any tract of land appears to be entirely justifiable. This conclusion, however, does not justify an implication that the presence of a monopoly position precludes the presence of any competition.

(2) The view that competition is a pervasive element in land markets seems, also, to be a valid contention. Here again, however, the presence of competition does not preclude the presence in the same market, of monopoly elements.

(3) The view that the rent of agricultural land is a purely competitive return while the rent of urban retail sites is purely monopolistic is unacceptable. Monopoly elements are present in markets for farm lands and competitive elements are present in markets for retail sites.

(4) The view that both agricultural and urban rental markets are imperfectly competitive seems a proper conclusion. However, an equally correct statement could be made to the effect that both markets are imperfectly (*i.e.*, incompletely) monopolistic.

In conclusion, it might be added that to designate a land owner as a "monopo-

list" describes one portion of his market status. To refer to him as a "competitor" indicates another—and different—aspect of his market position. Neither designation adequately describes his complete status.

THOMAS J. ANDERSON, JR.

New York University

"Wages Fund Theory and the Popular Influence of Economists": A Reply¹

This reply will be confined to a criticism of Mr. Miller's statement that in the middle years of the nineteenth century the propositions of the wages fund theory were not generally known, even by those most closely concerned, especially trade unionists and their sympathizers. The sole basis on which this conclusion rests is the fact that the testimony and official reports of the Royal Commissioners² do not contain a lengthy discussion of the theory. The only memorandum which deals with theory was excluded from the Final Report. Mr. Miller concludes: "It would appear that these propositions did not receive the popular acceptance which Merivale claimed for them among the intelligent class of workmen or even the impartial enquirers as represented by the members of the Commission."

First, let me point out that it was the declared policy of the Commissioners to avoid a theoretical discussion of the effects of trade unionism. The following statement clearly indicates this: "We collect this not so much from direct statements of doctrine made to us in the course of their evidence, having for the most part avoided mere matters of speculation in the course of our enquiries."³ The questions asked of witnesses during the enquiry related to changes in rates of wages that had taken place in the industries under consideration. The Commissioners did not consider it part of their duties "to enter into discussions respecting what may be the scientific, or economical, branch of the question of the effects which trade unions may have on the national well-being."⁴ Given this policy, it is not surprising that in the course of the inquiry Merivale asked no questions on the wages fund theory and that his memorandum was excluded from the Final Report; nor that Mr. Miller looked in vain for discussions of the orthodox wage theory of that period.

Professor Hutt points out that in the nineteenth century "articulate trade union leaders readily accepted the wage fund formula."⁵ It was the corollary that the unionists vigorously contested. In an essay⁶ published in 1860, Mr. T. J. Dunning refers to the propositions of the wages fund theory and states that no one was likely to dispute them. They "are in their enunciation like that of two and two making four—we will endeavour to show why the above propositions fail in convincing the workmen that they are doing wrong in entering into combination. Not that these propositions are doubted but because implicit belief in them is perfectly consistent with the propriety of Trade Combination."⁷ The adver-

¹ To J. Don Miller, Jr., *Am. Econ. Rev.*, Mar., 1940.

² Appointed to Inquire into the Organization and Rules of Trade Unions and Other Organizations, 1867-69, 12 vols.

³ Eleventh and Final Report, 1869, p. cxxi.

⁴ *Ibid.*

⁵ W. C. Hutt, "Theory of Collective Bargaining," p. 7

⁶ T. J. Dunning, *Trades Unions and Strikes*, London, 1860.

⁷ *Ibid.*, p. 8.

tisement prefacing this essay states that the views may be taken to represent not only those of the writer and his union but the working classes generally. The bookbinders union to which Dunning belonged printed and published the book because the leaders thought it would not get into circulation otherwise since the views expressed were considered somewhat revolutionary.

Rayner also states that until the end of the nineteenth century the wages fund theory was accepted by trade unionists and therefore "the only sound method of improving the economic position of craftsmen appeared to be by reducing the number of those who would have to share in the fixed dividend."⁸

In the Francis Place Collection in the British Museum there are to be found numerous newspaper and magazine articles which refer to and discuss the wages fund theory and its applications.⁹ I submit that Mr. Miller's statements relating to the degree to which the wages fund theory was known to those "with an immediate interest in a wages economy" are quite incorrect.

EILEEN MARIE WINTON

Blatchley, Bucks, England

Material in The National Archives of Especial Interest for Economists

The National Archives at Washington has a vast amount of material of interest to economists which the profession has to date signally failed to use. There appears to exist a general ignorance of their potential usefulness in economic research. The most useful of the publications that give an account of the organization and contents of The National Archives is the *Guide to the Material in The National Archives*.¹ The *Guide* has a very informative general introduction and a detailed description of the various collections as well as a comprehensive index. In addition the *Guide* lists the official publications of The National Archives and contains references to the principal secondary bibliographic sources. The recent article by Mr. Wayne C. Grover, a member of the staff, on the "Research Facilities and Materials at The National Archives," (*Am. Pol. Sci. Rev.*, Oct., 1940, pp. 976-983) provides a succinct statement concerning the possibilities of fruitful research by political scientists and economists.

The writer has personally inspected various collections under the Archives divisions of the various government departments and of the independent agencies, and found therein masses of interesting materials. There are to be found, for example, in the Division of Commerce Department Archives the official minutes of the United States Industrial Commission, 1898-1902, the sole extant primary records of the Commission; and in the War Department Archives the records of the Bureau of Refugees, Freedmen, and Abandoned Lands, 1865-72, of great value to students of the economy of the Reconstruction South.

Of special interest are the records of the World War agencies. These are located as follows:

War Industries Board, 1916-1923. Council of National Defense, 1916-1937. Committee on Public Information, 1917-1923. (War Department Archives)

⁸ Robert M. Rayner, *The Story of Trade Unionism*, p. 31.

⁹ See, for example, an address from the London Trades Committee in this collection, 27835:102.

¹ U. S. Gov. Printing Office, Washington, 1940 (40 cents).

United States Fuel Administration, 1917-1919. (Interior Department Archives)

United States Shipping Board, 1917-1933; United States Shipping Board Emergency Fleet Corporation, 1917-1926. (Commerce Department Archives)

United States Railroad Administration, Railroad Wages and Working Conditions Board, 1918-1920. (Labor Department Archives)

United States Food Administration, 1917-1920; United States Grain Corporation, 1917-1930; United States Sugar Equalization Board, Inc., 1918-1926. (Independent Agencies Archives)

These records lay practically untouched until very recently, when the newly created defense agencies of the government began to realize their great usefulness. Unfortunately limitations of time prevent the records from being properly exploited by the staffs of these defense agencies. The earlier failure of economists to make a thorough study of the original records of the World War agencies has resulted in their forfeiting of an opportunity to render the nation a great service in the present emergency.

There are unique source materials on various phases of the economic policy of the federal government over large periods of our history. The files of the various cabinet officials, in particular, are of importance in this field. The material at The Archives also provides the basis for a large number of studies on various economic problems of local, state and regional areas. The material on national economic problems is more difficult to handle since it is likely to require a staff of workers.

Since restrictions exist in many cases, the economist who contemplates using The Archives should communicate first with *The National Archives, Reference Division*, Washington, D.C. Facility at handling archival material before undertaking archival research will be hastened by careful study of the *Annual Reports of the Archivist of the United States* (First, 1934/35, Fifth, 1938/39, and the *Guide*). The able coöperation of the staff of The National Archives is available for meeting the problems that arise to plague the novice.

LOWELL PUMPHREY

Washington, D.C.

Trails to New America: Reply to W. I. King

In his review of my *Trails to the New America* in the *Review* for September, 1940, Dr. King has based so scathing an attack on so careless a reading that he forces a reply.

The book is an attempt to describe our economic dilemma in language intelligible to a high school freshman. Dr. King dismisses the effort as worthless. He bases his judgment on seven contentions. They follow with my comment:

1. He states that I put the nation's debt in 1929 at \$285,000,000,000. I put it at \$152,000,000,000. (Dr. King accepts this correction.)

2. He states that I put "interest charges" at 20% of the nation's income in 1932. I said "debt service." (Figures from *Internal Debts of the United States*.) My sole reference to interest was that "one authority" put interest at \$7,000,000,000 in 1929. For purposes of argument I used the *Internal Debts* figure.

3. He asks "how" I "know" that savings increased from \$7,000,000,000 to \$17,000,000,000 from 1922 to 1929. I used and cited the Brookings "Capacity" studies for my entire analysis of savings. At this point I erred in including

corporate savings in 1929. The figure should read "from about seven to eight billions in 1922 to fifteen billions in 1929," but the argument is not affected.

4. He criticizes my 1929 income figures, cited from Brookings, by citing 1936 figures from the National Resources Committee, which seems rather astonishing.

5. He challenges my statement that final economic judgments must be by the lay public because, among other reasons, economists do not agree among themselves. He likens the economist to the expert in precise sciences and asserts that economists generally do agree. I leave this to the jury.

6. He states that I exaggerated the 1929-1932 income drop. I took the consensus of estimates, Brookings' and others', showing a drop from \$82,000,000,000 to \$39,000,000,000, and noted the adjustment of the latter to 1929 prices, leaving a net drop of 39%. I did *not* describe these figures as *distributed income*. Dr. King elaborates his argument in correspondence but whether one takes his sources or mine, my argument is amply sustained.

7. He dismisses my "oversaving" argument by referring me to an authority, Carl Snyder. My argument was based on the pertinent Brookings studies which show that only a third of total savings was required in the latter twenties for new capital creation, and there was marked over-concentration of savings in the upper brackets, my main point which Dr. King overlooked.

In brief, since Dr. King refrained from quoting me correctly or dealing with actual argument, both the substance and style of his review are seriously out of bounds.

JOHN W. HERRING

*State Education Dept.
Albany, New York*

PUBLICATIONS OF THE TEMPORARY NATIONAL ECONOMIC COMMITTEE

The list of documents below represents the complete printed record of the Temporary National Economic Committee. A description of each item is contained in *Description of hearings and monographs of the Temporary National Economic Committee*, issued by the Superintendent of Documents, Washington, D.C.

Hearings

- Part 1. *Economic prologue*. 25c.
- Part 2. *Patents*. 75c.
- Part 3. *Patents*. 35c.
- Part 4. *Life insurance*. 50c.
- Part 5. *Monopolistic practices in industries, development of the beryllium industry*. 75c.
- Part 5-A. *Federal Trade Commission report on monopolistic practices in industries*. 15c.
- Part 6. *Liquor industry*. 40c.
- Part 7. *Milk industry, poultry industry*. 75c.
- Part 8. *Problems of the consumer*. 25c.
- Part 9. *Savings and investment*. 75c.
- Part 10. *Life insurance*. 75c.
- Part 10-A. *Life insurance*. 35c.
- Part 11. *Construction industry*. 75c.
- Part 12. *Industrial insurance*. 75c.
- Part 13. *Life insurance*. 75c.
- Part 14. *Petroleum industry*. 75c.
- Part 14-A. *Petroleum industry*. 75c.
- Part 15. *Petroleum industry*. 75c.
- Part 15-A. *Petroleum industry*. 35c.
- Part 16. *Petroleum industry*. \$1.
- Part 17. *Petroleum industry*. 65c.
- Part 17-A. *Petroleum industry*. 30c.
- Part 18. *Iron and steel industry*. 30c.
- Part 19. *Iron and steel industry*. 35c.
- Part 20. *Iron and steel industry*. 35c.
- Part 21. *War and prices*. 65c.
- Part 22. *Investment banking*. 50c.
- Part 23. *Investment banking*. 65c.
- Part 24. *Investment banking*. 75c.
- Part 25. *Cartels*. \$1.50.
- Part 26. *Iron and steel industry*. 65c.
- Part 27. *Iron and steel industry*. 75c.
- Part 28. *Life insurance*. \$1.25.
- Part 29. *Interstate trade barriers*. 55c.
- Part 30. *Technology and concentration of economic power*. \$1.75.
- Part 31. *Investments, profits, and rates of return for selected industries*. 40c.
- Part 31-A. *Supplemental data submitted to the Temporary National Economic Committee*.

Monographs

1. *Price behavior and business policy.* By Saul Nelson and Walter G. Keim. Pp. 419. 45c.
2. *Families and their life insurance.* By Donald H. Davenport and Gerhard A. Gesell. Pp. 168. 25c.
3. *Who pays the taxes?* By Gerhard Colm and Helen Tarasov. Pp. 55. 10c.
4. *Concentration and composition of individual incomes, 1918-1937.* By Adolph J. Goldenthal. Pp. 112. 15c.
5. *Industrial wage rates, labor costs and price policies.* By Douglass V. Brown, Charles A. Myers, John A. Brownell, John T. Dunlop, and Edwin M. Martin. Pp. 172. 25c.
6. *Export prices and export cartels (Webb-Pomerene associations).* By Milton Gilbert and Paul D. Dickens. Pp. 310. 35c.
7. *Measurement of the social performance of business.* By Theodore J. Kreps and Kathryn R. Wright. Pp. 207. 30c.
8. *Toward more housing.* By Peter A. Stone and R. Harold Denton. Pp. 223. 30c.
9. *Taxation of corporate enterprise.* By Clifford J. Hynning and Gerhard Colm. Pp. 216. 60c.
10. *Industrial concentration and tariffs.* By Clifford L. James, Edward C. Welsh, and Gordon Arneson. Pp. 326. 35c.
11. *Bureaucracy and trusteeship in large corporations.* By Marshall E. Dimock and Howard K. Hyde. Pp. 144. 30c.
12. *Profits, productive activities and new investment.* By Martin Taitel. Pp. 188. 35c.
13. *Relative efficiency of large, medium-sized, and small business.* By Federal Trade Commission. Pp. 449. 50c.
14. *Hourly earnings of employees in large and small enterprises.* By Jacob Perlman. Pp. 94. 15c.
15. *Financial characteristics of American manufacturing corporations.* By Charles L. Merwin, Jr., under the supervision of Robert R. Nathan. Pp. 442. 40c.
16. *Antitrust in action.* By Walton Hamilton and Irene Till. Pp. 146. 20c.
17. *Problems of small business.* By John H. Cover, Nathanael H. Engle, Earl D. Strong, Peter R. Nehemkis, Jr., William Saunders, Harold Vatter, and Harold H. Wein. Pp. 412. 40c.
18. *Trade association survey.* By Charles Albert Pearce. Pp. 501. 50c.
19. *Government purchasing—an economic commentary.* By Morris A. Cope-land, Clem C. Linnenberg, Jr., and Dana M. Barbour. Pp. 330. 35c.
20. *Taxation, recovery, and defense.* By H. Dewey Anderson. Pp. 374. 35c.
21. *Competition and monopoly in American industry.* By Dr. Clair Wilcox. Pp. 344. 40c.
22. *Technology in our economy.* By H. Dewey Anderson, Lewis L. Lorwin, John M. Blair, assisted by Ruth Aull. Pp. 313. 35c.
23. *Agriculture and the national economy.* By Albert L. Meyers. Pp. 48. 10c.
24. *Consumer standards.* By Samuel P. Kaidanovsky, assisted by Alice L. Edwards, under general supervision of Donald E. Montgomery. Pp. 433. \$1.
25. *Recovery plans.* By Arthur Dahlberg, Hon. Robert G. Allen, Hon. Thomas R. Amlie, Hon. Jerry Voorhis, George B. Galloway, Irwin S. Joseph, Joseph M. Lurie, Sterne Morse, and Sam D. Schearer. Pp. 260. 30c.

26. *Economic power and political pressures.* By Donald C. Blaisdell and Jane Greverus. Pp. 222. 25c.

27. *The structure of industry.* By Willard L. Thorp, Walter F. Crowder, and associates. Pp. 759. \$1.

28. *Study of legal reserve life insurance companies.* By Gerhard A. Gesell and Ernest J. Howe. Pp. 466. 50c.

29. *The distribution of ownership in the 200 largest nonfinancial corporations.* By Raymond W. Goldsmith, Rexford C. Parmelee, Irwin Friend, James Gorham, and Helene Granby. Pp. 1541. About \$2.

30. *Survey of shareholdings in 1,710 corporations with securities listed on a national securities exchange.* By Helene Granby, Raymond W. Goldsmith, and Rexford C. Parmelee. Pp. 258. 35c.

31. *Patents and free enterprise.* By Walton Hamilton. Pp. 175. 25c.

32. *Economic standards of government price control.* By Ben W. Lewis, Warren C. Waite, Don S. Anderson, R. K. Froker, Ellery B. Gordon, William Y. Webb, Donald H. Wallace, Aryness Joy, and Edward S. Mason. Pp. 514. 55c.

33. *Geographical differentials in prices of building materials.* By Walter G. Keim and associates. Pp. 459. 55c.

34. *Control of unfair competitive practices through trade practice conference procedure of the Federal Trade Commission.* By the Federal Trade Commission. Pp. 65. 10c.

35. *Large-scale organization in the food industries.* By A. C. Hoffman. Pp. 174. 20c.

36. *Reports of the Federal Trade Commission.* By the Federal Trade Commission. Pp. 275. 35c.

37. *Saving, investment, and national income.* By Oscar L. Altman. Pp. 135. 20c.

38. *A study of the construction and enforcement of the federal antitrust laws.* By Milton Handler. Pp. 100. 15c.

39. *Control of the petroleum industry by major oil companies.* By Roy C. Cook. Pp. 101. 30c.

40. *Regulation of economic activities in foreign countries.* By Agnes Roman, Louis Domeratsky, Rudolf Callmann, John H. Cover, and Nelson A. Miller. Pp. 177. 20c.

41. *Price discrimination in steel.* By John M. Blair and Arthur Reeside. Pp. 54. 10c.

42. *The basing point problem.* By the Federal Trade Commission. Pp. 151. 30c.

43. *The motion picture industry—a pattern of control.* By Daniel Bertrand, W. Duane Evans, and E. L. Blanchard. Pp. 92. 15c.

Final Reports

Final report and recommendations of the Temporary National Economic Committee. Recommendations of the Committee to the President and the Congress of the United States. Verbatim record of the public sessions of Committee members, containing the statement of the chairman, Senator Joseph C. O'Mahoney, progress report of the executive secretary, Dewey Anderson, statement of Thurman Arnold, Corwin Edwards, W. T. Kelley, James A. Horton, Wayne C. Taylor, Paul C. Truitt, Frank Bane, A. H. Martin, Frederick V. Waugh, Conway

P. Coe, Louis H. Bean, Carl C. Taylor, Mordecai Ezekiel, Donald E. Montgomery, Sumner T. Pike, Senator James M. Mead, Isador Lubin, Willis J. Ballinger, Joseph J. O'Connell, final statement of the chairman. A Brief History of the Temporary National Economic Committee. A Financial Statement of the Committee's Operations. Pp. 783. \$1.

Final report of the executive secretary to the Temporary National Economic Committee on the concentration of economic power in the United States. A staff volume prepared under the direction of Dr. Dewey Anderson, Executive Secretary of the Committee, and Dr. Theodore J. Kreps, Economic Adviser to the Committee, assisted by Ruth Aull. Competition and monopoly in American industry; concentration of production; managed industrial prices; controlled production and sales; trade associations and cartels; technology in our economy; interstate trade barriers; concentration of corporate assets, earnings, and profits; concentration of ownership; concentration of savings; concentrated control of investment policies; investments and the insurance industry; stimulating investment; investment in the housing industry; small business; consumers; fiscal policy and taxation.

REVIEWS AND NEW BOOKS

General Works, Theory and Its History

The Conditions of Economic Progress. By COLIN CLARK. (London: Macmillan. 1940. Pp. xii, 504. \$5.00.)

Mr. Clark's newest book is an attempt to give quantitative estimates of the forces which determine the level and development of economic welfare in the different countries in the world for which data are available. It is not primarily an attempt to verify pet theories. It is rather a statistical examination of theoretical concepts with a view of making these concepts not only more real but more meaningful. After a study of the book many concepts will have ceased to be "empty boxes."

The book starts with a summary of the arguments and findings, a practice which this reviewer feels deserves wide imitation. The aim of the book is to analyze the reasons for the differing sizes and rates of growth of national incomes. Mr. Clark's discussion makes it obvious that he is well aware of the tremendous difficulties involved in such an undertaking; his book is proof that these difficulties can be overcome.

The study falls naturally into three parts. In the first (chapters I-IV), the raw material is presented: it deals with the present level and growth of national income in different countries. The chapters give not only an admirably concise compilation of statistics but also a convenient and, one feels, exhaustive reference manual both as to the sources and the quality of the national income calculations available for the different countries. The results of this section are striking and in some respect puzzling. The world is found to be shockingly poor. Moreover, the possibilities of enriching it by using idle resources are found to exist to any important degree only in the United States.

The figures are further analyzed in the second part (chapters V-X) which is best described in the author's own phrase as "the morphology of economic growth." For the purpose of this analysis all production is classified into three groups, primary production comprising agriculture, fishing, etc.; secondary production consisting of mining, construction, manufacturing, public works and the supply of gas and electricity; and tertiary production embracing all other economic activities, primarily the service industries. The productivity of these groups of economic activity is investigated. The changes in the relative importance of these three types of production in the national economy are shown to be closely related to the progress of economic welfare: a rising level of national income is always associated with a declining proportion of people employed in primary industries. The relative importance of secondary production at first increases with increasing national income, reaches a maximum and then declines. Employment in tertiary production apparently has not yet reached its maximum. The hope

of further increases in national income seems to be tied up with a re-allocation of the factors of production away from primary to secondary and particularly to tertiary production.

The final section of the book (chapters XI-XV) starts with a discussion of the rôle of capital in economic progress, considers then the income distribution between individuals within the different countries, passes on quite naturally to consumption habits and to the effects of changes in the terms of trade on national income, and ends up with a discussion of the Relation and the Multiplier. Its particular fascination lies in the fact that it puts flesh and blood on such concepts as the propensity to consume, the marginal efficiency of capital, the foreign trade multiplier, and the other tools of analysis made familiar by the writings of Keynes, Hansen, Harrod and others. The practical conclusions are somewhat invalidated as far as the continent of Europe is concerned, but they remain of extreme importance to the United States: namely, that the amount of savings and investments during the twenties must be regarded as abnormally high; that only housing and public utilities are likely to offer large outlets for private capital in the future; and that a maximum national income cannot be reached in the future unless there is either a considerable amount of public works, or a change in spending habits whether brought about by a redistribution of incomes or for other reasons.

This review has given only the barest outline of a book which is crammed with interesting and important facts and analyses presented by that rare phenomenon: an economist who is both a competent statistician and a thorough theorist. It is a most important book which should be widely read. It seems almost carping to mention two defects of form. The omission of many table headings necessitates a long search in the text for the meaning of about half the tables and makes quick reference next to impossible. In a few cases lack of sufficient information greatly detracts from the usefulness of the tables.

WOLFGANG F. STOLPER

Harvard University

The Anatomy of American Wealth: The Story of Our Physical Assets (Sometimes Called Wealth) and Their Allocation as to Form and Use Among the People. By ROBERT R. DOANE. (New York: Harper. 1940. Pp. xxvii, 345. \$2.50.)

The publication of annual estimates of national income and of theoretical studies in the field of income has served to overshadow interest in wealth studies, especially since 1919. For example, the inclusion of building construction as part of the national income during the current year has developed the notion that national income statistics are sufficient and national

wealth figures almost unnecessary. If the service concept of income were followed in these tabulations, it would be necessary to know at least the rental value of all buildings, both new and old.

The publication of Mr. Doane's book should greatly stimulate interest in studies of national wealth—or, as he would say, physical assets. He has assembled a complete list of wealth studies (including his own of 1929 and 1932) and has proceeded to build on these a new type of study, which he calls "inventory correlation," and which emphasizes not only the changes in the totals for 1922, 1930, and 1938, but also the significant changes in the form and use of the physical assets of the people of the United States.

In general, the method followed by Mr. Doane in making these estimates is to project the totals for each class given in the Federal Trade Commission study for 1922. In projecting values between 1922 and 1938, reliance has been placed upon the assessed value of property as reported by states and counties with some corrections for understatements of values. He finds that, whereas the values of physical assets used for production and for comfort, respectively, were approximately equal in 1922, the portion used for comfort in 1930 and 1938 was much greater. In other words, Mr. Doane would say that we now live in a comfort-goods economy rather than in a production-goods economy.

The total *value* of the physical assets of the nation is estimated at \$321 billions in 1922, \$428 billions in 1930, and \$388 billions in 1938. The principal changes in the totals of 1922 and 1930 were: an increase of \$38 billions in privately owned man-made goods used for production, a decrease of \$3 billions in natural resources (land), an increase of \$36 billions in man-made goods used for comfort, and an increase of \$22 billions in land used for comfort purposes. No change was reported in publicly owned physical assets (p. 144). The decrease noted between 1930 and 1938 is itemized as follows: of the privately owned taxable physical assets, man-made goods used for production decreased \$14 billions, natural resources (land) decreased \$11 billions; man-made goods used for comfort decreased \$30 billions, and land used for comfort purposes decreased \$8 billions, the totals for the four items being a decrease of \$63 billions. On the other hand, publicly owned physical assets increased \$23 billions, making a net decrease of \$40 billions in the total physical assets of 1938 below 1930 (p. 145).

The use of data on assessed values suggests the possibility that the increase in the percentage of comfort goods might be due to the practice of assessors in keeping appraisals of comfort goods closer to market values than similar appraisals of production goods. Mr. Doane was forced to use assessed values, but another set of values (*e.g.*, fire insurance appraisals) might have indicated different changes in the proportion of comfort and

production goods. Even if selling prices could be used and no change was recorded in the index of (general) prices, the decreases in prices of production goods and the increases in prices of comfort goods might exactly counterbalance, and the apparent stability of (general) prices might conceal the upward and downward movement of prices in these two classes of goods. Mr. Doane, therefore, does not show that the supply of our physical assets was greater in 1930 than in 1922 and 1938, but only that their dollar value was greater. He presents no method of correcting his dollar series for price changes.

Despite these and a number of lesser questions about other methods, there is sufficient evidence to justify Mr. Doane's conclusion that our national physical inventory of comfort goods probably exceeds that of production goods. Of course, in any division of physical assets into these two categories many questions will arise about where to place a number of items.

Two additional major criticisms should perhaps be made. First, the exceptionally important problem of including in one grand total both private and public property *values* has received inadequate attention. If the value of public highways and streets has already enhanced the value of abutting property, it has been included in the values of private property and therefore counted twice. Obviously these public and private items would have involved no double counting in making a grand total of physical assets if Mr. Doane had used a physical total instead of a value total. But no quantitative unit is available in which to express a grand physical total; and dollar totals involve this double-counting problem. When one considers the increasing amount of public property, Mr. Doane's slighting of this problem seems most unfortunate. The second and final comment is a criticism of scope rather than method. Only physical assets are studied; claims to these assets and all questions of ownership are ignored.

In addition to a glossary of terms and six appendices, there is a word of acknowledgment to an unnamed patron and adviser who wishes to remain anonymous. In appearance the volume resembles a research bureau type of publication. It contains many useful tables and a number of time-saving charts. For example, the vertical bar chart opposite the title page shows the principal classes of comfort goods and production goods for 1922, 1930, and 1938. Chart 3 on page 42 is an ingenious device covering eighty-five centuries, "Principal Landmarks along the March of Man's Knowledge in the Use of Things." Students of economic history will find chapter III, "Perspective," very stimulating, although, of course, extremely sketchy.

The author's style is commendable. For the most part each table is well documented and the author's methods of estimating are clearly explained. This volume gives form and content and meaning to statements often

heard and read that ours is an economy of abundance, not of scarcity. In this sense, it is a landmark in wealth studies.

FRANK G. DICKINSON

University of Illinois

Essays in Monetary Theory. By D. H. ROBERTSON. (London: P. S. King. 1940. Pp. ix, 234. 11s. 6d.)

A quarter of a century passed between the offering of Mr. Robertson's first book and the appearance of the present volume of essays, prepared for publication, he reminds us, before the outbreak of war and his appointment in the Civil Service. The occasion seems more appropriate for general comments than for concern with the details of controversies or those inconsistencies the reader is warned by the author to expect.

It has sometimes seemed a misfortune that Mr. Robertson, writing under the "shadow" of "two masters" at Cambridge, has not reached an even wider audience. But those qualities of mind and style which have restricted his circle of readers have proved most enlightening and refreshing to students of monetary theory. In his volumes *Money* (1922, 1929) and *Banking Policy and the Price Level* (1926), he made a major contribution to our understanding of monetary objectives and processes, and the present volume of papers prepared through the years 1924-39, is in a sense a complement and sequel to *Economic Fragments* (1931) and *Economic Essays and Addresses* (with Professor Pigou, 1931). The collected papers are in part concerned with the development, refinement, and application of the methodology and points of view developed in the earlier books.

The present essays considered against the background of these earlier writings offer the reader important new strands of thought. Most of the essays are reprints of papers previously published in economic journals. They include articles on international trade, trade cycle theory and monetary objectives, commercial banking theory, and an analysis of several episodes in British and American monetary policy. The reprints of the important essays on "Saving and Hoarding" (pp. 65-82) and "Industrial Fluctuation and the Natural Rate of Interest" (pp. 83-91) are especially welcome. Of especial interest, also, are the sections concerned with Keynesian interest doctrine (lectures delivered at the London School of Economics in 1939, pp. 1-38) and with the disentangling and synthesizing of monetary controversies (pp. 133-153).

Since the views of Mr. Robertson expressed in these writings are generally familiar, a few citations will suffice. He defends his "sequence analysis" and the definitions of saving and investment based thereon against the "statically-framed" terms of Keynesian theory (pp. 7-8, 65-82). Though recognized difficulties exist with respect to Mr. Robertson's definition of the "period," his method reveals processes hidden and even ignored

by theorists preoccupied with realized results. He insists that thrift and productivity play a direct part in the determination of the interest rate, especially in the long period point of view (pp. 10 ff.). Liquidity preference may under appropriate conditions help determine not the rate of interest but the price level (pp. 28, 151-152). He expresses doubt that "the 'multiplier' constitutes much advance over more crudely 'monetary' weapons of thought" (p. 121). And among these "weapons" of thought he retains a rack in his own arsenal for such old-fashioned concepts as circular velocity of the money stock (pp. 92-94), hoarding and forced saving (pp. 5, 65-82), and the natural rate of interest (pp. 83-91), now regarded as crude, or even nonsensical, expressions by the Keynesians. Robertson himself has coined new economic terms, but he may well claim to have done so to meet evident needs or to infuse new life into a sterile vocabulary. He now detects—with regrets for any personal responsibility, one supposes—a good many signs of inflation in the economic vocabulary and regrets the extent to which controversy has been concerned with words as against substance (pp. 33 ff.).

On one occasion, Mr. Robertson recommended the rigid separation of economists into those permitted to serve as advisers and those permitted to "think dangerous thoughts" provided they offered advice to no one (p. 108). But the author of this prescription himself provides an example of that rare combination of the capacity for courageous intellectual exploration and of the ability to keep in touch with the complexities of economic life. Though he is sympathetic with the utilization of monetary expedients in the effort to mitigate fluctuations, he warns us against unbounded faith in cheap money and government deficits as sufficient means of achieving full employment and durable stabilization in a world in which "inevitable discontinuity" occurs against a background of structural change (cf. pp. 126, 175-176, 112-113).

To words of high praise, the reviewer wishes to append the hope that events will make possible an early return of Mr. Robertson to his wonted academic activities. In the meantime, students of monetary theory will be grateful to him for making available materials which we hope can be read not only by those having "an antiquarian interest in the problems and controversies of a vanished age," but also by those seeking guidance in solving the problems of a new age.

LEONARD L. WATKINS

University of Michigan

History of Monetary and Credit Theory from John Law to the Present Day.

By CHARLES RIST. Translated by Jane Degras. (New York: Macmillan. 1940. Pp. 442. \$4.90.)

This volume is a translation by Jane Degras of Professor Rist's *Histoire des Doctrines relatives au Crédit et à la Monnaie*, first published in Paris in

1938. It is, in the words of the author, "the history, not of books, but of ideas" and represents an attempt "to check the answers given at different periods by the facts relating to the matters at issue" (p. 15). Professor Rist utilizes the compass of his own theory in his selection of men and ideas, and is lavish in praise and blame. Cantillon, Thornton, and Tooke, in his opinion, set monetary theory on the right course, but Law, Ricardo, and Overstone guided theory and policy into the barren lands. Among the moderns, Fisher and Warburg receive sympathetic treatment, but Wicksell, Marshall, Knapp, Cassel, and Hawtrey fare rather badly. Many names and ideas are omitted. In particular, the author gives relatively little attention to contemporary Swedish and English writers, apparently believing that their ideas are either too old or too bizarre to merit much attention.

Money, according to Professor Rist, serves not only as a medium of exchange and standard of value, but also as a store of value. Confusion between convertible and inconvertible moneys and the advocacy of fiat money derive especially from insufficient emphasis on the store-of-value function. Advocates of independent paper currencies have been obsessed with "quantity" and have neglected "demand" associated with confidence and the store-of-value function. Fiat money is simply "an 'ersatz' (and a very bad 'ersatz') for gold coin" (pp. 145-46). Law and the many "cranks" who have followed him erred badly in their failure to recognize the important differences between a forced paper currency and a metallic currency which provides a dependable "footbridge between the present and the future" (pp. 108-09).

Ricardo, among others, was guilty of drawing a false distinction between bank notes and deposits, but Professor Rist holds that many moderns are equally confused in their mistaken identification of bank notes and deposits with money. Plans for credit control based on the conception of bankers as creators of money, like plans for managing the printing press, affront Professor Rist's common sense. He holds that banks through their lending operations merely increase the velocity of the true money stock (*cf.* pp. 39, 42, 173); the supply of credits is restricted not only by commercial demands and the "reflux" principle (pp. 197-201), but also by the narrowing "credit margin" (pp. 206-11). He regards the view that "loans create deposits" (p. 206) as very misleading, for the insufficient reason that excess reserves are used up in the process.

In line with his banking-school views of credit, Professor Rist praises Tooke's distinction "between the 'general level' of prices and the temporary level established during a 'period of confidence'" (p. 219). Armed with this distinction and Fisher's normative idea that credits change slowly in relation to the volume of metallic money (p. 264), Professor Rist proceeds with a vigorous restatement of his familiar gold theory (chapters 6-7). Gold in effect circulates vicariously through the medium of paper and credits; over longer periods, other exchange media and the general price

level adjust to gold. Unlike credits, an increasing gold stock brings no compensating flow of goods and, unlike forced paper money, gold raises no questions of confidence. Gold supply determines the normative price level in a fundamental and inexorable sense, and when fiat money establishes an abnormal level, as in the War of 1914-18, there is no escaping readjustment to a level supportable by gold supply (p. 433).

To Professor Rist the prescription for current monetary problems is clear. He regards proposals for price stabilization and the like as "quack" remedies (pp. 425-30). The correct objective is that "of organizing the return to an international standard. . . . The gold standard alone can serve this purpose" (p. 433). He is not concerned over the possibility of gold's losing its value through demonetization, and he believes that if the gold standard is restored "we may look forward without anxiety to a period in which the purchasing power of the dollar will fall slowly and slightly, a course which will give nobody cause for complaint" (pp. 433-34).

It seems unfortunate that Professor Rist has allowed his own views on theory and policy—views which are largely at variance with modern trends of monetary theory—to appear so prominently in his selection and appraisal of men and ideas. Be this as it may, Professor Rist describes the main course of development in an interesting manner, and his pages are filled with many pertinent observations. The very dogmatism of one so impatient with new systems and nostrums is refreshing. Who may say that exercises in Euclid have lost their usefulness in a world which has rather hastily discarded reference points formulated through the long period considered by Professor Rist? No doubt we need to be reminded ever and anon in moments of excess enthusiasm over "new" ideas that "there is little new under the sun."

LEONARD L. WATKINS

University of Michigan

Anticipations, Uncertainty and Dynamic Planning. By ALBERT GAILORD HART. (Chicago: Univ. of Chicago Press. 1940. Pp. viii, 98. \$1.00.)

The theory of expectations is the promised land to some economists, and a mirage to others. The reviewer must admit that he leans toward the latter view: much of the literature on expectation consists of obvious and uninformative generalizations of static analysis. It is remarkable how impressive one can make a formal demonstration that it pays to buy stuff when it is cheap. But it is possible to go beyond such pretentious formalism, as Dr. Hart's excellent monograph proves. For he not only provides us with a useful summary of the formal theory, but also makes a detailed investigation of two important phenomena which accompany uncertainty, capital-rationing and flexibility. This he does with balance and perspective in a field where these seem difficult to attain.

The method of successive approximations is used. Dr. Hart begins with a restatement (chapter 2) of the relatively well-known theory of planning of future purchases, production, sales and financing—all in the absence of uncertainty. The statement of the fundamental theory (pp. 11-22) is both comprehensive and succinct, but the topic is sufficiently complex to have made a mathematical exposition welcome. Next he considers (chapter 3) the impact on the plan of market discontinuities of the firm; *i.e.*, the inability of the firm to vary price (price-fixing) or output (rationing), or to borrow, lend and use capital on constant (or at least on continuously variable) terms. The first two forms of discontinuity are submitted only to brief monopolistic price analysis. Capital-rationing receives more attention. Its consequences may be summarized (pp. 42-43): (1) the interest rate paid by the firm increases with the ratio of debts to inside equity; (2) different types of financing will be subject to different interest rates and to quotas; and (3) the marginal interest rate will lie above the average rate. The concept of capital-rationing seems to have considerable promise for theoretical analysis.

Once uncertainty is taken into account (chapter 4), the need for *flexibility* in all sectors of the operations of the firm becomes evident. In recent discussions the real effect of uncertainty has usually been eliminated by the hypothesis that only the mean expected price or quantity is important. In pleasant contrast, Dr. Hart makes a careful and illuminating analysis of the implications of the existence of uncertainty for inventories, nature of durable equipment, cash balances, terms and duration of contracts, etc. This is undoubtedly the most valuable part of his study.

Finally, there is a general summary of the factors which determine entrepreneurial anticipations and revisions of anticipations (chapter 5). The discussion, which is admittedly fragmentary, is eminently sensible and at points ingenious, but it does not shed much light on how anticipations are made or revised. Dr. Hart's technique is essentially *a priori*, and it is hard to see how this technique, no matter how skillfully applied, will serve as more than a sketchy rationalization of past experience. This is one of the sections of economic analysis where, the reviewer believes, progress depends much more on the accumulation of data (of a type almost impossible to collect!) than on an increase in the versatility of our technical apparatus.

GEORGE J. STIGLER

University of Minnesota

Liquidity and Instability. By COURTNEY C. BROWN. (New York: Columbia Univ. Press. 1940. Pp. xiii, 282. \$3.00.)

The concept of liquidity, long familiar in banking controversies, has recently come to occupy a crucial place in the theory of the level of output of a community. Mr. Brown takes it as the focal point for a discussion of

many theoretical matters centering, for the most part, around this latter problem. His general thesis, with which no one can disagree, is that changes in liquidity desires, while not an initiating cause of booms and depressions, contribute in an important way to the cumulative movements which make them severe. The book consists first of a set of definitions of the liquidity of assets and persons, liquidity preferences (or more simply liquidity desires), various kinds of wealth, final buying, and a few other concepts. It proceeds to a discussion of the way in which increases in liquidity desires are associated with decreasing money profits, increasing hoarding (defined as a reduction in the velocity of circulation), a reducing corpus of debt, and a diminishing supply of money, all of which aggravate reductions in the flow of final buying. There is, finally, a section in which a very rough empirical test of certain of the conclusions is attempted.

In view of the wide use of the concepts and the ambiguities in Mr. Keynes's formulations of them, a precise quantitative and operational definition of the liquidity of an asset and of liquidity preference would be very welcome. Unfortunately, Mr. Brown has not attempted this task. He defines liquidity (p. 266) as a "quality determined by the exchangeability of [the asset] into money in general but not for a specific amount of money." This "exchangeability" in turn depends upon (p. 6) "(1) the time that would probably be required to convert the asset into cash, and (2) the spread or range of money prices, one of which may be expected in such a time period." This definition is intended to exclude from the factors affecting liquidity the most probable price obtainable for the asset (*i.e.*, its probable *value* at any time), but to include something like the standard deviation of probable prices from the mean. This seems to correspond pretty well with the common-sense notion of liquidity, but the definition gives us no clear criteria on the basis of which one could arrange assets in a one-dimensional order of liquidity. Thus, for instance, it is not clear whether an asset for which, in short periods, sums definite but small in relation to "reasonable" value could be obtained would be more liquid than one for which the proportion of reasonable value would be high but very indefinite.

Mr. Brown's use of the term "liquidity preference" is at the same time wider and narrower than Mr. Keynes's. It is wider in that it refers to the demand not only for money but for a degree of liquidity in the assets of all kinds held and, in some contexts, to a preference for a degree of *solvency*. It is narrower in that Mr. Keynes's demand for money for transactions purposes is, I think, excluded. In this connection we are treated to the now familiar spectacle of an apparently sharp difference of opinion arising largely from a difference of definition. Mr. Brown rejects Mr. Keynes's interest theory on the ground that, empirically, interest rates usually *fall* during depressions when we would expect liquidity desires to be increased

and the quantity of money reduced. This difficulty, which seems to have bothered a number of people, is of course cleared up when we realize that Keynes's liquidity preference includes formally the transactions demand for money. During depressions the transactions demand is reduced by much more than enough to offset the increased precautionary (and possibly speculative) demand.

The chapters on aggregate money profits, hoarding, the corpus of debt, and the supply of money are difficult to appraise because it is not wholly clear just what the author was trying to do. If he was intending to write about the place of liquidity desires in cumulative change, there is much material the relevance of which to liquidity seems to be obscure. The extended discussion of the meaning of real as opposed to money profits is interesting, as a problem in definition, but does not seem to relate to the main issues. Again, there is considerable material on unbalance in the price structure as a cause of changes in the volume of final buying, accompanied by a brief panoramic view of a large number of policy instruments which might be used to correct it. The attempt to introduce these matters into a discussion focused on liquidity seems to me a little forced. On the other hand, if it is the purpose of the book to give an account of the factors responsible for instability, there are very fundamental omissions. Nothing is said, for instance, about changes in saving habits or fluctuations in investment opportunities, and I am still unable to state just what the author means by "unbalanced" prices.

In spite of this absence of a unifying scheme, the author makes many points well worth making. It was high time, for instance, that someone pointed out forcefully that the supply of money is not, as Keynes assumes, determined solely or even primarily by the banking system. He further emphasizes usefully the fact that changes in the institutional organization of production and of the markets for titles may, by influencing what he calls the interstitial circulation, affect the volume of final buying as significantly as what we are more accustomed to call hoarding. An extremely good feature of the book, of which all potential authors should take note, is the appearance of a concise summary at the end of each chapter.

The attempt to test empirically the conclusion that interest rates and liquidity desires are inversely correlated is a brilliant example of verification gone astray. The *difference* between an index of long rates (bond yields) and one of short rates (on commercial paper) is used as a measure of the strength of liquidity desires. The *average* of these same two series is then used as a measure of the interest rate. In other words, x minus y measures liquidity desires, x plus y (over 2) the interest rate. The author then believes it empirically significant that, when x (the long rate) is fairly stable, these two measures move in opposite directions with changes in y !

MAX MILLIKAN

Yale University

Business Cycles. Their Nature, Cause, and Control. By JAMES ARTHUR ESTEY. (New York: Prentice-Hall. 1941. Pp. xvii, 544. \$3.75.)

This book represents a courageous attempt to fill an important gap. Teachers in the increasing number of courses on business cycles have long complained about the lack of an adequate up-to-date exposition suitable for undergraduates. The subject which Professor Estey has chosen has so far undoubtedly been the worst served by textbook writers. And it may be said at once that Mr. Estey has done much toward redressing the balance.

The book is based on the sensible plan of combining description, theory, and policy. It is divided into three parts of roughly equal length. The first, and shortest, contains a brief survey of the essential facts of economic fluctuations. Various measures of business activity are described, the general pattern of a business cycle is outlined, and the relations of different types of fluctuations (cyclical, seasonal, secular, and random) are briefly discussed. The second part summarizes the chief business theories in the traditional manner (real, monetary, monetary overinvestment, underconsumption, etc.), and is noteworthy especially for its inclusion of Keynes's *General Theory* and of some of the controversies which followed that book. The final part, significantly entitled "Stabilization," deals—again in the usual order—with various policies for the control of cyclical fluctuations. Monetary management, public works, stabilization of consumption, wage and price policy, are successively brought under review. A few final pages deal rather sketchily with the broader social issues of economic stabilization.

Since Professor Estey's *Business Cycles* does not claim to be the product of original research, it must be judged entirely in the light of its efficiency as a textbook. As such, it stands out by comparison with its established rivals and it possesses also positive merits of its own. It shows much familiarity with recent literature and skill in presenting many modern advances in an easily assimilable manner. Its approach is refreshingly unbigoted, and the reader's confidence and interest are quickly won by the obviously sincere desire of the author to give an impartial and instructive account of the present state of knowledge. The structure is logical, but the book does not aim at complete comprehensiveness. The limits which the author appears to have set himself are, judging by the manner of the exposition, those of a junior course. The theoretical part cannot, of course, compare with Haberler's full analysis, but it is fairly detailed and it does no injustice to the authors it summarizes. The style, though undistinguished and at times so deliberately simple as to produce an impression of ingenuousness and platitude, is commendably clear and straightforward.

There are, however, a number of criticisms to be made. Among the topics that are either only very sketchily treated or not at all may be mentioned the problem of inventories and of self-generating cycles, the international propagation of business cycles (very inadequately dealt with on pp. 96-

101), the relation of changes in the degree of competition to economic fluctuations, and the question of technological unemployment. The praiseworthy attempt to introduce the student to the subject by way of the observed facts of fluctuations is somewhat stultified by an inadequate linking-up of this part with the subsequent theoretical analysis. It is also surprising that in a book so broadly based on the literature, there should be lacking reference to several important contributions. Tinbergen's more important econometric attempts, for example, are not mentioned. Nor is there any discussion of the approach through model sequences and of the combination of the effects of different forces, such as that of acceleration and of the multiplier. And among the names for which one looks in vain in the index may be mentioned Hicks, Lindahl, Malthus, Marx, Myrdal, Ricardo, Veblen, and Wicksell. Professor Estey might, of course, claim that he was writing for a not very advanced audience. But having gone as far as he has in using the old literature and recent developments, one has a right to expect greater completeness. The publisher should take an early opportunity of improving the illegible reproduction on page 53 of Mitchell and Thorp's well-known conspectus.

It is not to detract from the merits of Professor Estey's book if one major criticism is added. It is indicative of the sorry state of the textbooks in this field that even this work—the best available so far on its particular level—should still present a somewhat old-fashioned picture. The most striking feature of recent cycle theory is the way in which it has changed its character to become a study of the determinants of the level of economic activity through time. It is, paradoxically enough, the iconoclasm of Mr. Keynes which has taken cycle theory back to the classical Ricardian concern with the general problem of capital accumulation and economic development. Whatever one may think of Mr. Keynes's contribution, it cannot be denied that as a result of it the present debate has taken a turn which makes it more than ever necessary—but also more possible—to link up business cycle theory with general economic theory. Indeed, it is probably safe to say that with the exception of a few special sections, business cycle theory in the old sense is rapidly disappearing. It is imperative that students should be made aware of this development: partly in order that they may not have to unlearn in their senior and graduate years what they have learnt in their junior year; above all to take from them something of the unfortunate sense of fractionalization so common in our subject.

It is not normally a reviewer's function to quarrel with the method which an author has chosen. An exception may, however, be made in the case of a textbook. It might, therefore, be suggested that Professor Estey would have done better if he had insisted more strongly on the very substantial change in the quality of the discussion of fluctuations dating from the late thirties. His impartiality, which made him list a number of theories as if

they were all of equal import, has served to obscure this all-important change. It is not to become biased and to abandon the path of academic righteousness to make a distinction in terms of their relation to the whole corpus of economic theory between, say, the monetary theories of the 1920's and the current discussions of the economic aggregates of income, consumption, and investment.

ERICH ROLL

*Institute for Advanced Study,
Princeton*

The Control of Business Cycles: A Study of Methods for Achieving and Maintaining Prosperity. By JOHN PHILIP WERNETTE. (New York: Farrar and Rinehart. 1940. Pp. ix, 197. \$1.75.)

This book, as its title and subtitle suggest, is primarily concerned not with the analysis and causes of cycles as such but rather with the problem of developing policies, mechanisms, and controls for the purpose of achieving and maintaining "stabilized prosperity." More strictly speaking, however, the problem, in the opinion of the author, is not one of maintaining a norm of prosperity. Prosperity is considered to be inherently unstable and the real problem is one of detecting departures from this norm and then putting into effect corrective measures that will deflect business activity back to the desired norm.

The author repudiates the theory that if a boom is permitted to develop, depression is inevitable, and that, therefore, the only method of avoiding depressions is to avoid booms. It is conceded that moderation of the boom may facilitate the control of an ensuing depression, but it is believed that depression may occur without a preceding boom, and that, whether or not the depression is preceded by a boom, the cumulative intensification of the depression may be avoided by available measures of control.

The basic proposition of the author is that business fluctuations occur because of fluctuations in spending and that the control of the former involves, therefore, controlling the rate of spending. A very brief treatment is given to the factors causing changes in the volume of consumer or business spending. If for any reason a decrease in the volume of either type of spending occurs, leading to a decline in business activity, prosperity may be restored by employment of the appropriate positive measures for increasing the amount of spending. Among the possible measures for such a purpose the author lays particular stress upon federal reserve action, governmental spending, and a variable tax on money.

In spite of the apparent simplicity of the remedies proposed there is evident, on the part of the author, a consciousness of the underlying complexities of the problem, and the book closes with a plea for further investigation of control plans. Nevertheless, in the opinion of the reviewer,

a rather one-sided view of the problem is presented, because of the relatively little attention given to an analysis of the factors involved in an onset of depression. To say that the cause is a decline in spending is perhaps an illuminating way of stating the problem. But the question remains of the reasons for the decline in spending. The cursory treatment of these questions does not appear to be merely a matter of economy in space, but in large part doubtless grows out of the assumption of the author that, whatever the initial causes of depression, prosperity can be restored by positive measures to increase spending. But is this a valid assumption? If the decline in spending comes about, for example, as a result of the discovery of over-expansion in certain important industries, can the decline in spending for capital goods in these industries with its accompanying unemployment, be offset merely by an increase in spending for other types of goods? Is there such mobility in all types of labor and capital that they can be shifted easily from one employment to another? In the meantime what are likely to be the effects of this lack of equilibrium in business upon such factors as the stock market, the strength of the debt structure, the soundness of the banking situation, and the psychological attitudes of business men? If, as seems probable, the developments in all of these respects are likely to have detrimental repercussions upon business enterprise, it would seem to be the part of wisdom in seeking to abolish depressions, to have serious regard also to the avoidance of those conditions that lead to the onset of depression.

The style of the book is clear and straightforward, with a minimum of technical terminology, so that it should be intelligible to the lay reader as well as to the professional economist.

WILLIAM O. WEYFORTH

The Johns Hopkins University

Government Spending and Economic Expansion. By ARTHUR E. BURNS and DONALD S. WATSON. (Washington: Am. Council on Public Affairs. 1940. Pp. vi, 174. \$2.50.)

The authors state at the outset their belief that the fundamental factor underlying the social and economic changes of recent years is a change "in the *spirit* of enterprise." As a result, "business itself, dominated by corporate bureaucracy . . . has lost initiative . . . a weakened spirit of enterprise is manifest" (Preface, p. v). This loss of initiative is in part due to the declining birth-rate and the increase in the number of middle aged and older groups, as a result of which the authors "expect a further lessening in initiative and enterprise," in an economy "dominated by bureaucratic corporate monopolies" (p. 22)—the implication being that the medical profession, by unduly prolonging human life, is undermining our system of private enterprise. This is worse even than anything Thurman Arnold has yet charged the medical profession with.

As a consequence of this change, America is suffering from "economic stagnation, from chronic depression." In this situation, "the only agency which is free to act is the government. Likewise the government is the only single body in the economy which is large enough to affect the remainder of the economy" (p. 2). Consequently, the responsibility for "lifting the national income" and maintaining general prosperity and employment must now rest with the government.

A third premise is that "the principal method by which the government can proceed to carry out these purposes is spending—and spending on a large scale" (p. 3). The national income depends upon "the volume of expenditures" (p. 19); "income is generated by spending" (p. 25). The failure of pump-priming expenditures in the past "must be laid to the meagerness of the spending" (p. 29). "The failure of government to spend enough . . . is one of the great mistakes of the 1930's" (p. 86). The authors regret "the retention by the Administration of fundamentally orthodox views of fiscal policy" (p. 70).

They suggest that it might be possible to determine the effect of a given volume of public expenditure upon the Federal Reserve index of production, and thereafter adjust the volume of expenditure to whatever increase in production might be desired at any time (p. 101).

They would finance the national debt by issuing 17 billions of currency, with which to buy up a corresponding amount of government obligations. As this currency accumulated in the Reserve Banks, the Board of Governors would increase the reserve requirements, thus nullifying any inflationary effects. In this way "for all practical purposes the public debt would have been reduced" (p. 133).

After tracing the course of expenditure policy over the past few years and analyzing its effects, the authors reach the conclusion that we must continue more or less permanently a policy of enormous public expenditure. Unless we do this, our economic system will "soften and retrogress," our economy will "wane" (p. 115), and we shall be faced with prolonged "political and social decay" (p. 136).

Perhaps the only pertinent comment would be that the intermediate chapters might have been dispensed with; because, given the authors' premises—that the spirit of private enterprise has vanished, that government is now the only agency that can act effectively toward maintaining prosperity, and that the only or "principal" method for doing this is public spending—their conclusion would seem to follow automatically, by much the same logic as that by which the ancient Syllogists proved that Socrates was mortal.

HERBERT D. SIMPSON

Northwestern University

Profit: Theoretical and Applied Aspects. By JAMES P. BEDDY. (Dublin: Hodges, Figgis & Co. 1940. Pp. xi, 415. 12s. 6d.)

The present volume is divided into two parts of which Part I is an historical review of profit theories which occupies about a third of the volume. This section adds little to what has already been said by other writers in similar reviews and the professional economist will do well to heed the suggestion in the preface and pass over it hurriedly. For the most part, it threshes old straw.

Part II begins with a chapter on "The Actual Profits of Business Concerns." Its aim is apparently to establish the proposition that statistical studies show that, between one trade or industry and another, wide differences in gross and net profits exist and that such differences are enduring in the sense that business profits do not approach equality either within or without industries. While the main conclusion of the argument probably would not elicit violent opposition, an uninitiated reader would scarcely be convinced by Mr. Beddy's evidence. Instead of speaking at length about profits per unit of investment he reviews the older literature on the differences between firms and industries in turnover ratios, expense ratios, gross profit ratios, etc. Although the book bears a 1940 imprint, the valuable recent studies of Crum, Epstein, Paton, the National Bureau, and others are not even mentioned. In fact, the whole of this chapter (and much of the book) gives the impression of having been written and shelved some years ago. For instance, the reviewer recalls no citation in the volume later than 1934.

The "Explanation of Profits" offered in the succeeding chapter is at least unique. In the first place it endeavors to show that some firms have "advantages" over others; *e.g.*, high turnover, lower expenses, favorable location, better credit facilities, etc., and that these "advantages" permit them to obtain a higher profit than their fellows. How one recognizes an "advantage" without first having noted the existence of a "profit" is not clear to the reviewer. Notwithstanding this difficulty, advantages are alleged to be of two types: natural and acquired. Natural advantages yield "rent." But if they are "acquired," either deliberately or by accident, they yield "profit" (pp. 253-265). Although the author says frequently that natural and acquired advantages are not to be confused, he nowhere defines either except inferentially. The location of urban real estate, for example, is an acquired rather than a natural advantage (p. 256). Similarly, remoteness from market and proximity to an industrial center are acquired rather than natural land qualities. Since profits by definition stem from acquired advantages, chapter XI describes their various bases such as legal and political factors, inequality of opportunity, economies of scale, product differentiation, elimination of competition, chance factors, etc. Acquired advantages are relatively permanent. "Profits may tend to disappear, but

a tendency which is never realized on any important scale cannot occupy any prominent place in economic theory" (p. 387).

Mr. Beddy's own theory of profits is only part of a general, "non-functional" theory of distribution apparently applicable to the static state or dynamic conditions with equal force. (See pp. 361-370.) The income of any person or group of persons is said (p. 366) to consist of (a) a sum to cover maintenance and renewal, (b) a compensation for disutilities, (c) rent from natural advantages, and (d) profits from acquired advantages. Consequently, any wage above the subsistence level and that required to overcome disutility is rent if it rests on natural advantages (*e.g.*, concert singers) and profit if it depends upon acquired advantages (*e.g.*, attorneys) (p. 349). "Interest is . . . similar to profits in the sense that it arises from the same causes—acquired advantages—and just as the excess of earnings over subsistence wages constitutes profit, so also any reward over and above that required for the maintenance and renewal of capital is similar in nature to profits" (p. 357). "The reward we know as interest cannot arise except by the use of capital, but the more general reward—profits—can arise in circumstances which owe nothing to capital" (p. 357).

What does all this amount to and what purpose does it serve? Clearly all the familiar terms—wages, interest, and rent—are given new connotations. But to what purpose is not clear. The new categories are no more useful statistically than those hallowed by long usage. And on logical grounds their marked superiority is not self-evident. If one overlooks the author's peculiar restriction of "natural" advantage with respect to land (and hence the derivative concept of land rent) his profit theory is essentially a "frictional" or "monopoly" theory (*cf.* pp. 146-149). As such his analysis may emphasize certain elements treated only briefly by other writers. But the problem usually posed by earlier economists was how, given competitive conditions, mobility of the factors of production, etc., can profits arise and what determines their amount? Mr. Beddy asks different questions and yet criticizes other authors for not giving good answers. Moreover, he should recognize that his concept of profits and what he "explains" bear little or no relation to recorded accounting profits, the non-uniformity of which constituted his original problem. Finally, the reader is constantly in doubt as to the applicability of the numerous propositions about profits scattered through the volume. Are they intended to apply to profits in the accounting sense, some theoretical sense, or the special sense in which he has defined them in his volume? One is never sure.

One would like to be able to report that Mr. Beddy's volume achieves a fruitful marriage of more recent developments in economic theory and the best statistical studies on business profits. As it is, the high hopes with which one approaches the volume are disappointed and one leaves it with the feeling that an excellent opportunity has been allowed to go to waste.

NORMAN S. BUCHANAN

University of California

NEW BOOKS

ANGELL, R. C. *The integration of American society*. (New York: McGraw-Hill. 1941. Pp. ix, 228. \$2.50.)

A simply written description of areas of group action, not sufficiently integrated to live up to the promise of its title nor sufficiently profound to give much of an answer to the principal question raised, "Is the development of free-standing groups in our society a threat to the hold of American institutions and values upon our people?" (p. 210). The chapters of most interest to economists, 4 and 5, dealing with corporations, labor unions and farm groups, are extremely superficial.

BARON, S. W., editor. *Essays on Maimonides—an octocentennial volume*. (New York: Columbia Univ. Press. 1941. Pp. 316. \$3.75.)

Contains an essay of more than 100 pages on the economic ideas of Maimonides.

BLODGETT, R. H. *Principles of economics*. (New York: Farrar and Rinehart. 1941. Pp. xviii, 634. \$3.50.)

BRATT, E. C. *This unbalanced world*. (New York: Harper. 1940. Pp. x, 220. \$2.50.)

The author of this book on economic unbalance attempts to diagnose the cause of the malady and prescribe the cure. He argues that the key to business cycles is fluctuation in the output of durable goods. Next he indicates his reasons for rejecting some of the proposed cures for unbalance, including price flexibility, credit control, public works, redistribution of income ("making the poor rich" as he puts it), and other government controls. The cure is to be found, the author contends, in the development of private business forecasting. In his words "the need is for a dependable estimate of the balanced level and its probable change. This the business man is not equipped to provide for himself. It must be furnished by collective agencies. The most important function of such agencies is not planning. It is the furnishing of appropriate information regarding the economic activity required for stability. This function may be called long-range forecasting. When a good understanding of the durable equipment required for balanced needs becomes common knowledge, competition will tend to maintain a reasonable degree of stability instead of driving activity far from it. Information on balanced needs provides the key to a requisite degree of stabilization" (p. 92).

Two assumptions underlie the proposal: (1) that rough calculations can be made of durable goods required in various industries in terms of a balanced economy, and (2) that individual business enterprises can be expected voluntarily to utilize these forecasts in such a way that balance will actually emerge. To escape the obvious question-begging implications of the first proposition the author urges long-term, as opposed to short-term, forecasting, on the grounds that the long-run factors controlling growth (or decline) of an industry can be evaluated. In spite of some good discussion centering on technological factors, the argument is not convincing. For example, at no point does the author grapple with the question of the basic meaning of "needs in a balanced economy." In what sort of price structure is "need" to be interpreted? A system permeated with private business controls, or one in which the government "enforces" competition? The author gives no direct answer. Perhaps he inadvertently suggests his position in the following statement bearing on the second assumption noted above: "The fundamental estimate needed is the amount of an industry's product required for normal needs

in the future. Such forecasts will be the uniform requirement of every company within any industry. There is no reason for each company to develop an estimate, and each can save a good deal by coöperating with others" (p. 151). This seems to mean that the managers of a given industry might well combine to control investment. And if investment, why not prices and other important policies?

J. R. HUBER

BREEN, Q., editor. *Survey of social science; an introduction to a science of society*. (Eugene, Ore.: Univ. of Ore. Co-op Store. 1940. \$3.75.)

CHENOWETH, C. G. *An introduction to economics*. (New York: Holt. 1940. Pp. ix, 677. \$3.)

In the preface the author states that "in some respects this volume is just another textbook . . . not radically different . . . nor treated in an entirely original or distinctive manner." On this keynote he introduces his scheme of reorganized procedure of the conventional treatment of value and distribution which "has always seemed unsatisfactory, and the discussions based upon it confused and unrealistic." Following this he prepares the reader for another "novel" item on the economic system as an integrated mechanism, how it works, and how it can be made to work more effectively.

The book, it should be emphasized, is an introduction to economics and lays no claim toward expounding principles of economics. The subject is treated in a matter-of-fact way, stressing institutional lines of development and the business viewpoint as the prevailing pattern of thought in the scheme of social organization. Following a presentation of fundamental concepts and processes, the author discusses institutional organizations, practices and procedure. Part III deals with business operation under conditions of competition and monopoly. Money, banking, credit, business fluctuations, domestic and foreign exchange and international trade take up the next hundred and fifty pages. The economic system as an integrated mechanism gets eighty-four pages; and Part VII, on the distribution of wealth and income (functional distribution is covered in thirty-five pages) is concluded with a chapter on radical reform movements.

Quite obviously the book has been written to fit a particular need, for those students who may not be expected to conform to the intellectual discipline required for analytical purposes. There is a place for that kind of presentation and this text would fill that need if it were not for its smug suggestion that no more is needed to arrive at an understanding of what economics is all about. The treatment accorded distribution is pretentious rather than distinctive. The somewhat unconventional approach to the study of functional distribution, if properly qualified, need not have been regarded as in opposition to other types of presentation. By reducing the primary functions in production to labor, waiting, and risk taking, the author is inconsistent in his failure to substitute pains for labor and, as a matter of ultimates, to have arrived at *real* cost and *real* incomes. But this might have raised some doubt in the mind of the student who might consider labor as something enjoyable, intent upon living to work and not just working for a living. Moreover, there is another conflict here between the accountant's point of view on interest and profit and the attempt of restatement on real cost. But the issue is not developed. In order to keep the student unconfused on the distributive share analysis economic rent is ruled out as a separate category of income. This

income stream, the author says, is nothing but interest and profit anyway—so why confuse the issues of arriving at an understanding of how things work? He holds that the average reader can understand the terms of the business man and can put his finger on something concrete which he cannot do when he reads the analysis of functional distribution offered by theoretical economists. He contends, by the authority of Sir Francis Bacon, that a lot of them are engaged in spinning cob-webs, hunting about in the jungle, with no profit for anybody. In other words, they are a daft lot.

Climates differ. And intellectual climates differ most of all because the resources of accumulated knowledge, perception, and imagination are so varied, and purposes and objectives so different too. Grey is, young friend, all theory, and green of life the golden tree. Isn't that what Mephistopheles said to the student when he became too inquisitive about certain matters?

ERWIN GRAUE

ECKARD, E. W. *Economics of W. S. Jevons*. (Washington: Am. Council on Public Affairs. 1940. Pp. 113. \$2.50; \$2, paper.)

Mr. Eckard broaches his study of Jevons by a brief but interesting sketch of Jevons' life. Jevons' contributions to value and distribution theory, especially capital and interest, his study of the coal question, his works on money and business cycles and his views on the social questions of the day are carefully expounded, occasionally interspersed by critical and explanatory comments.

Although in general the study is sympathetic to Jevons, Mr. Eckard's prejudice against the use of mathematics leads to occasional injustice to Jevons' idea. For example, in criticizing Jevons' point that, if mutton and beef are perfect substitutes for each other, variation in the supply of one would not affect the ratio of exchange between them, Mr. Eckard is clearly wrong.

The study is not penetrating, but Mr. Eckard's thoroughness in bringing Jevons' ideas together makes the book worth reading.

EARL ROLPH

HANSEN, A. H. *Fiscal policy and business cycles*. (New York: Norton. 1941. Pp. ix, 462. \$3.75.)

HAYEK, F. A. *The pure theory of capital*. (London: Macmillan. 1941. Pp. xxxi, 454. \$3.50.)

KING, W. I. *The causes of economic fluctuations*. Rev. ed. (New York: Ronald. 1941. Pp. 376. \$3.50.)

KITAMURA, H. *Zur Theorie des internationalen Handels: Ein kritischer Beitrag*. (Weinfelden, Switzerland: Neuenschwander. 1941. Pp. xviii, 269.)

KRUSE, A. *Preisstop und Produktionskosten, Ein akademischer Vortrag*. Münchener Volkswirtschaftliche Studien heft 30. (Jena: Fischer. 1940. Pp. 26. RM 1.60.)

LEONTIEF, W. W. *The structure of American economy, 1919-1929: an empirical application of equilibrium analysis*. (Cambridge: Harvard Univ. Press. 1941. Pp. xi, 181. \$2.50.)

LÖSCH, A. *Die räumliche Ordnung der Wirtschaft: Eine Untersuchung über Standort, Wirtschaftsgebiete und internationalen Handel*. (Jena: Fischer. 1940. Pp. viii, 348. RM. 12.)

- MACK, R. P. *The flow of business funds and consumer purchasing power.* (New York: Columbia Univ. Press. 1941. Pp. xvii, 400. \$3.75.)
- MCFERREN, R. *Distribution—essays on modern economics and conditions.* (Webster City, Iowa: Author. 1940. Pp. 262. \$1.)
- MCAIR, M. P. and MERIAM, R. S. *Problems in business economics.* (New York: McGraw-Hill. 1941. Pp. xiv, 654. \$5.)

This book was written to acquaint the prospective business executive with the modes of thought used by economists. The authors believe that a familiarity with such reasoning will help the student to make decisions concerning the economy of the single firm, *e.g.*, problems of price, rate of operation, investment, expansion and contraction, and that, after such a study, he will have a better understanding of the relations between the single firm and the economy as a whole. All this should develop an intelligent opinion concerning the economic aspects of public policy. The book is primarily a series of cases designed to bridge the gap between the usual undergraduate course in economics and professional instruction in business management. There are introductory notes to satisfy those who have little knowledge of the subject.

Admittedly there is no logic to the arrangement of topics (p. vi), for the sequence was chosen with a view toward pedagogy rather than the systematic treatment of any organized body of doctrine. The cases are classified under six main headings: Profits and Risk, Demand, The Behavior of Costs, Supply and Demand Analysis, Business Cycles and Business Policies, and Current Problems of Public Policy. This list in no way reveals the wealth of material that is included in both the cases and the introductory notes.

The success of a case book as a pedagogical device depends as much upon the arrangement of material as upon the skill used in selecting the problems. In this, the authors have succeeded remarkably well. The essay on Demand contains no extended treatment of derived demand and yet, by classification, the subject can be covered with a very brief note. Much substance is given to the section on costs by this method.

An evaluation of the book without observing its effectiveness in the classroom is difficult. This reviewer was impressed with the skill exercised in the selection and preparation of cases and he is inclined to believe that, in the hands of a competent instructor, it should be highly successful. The organization of sections, when emphasized, should do much to supplement the introductory notes. However, there are disappointments. The section on Profits and Risk could be used to indicate how resources are allocated in an economy where free choice is exercised. This would do much to give the analysis of absolute and relative profits meaning. The note on economists' costs confuses factor costs and fixed costs (pp. 167, 169). Perhaps economists dealing with business students could dissolve the ambiguity of the literature on this point.

EDWARD G. NELSON

- MOORE, J. H. and HOCK, M. L. *Readings in modern economics.* (New York: Nelson. 1941. Pp. 686. \$3.50.)

"A history of economics and a discussion of economic problems and principles compiled from various authorities, to be used as a college textbook."

PANZACCHI, A. *Nuova fatti e nuove dottrine sull'impiego della mano d'opera.*

Prefazione del Prof. Felice Vinci. (Bologna: Tipografia compositori. 1940. Pp. 166.)

PIETRANERA, GIULIO. *La dinamica dell'interesse nell'economia capitalistica*. (Padova: Cedam. 1940. Pp. 179. L. 25.)

With reference to a paper advocating *a pure theory of interest*, published in 1927 (see Frank A. Fetter, "Interest Theory and Price Movements," *The American Economic Review Supplement*, March, 1927, pp. 62-105), an Italian scholar of the same school of thought defends now similar ideas in his recent study relating to the dynamics of interest in a capitalistic economy. This dynamical theory, or "theory of economic oscillations" as it has been called in this country, finds itself in contrast with mere quantitative measurements regarding price changes and rates of interest. The object of the essay is, according to the introduction, to examine with different methods the single problems of rates of interest which have been recognized empirically. They have been grouped into four chapters.

The first chapter relates primarily to Böhm-Bawerk's fundamental theory of premium and the subjective value of the Austrian "grenznutzen" school, based on time preference. Chapter 2 tries to prove that there prevails one general trend in historically decisive interest doctrines: theories justifying the phenomenon of interest consider it a dynamic fact bound to sociological schemes. The next and longest part of the book elaborates on various saving types, classifying them as rational and other, non-reasoning examples. A very short final chapter concludes that in our modern capitalistic society interest rates exist in diverse forms. The author's main conclusion is that *the ultimate cause for interest rates is psychological*. It is no new disclosure; indeed, there are hundreds of quotations from American and European literature, but the book lacks a bibliographical index.

PAUL UCKER

PIGOU, A. C. *Employment and equilibrium—a theoretical discussion*. (London: Macmillan. 1941. Pp. xi, 283. \$3.)

STIGLER, G. J. *Production and distribution theories: the formative period*. (New York: Macmillan. 1941. Pp. vii, 392. \$3.50.)

VILLARD, H. H. *Deficit spending and the national income*. (New York: Farrar and Rinehart. 1941. Pp. ix, 429. \$3.50.)

VINCI, F. *Analisi economiche*. Serie seconda. (Bologna: Zanichelli. 1940. Pp. 397. L. 60.)

———. *I concetti statistici dell'analisi economica*. Appendice: *I primi cento gruppi de concetti fondamentali*. (Bologna: Zanichelli. 1941. Pp. 96. L. 12.)

YATES, R. E. *Introduction to the social sciences: a syllabus*. (Conway, Ark.: Hendrix College. 1940. Pp. 65. \$1.)

ZIPF, G. K. *National unity and disunity: the nation as a bio-social organism*. Bloomington, Ind.; Principia Press, 1941. Pp. xv, 408. \$3.50.)

Cowles Commission for Research in Economics: report for 1940. (Chicago: Univ. of Chicago. 1940. Pp. 16.)

Proceedings of the Institute of Economics and Finance, Occidental College: third session, Los Angeles, California, October 17-19, 1940. (Los Angeles: Occidental College. 1941. Pp. 76.)

Science, philosophy and religion; a symposium. (New York: Conference on Science, Philosophy and Religion. 1941. Pp. 451. \$1.50.)

"Papers . . . prepared for the initial meeting of the Conference in September, 1940."

Social Science Research Council: annual report 1939-1940. (New York: Soc. Science Res. Council. 1941. Pp. 60.)

Survey of business research projects at universities. (Washington: U. S. Dept. of Commerce. Pp. 185, mimeographed.)

Economic History and Geography

Great Britain Under Protection. By FREDERIC BENHAM. (New York: Macmillan. 1941. Pp. xvi, 271. \$2.50.)

This volume, prepared under the auspices of the Carnegie Endowment for International Peace, is one of a series of four on the recent commercial policies of leading European countries. The companion study on France, by Professor Haight, has also been published; two others, on Italy and Germany, are in process. The four together will fill the great need, which teachers and students have alike felt for a number of years, for honest and well-organized accounts of the complex European developments in this field since 1918.

Mr. Benham's book has the great merit that it gives a comprehensive and unified view of nearly the whole of British economic foreign policy. The British protective tariff alone clearly cannot be comprehended adequately except in the light of the measures of quantitative trade control, foreign exchange intervention, general monetary policy and the like which accompanied and supplemented the tariff proper; and none of these measures can be understood except in terms of the post-1918 changes in Britain's economic position as a whole, both internally and vis-à-vis other countries. Mr. Benham offers a balanced and judicious account of all these factors, and of their combined effects on British economic development.

Britain's dramatic shift to protection in many forms and on many fronts, and away from the free-trade policy of which she had so long been the great example, was due to two principal factors. One was obviously the acute and protracted depression that began in 1929. The other, less spectacular but not unimportant, was the fact that Britain had for years been falling behind her rivals in international trade, and that for this and other reasons unemployment had been relatively severe most of the time since 1920. On both grounds, protection seemed an experiment worth trying, if only because other countries were doing better than Britain and also had protection. *Post hoc, ergo propter hoc!* How much part was played by the purely political desire to bind tighter the links of Empire solidarity, and to do so by granting trade preferences, is not made clear. At all events, the sequence of events in and after 1931—the abandonment of gold, the passage of comprehensive protective tariffs, the installation of quota and licensing systems (partly in conjunction with private but officially sanctioned participations in international cartels), the Ottawa agreements, the

ill-fated Monetary and Economic Conference of 1933, the actual use of the Exchange Equalization Account as a deliberate device for holding down the value of sterling exchange to help the export industries, the negotiation of a network of variegated commercial treaties, and even the use of part or all of these measures to bring rather severe pressure to bear on other countries (notably the Argentine and some of the smaller European nations)—all form part of the development and application of what was essentially a single unified policy of governmental protection and promotion of British trade and industry.

How far the policy was really effective, it is impossible as yet to judge. Britain experienced a large and sustained economic recovery after 1932, but the two chief reasons for the recovery—the housing boom and later the armament program—had no very close and direct connection with protection. Cheap food imports and low interest rates helped, as did the stimulus to investment in certain protected industries, but these were not the major factors in the recovery. For a time, the new commercial and foreign-exchange policies did give British exports a competitive advantage, but the devaluation of other currencies, increases in the tariffs of other countries, and the steady growth of bilateral trade and payment agreements in the rest of the world whittled this advantage away over time. Imperial Preference was not a marked success on the most favorable view, and can easily be interpreted as a failure. It was achieved in the main, of course, not by lowering previous tariffs but by creating a new tariff from which preferential “concessions” could then be made. Empire suppliers were merely substituted for cheaper non-Empire suppliers, sometimes at the price of a net reduction in total imports from all sources and usually with a decrease in real British welfare; and the other Empire countries were often discontented rather than pleased by the end-results. It can also be argued that the Ottawa agreements, by seeming to tighten the commercial straitjacket around Germany, helped precipitate the rise of German military power and hence the war; on this Mr. Benham casts no light. Be that as it may, it seems clear that the protectionist, isolationist and sometimes (in retrospect) sheerly stupid character of the new British international economic policy as a whole, plus the contemporary French quota policy, plus (last but far from least) our own earlier tariff and Inter-Ally debt policies, were together creating a world situation which was increasingly intolerable and hence explosive, in the political as well as in the strictly economic sphere. The first stone should not be cast at Britain, though she took the two most spectacular steps—abandoning gold and adopting protection.

The reader will regret that only two major industries are subjected to detailed examination; and that Mr. Benham made no substantial attempt to apply his wealth of factual material to the perplexing problems center-

ANDREWS, W. *The Vanderbilt legend: the story of the Vanderbilt family, 1794-1940.* (New York: Harcourt Brace, 1941. Pp. 464. \$3.50.)

AOKI, N. and others. *Economic and financial conditions in Japan, Manchoukuo and China.* E. Asia econ. intelligence ser., no. 2. (S. Pasadena, Calif.: P. D. and Ione Perkins, 1940. Pp. 66. 15c.)

BARBER, J., JR. *Hawaii: restless rampart.* (Indianapolis: Bobbs-Merrill, 1941. Pp. 285. \$2.75.)

"A study of the complex factors which exist in Hawaii today, discussed in terms of national security."

BAXTER, W. J. *Japan and America must work together! a program for American recovery that will work.* (New York: Internat. Econ. Research Bur. 1940. Pp. 100. \$2.)

"The author believes that the Japanese have proven themselves better able, as a race, to adapt themselves to modern mechanized civilization, than other peoples, and that, therefore, America's most prosperous future lies in co-operation with the 'rising empire' of Japan rather than with China or the 'declining empire' of Britain."

BONNELL, A. T. *German control over international economic relations, 1930-1940.* (Urbana: Univ. of Illinois Press, 1940. Pp. 167. \$2.)

This book is an attempt to give an objective view of Germany's commercial and financial policies in the decade preceding the second World War. In his Preface Dr. Bonnell writes:

To the National Socialists has been assigned a great deal of the responsibility for the disruption of normal international economic and financial relations between nations. However, to a considerable extent, German control measures were consequences, rather than causes, of international disequilibria. Germany was not so much the source of international economic and financial disturbances as a medium through which shocks originating elsewhere were transmitted to other parts of the world economy.

After an introductory chapter reviewing the circumstances which led to the financial crisis of 1931, there follows a detailed description of the various measures of exchange control, moratoria and standstill agreements. Chapter V deals with import control, chapter VI describes the policies designed to stimulate exports and a concluding chapter summarizes the effects of German control.

Based very largely on German sources, the book is written for specialists in foreign exchange and trade policies. The author immerses the reader in a sea of administrative regulations, throwing him only an occasional helpful generalization. A specimen of the latter is the statement on page 118 regarding the German use of 'blocked marks. "From the National Socialist standpoint, the fulfillment of 'national destiny' seemed more important than the fulfillment of international obligations."

Exchange control and the very complete regulation of import and export trade, the writer finds, aided the transition from peace to a war economy. He avoids a direct statement of the effect upon internal economic conditions but implies that the standard of living was lowered. "Autarchy, coupled with a policy of public works and rearmament, brought with it the 'blessing of voluntary scarcity,' namely, full employment, rather than the 'scourge of plenty,' market surfeit and idleness." In international relations he does not deny that the German policies resulted in disturbing the political and economic equilibrium, but he lifts the burden of responsibility from the shoulders of

survey of the Dominion available for the post-Confederation period. In Canada politics and economics have frequently been at odds. Most Canadian economic regions, separated by stretches of unproductive territory, are the northward extension of similar regions in the United States, and integration along north-south lines would have entailed less cost than the east-west development that the preservation of political unity and independence has seemed to demand. The cost of public works has strained the credit of the weaker provincial governments. When the Confederation was established the Dominion government took over the power to levy indirect taxes, principally the customs tariff. Prior to the first World War, this was the major source of revenue in Canada. Compensation was given the provinces in the form of monetary grants. The principal burden of social services has fallen of late on the provinces, however, and some readjustment of tax power or redistribution of social service burdens is necessary as the provinces drift further and further into debt. The tax structure is unsatisfactory, and duplicate taxes are imposed by Dominion and provincial governments in some instances, as on corporation income.

In Volume II, the Commission makes two alternative suggestions for dealing with the financial dilemma. Under Plan 1, the Dominion would assume the whole burden of relief for the employable unemployed, now largely borne by the provinces, and also the servicing of the provincial debt. In return the provinces would surrender certain Dominion subsidies and taxing power now shared with the Dominion. Plan 2, to be used if Plan 1 proved unacceptable, provides that the Dominion should immediately assume responsibility for the unemployed.

The Commission also proposes a new system of Dominion-provincial grants to bring all the provinces up to a minimum level of social services. This scheme closely follows that adopted in Australia several years ago. In general, the Report looks toward greater centralization of financial control. For this reason it has received a cold reception at the hands of a majority of the provincial governments.

The recommendations of this Commission have suggested a line of policy which may serve as the ultimate basis for resolving the old struggle between the weaker and stronger economic regions of Canada and, therefore, are of interest wherever the federal system is on trial.

O. J. McDIARMID

Carnegie Institute of Technology

NEW BOOKS

- ALEXANDER, F. *Australia and the United States*. America looks ahead, no. 1. (Boston: World Peace Found. 1941. Pp. 68. 50c; 25c, paper.)
- ANDERSON, H. R., and LINDQUIST, E. F. *Selected test items in American history*. Rev. by Harry Berg. Nat. Council for Soc. Stud. bull. no. 6. (Cambridge: Nat. Council for Social Studies. 1940. Pp. 93. 75c.)

ANDREWS, W. *The Vanderbilt legend: the story of the Vanderbilt family, 1794-1940.* (New York: Harcourt Brace, 1941. Pp. 464. \$3.50.)

AOKI, N. and others. *Economic and financial conditions in Japan, Manchoukuo and China.* E. Asia econ. intelligence ser., no. 2. (S. Pasadena, Calif.: P. D. and Ione Perkins, 1940. Pp. 66. 15c.)

BARBER, J., JR. *Hawaii: restless rampart.* (Indianapolis: Bobbs-Merrill, 1941. Pp. 285. \$2.75.)

"A study of the complex factors which exist in Hawaii today, discussed in terms of national security."

BAXTER, W. J. *Japan and America must work together! a program for American recovery that will work.* (New York: Internat. Econ. Research Bur. 1940. Pp. 100. \$2.)

"The author believes that the Japanese have proven themselves better able, as a race, to adapt themselves to modern mechanized civilization, than other peoples, and that, therefore, America's most prosperous future lies in co-operation with the 'rising empire' of Japan rather than with China or the 'declining empire' of Britain."

BONNELL, A. T. *German control over international economic relations, 1930-1940.* (Urbana: Univ. of Illinois Press, 1940. Pp. 167. \$2.)

This book is an attempt to give an objective view of Germany's commercial and financial policies in the decade preceding the second World War. In his Preface Dr. Bonnell writes:

To the National Socialists has been assigned a great deal of the responsibility for the disruption of normal international economic and financial relations between nations. However, to a considerable extent, German control measures were consequences, rather than causes, of international disequilibria. Germany was not so much the source of international economic and financial disturbances as a medium through which shocks originating elsewhere were transmitted to other parts of the world economy.

After an introductory chapter reviewing the circumstances which led to the financial crisis of 1931, there follows a detailed description of the various measures of exchange control, moratoria and standstill agreements. Chapter V deals with import control, chapter VI describes the policies designed to stimulate exports and a concluding chapter summarizes the effects of German control.

Based very largely on German sources, the book is written for specialists in foreign exchange and trade policies. The author immerses the reader in a sea of administrative regulations, throwing him only an occasional helpful generalization. A specimen of the latter is the statement on page 118 regarding the German use of 'blocked marks. "From the National Socialist standpoint, the fulfillment of 'national destiny' seemed more important than the fulfillment of international obligations."

Exchange control and the very complete regulation of import and export trade, the writer finds, aided the transition from peace to a war economy. He avoids a direct statement of the effect upon internal economic conditions but implies that the standard of living was lowered. "Autarchy, coupled with a policy of public works and rearmament, brought with it the 'blessing of voluntary scarcity,' namely, full employment, rather than the 'scourge of plenty,' market surfeit and idleness." In international relations he does not deny that the German policies resulted in disturbing the political and economic equilibrium, but he lifts the burden of responsibility from the shoulders of

Hitler and his advisers by repeating the observation already quoted from the Preface. In these and other remarks there seems a tendency to confuse the statement of what actually happened with its justification.

The material treated does not lend itself to easy exposition, but the author has done little to help the reader. On many pages the text appears like the mere outline of a book, in 1-2-3, (a) (b) (c) fashion. Moreover, it could have been much improved by more careful editing and proofreading.

PERCY W. BIDWELL

BONNER, J. C. and ROBERTS, L. E., editors. *Studies in Georgia history and government*. (Athens: Univ. of Georgia Press. 1940. Pp. 298. \$2.50.)

"Twelve essays in a volume published in honor of Professor John H. T. McPherson."

BORTON, H. *Japan since 1931; its political and social developments*. (New York: Inst. of Pacific Relations. 1940. Pp. xii, 149. \$1.25.)

BOUSQUET, G. H. *A French view of the Netherlands Indies*. Translated by Philip E. Lilienthal. (New York: Oxford, for Am. Council, Inst. of Pacific Relations. 1940. Pp. viii, 133. \$1.50.)

DAVIDSON, P. *Propaganda and the American revolution, 1763-1783*. (Chapel Hill: Univ. of North Carolina Press. 1941. Pp. 476. \$4.)

DICKINSON, F. G. and EAKIN, F. *The Illinois segment of the nation's economy for 1935: a bookkeeping picture*. Bur. of bus. res. bull. ser. no. 60. (Urbana, Ill.: Univ. of Illinois. 1940. Pp. 132.)

ELLIS, E. *Henry Moore Teller: defender of the West*. (Caldwell, Idaho: Caxton. 1941. Pp. 409. \$5.)

ERICKSSON, E. McK. *The Supreme Court and the New Deal*. (Los Angeles: Lymanhouse. 1941. Pp. 260. \$2.)

FAULKNER, H. U. and others. *The American way of life; a history*. (New York: Harper. 1941. Pp. 756. \$2.20.)

FONER, P. S. *Business and slavery; the New York merchants and the irrespressible conflict*. (Chapel Hill: Univ. of North Carolina Press. 1941. Pp. 365. \$4.)

"A study of the efforts made by the New York merchants to compromise the war between the North and the South."

FORTENBAUGH, R. and TARMAN, H. J. *Pennsylvania, the story of a commonwealth*. (Harrisburg, Pa.: Bd. Service. 1940. Pp. 621. \$2.24.)

FEUERLEIN, W. and HANNAN, E. *Dollars in Latin America: an old problem in a new setting*. Stud. in Am. foreign rel. no. 1. (New York: Council on Foreign Relations. 1941. Pp. vii, 102. \$1.50.)

As was to be expected of a publication issued by the Council on Foreign Relations, this, the first of a series of studies in American foreign relations, has been ably prepared. The principal task of the authors has been one of synthesis. Most of the factual material which forms the base of their study has been available in separate studies. A few volumes, like Cleona Lewis's *America's Stake in International Investments*, already covered much of the same ground, but Mr. Feuerlein and Miss Hannan have arranged their material in a more readable form, and have carried it down to the current year—which is important because of the changes brought about by the new world war, and because of the emphasis which the government of the United States is placing on hemisphere solidarity. While many of the basic facts remain unchanged, they have received new importance—and are calling for new solutions—because of changed world conditions.

Dollars in Latin America begins by summarizing the different types of

dollar investments in Latin American countries, and the national policies affecting them. It then deals at length with the history of defaults of dollar obligations and the various efforts to establish a new debtor-creditor relationship. The fate of direct investments is also discussed, together with the tendencies in different countries to place limitations on the activities of foreign capital. Finally—and necessarily only very sketchily—the book discusses some of the problems inherent in seeking to adjust local nationalist movements to the legitimate protection of foreign (*i.e.*, American) capital, and touches lightly on new investments and the development of new imports.

The principal merit of the volume is that, with a notable absence of partiality and a minimum injection of opinion, it sets before the reader a well-rounded picture of the main aspects of the problem. It is not a book for persons wishing a full analysis of American investments in particular countries, but it should be useful as a primer on the economic bases of closer hemisphere coöperation. The authors seem fully aware of what many persons in Washington and in Latin American capitals do not like to face frankly—that the settlement of outstanding defaulted debts and the protection of legitimate existing investments must be achieved if new investments, whether in the form of loans or of direct investments, are to serve as the basis of a sound long-range policy of economic coöperation. At the same time they stress the fact that the key to the whole problem is to be found in discovering new markets for the products of Latin America. Unless the Latin American nations can sell more to us, or can sell their products elsewhere in order to pay us, they will have difficulty in making payments of interest on debts, in transferring funds for payment of dividends on direct investments, and in finding the wherewithal with which to purchase more goods from the United States. Just how this can be done the authors do not dogmatically state—which is just as well, since no really sound "solution" has yet been put forward by anyone. Little would be gained by adding another to the long list of panaceas and nostrums, beginning with such absurd schemes as Assistant Secretary of State Berle's plan last summer for a super-Inter-American Trading Corporation to handle the marketing of all hemisphere products and to put into effect economic planning on a hemispherical scale. The authors seem quite aware that the logic of events makes it probably inevitable that short-term expedients will have to take precedence over long-term programs—at least until the outcome of the present world war is more clearly discernible.

NICHOLAS ROOSEVELT

FURNISS, E. S. *A new state faces a difficult world . . . the position of Turkey today.* (New Haven: Yale Literary Magazine. 1940. Pp. 83. \$1.)

GOLDMAN, E. F. *Historiography and urbanization; essays in American history in honor of W. Stull Holt.* (Baltimore: Johns Hopkins Press. 1941. Pp. 229. \$2.50.)

GORDON, M. *Workers before and after Lenin.* (New York: Dutton. 1941. Pp. 524. \$4.)

GORDON, W. C. *The expropriation of foreign owned property in Mexico; abridgement of thesis.* (New York: N. Y. Univ. Grad. School of Arts & Science. 1941. Pp. 15. 75c.)

HAFEN, L. R. and RISTER, C. C. *Western America; the exploration, settlement, and development of the region beyond the Mississippi.* (New York: Prentice-Hall. 1941. Pp. 722. \$4.65.)

- HAIGHT, F. A. *A history of French commercial policies*. Carnegie Endowment for Internat. Peace, Commercial and tariff history. (New York: Macmillan. 1941. Pp. 302. \$2.50.)
- HANKE, L. and BURGUN, M., editors. *Handbook of Latin American Studies: 1939, No. 5*. For the Committee on Latin American Stud. of the Am. Council of Learned Societies. (Cambridge: Harvard Univ. Press. 1940. Pp. xvi, 476.)
- A selective guide to the material published in 1939 on anthropology, archives, art, economics, education, folklore, geography, government, history, international relations, law, language and literature, libraries, music and philosophy.
- HERRING, H. L. *Southern industry and regional development*. (Chapel Hill: Univ. of North Carolina Press. 1940. Pp. xiii, 103. \$1.)
- HULL, C. and STRESEMANN, J. *The foreign policy of the United States: United States business in a world of controlled economy, and economic reorganization of Europe in the event of a German victory*. Internat. conciliation no. 365. (New York: Carnegie Endowment for Internat. Peace. 1940. Pp. 27. 5c.)
- JENKINS, D. R. *Growth and decline of agricultural villages*. (New York: Bur. of Pubs., Teachers Coll., Columbia Univ. 1940. Pp. v, 95. \$1.60.)
- JOHNSTONE, W. C. *The United States and Japan's new order*. (New York: Oxford Univ. Press. 1941. Pp. xii, 392. \$3.)
- JONES, A. W. *Life, liberty, and property; a story of conflict and a measurement of conflicting rights*. (Philadelphia: Lippincott. 1941. Pp. 397. \$3.50.)
- "... a survey undertaken in Akron, Ohio, with ... background material ... of the development of labor relations and class cleavage in the city."
- LATANÉ, J. H. and WAINHOUSE, D. W. *A history of American foreign policy, 1776-1940*. 2nd rev. ed. (New York: Doubleday. 1941. Pp. 1037. \$6.)
- LEWIS, M. G. *What plight the farmer? A study of agricultural economics, 1933-1940*. (Cornelia, Ga.: Farm Furrows. 1940. Pp. 33. 25c.)
- LOWER, A. R. M. *Canada and the Far East—1940*. I. P. R. inquiry ser. (New York: Inst. of Pacific Relations. 1940. Pp. ix, 152. \$1.25.)
- MACIVER, R. M. and others. *The roots of totalitarianism*. James-Patten-Rowe pamph. ser., no. 9. (Philadelphia: Am. Acad. of Pol. & Soc. Sci. 1940. Pp. 31. 25c.)
- MANSERGH, N. *Ireland in the age of reform and revolution; a commentary on Anglo-Irish relations and on political forces in Ireland, 1840-1921*. (New York: Macmillan. 1941. Pp. 272. \$2.50.)
- MENDIETA Y NUÑEZ, L. and others. *Los Tarascos; monografía histórica, etnográfica y económica*. (México: Imprenta Universitaria. 1940. Pp. lxxiii, 311.)
- MILLER, W. *Greece and the Greeks; a survey of Greek civilization*. (New York: Macmillan. 1941. Pp. 522. \$3.)
- "A survey for secondary schools."
- MITCHELL, L. S., BOWMAN, E., and PHELPS, M., *My country 'tis of thee, the use and abuse of natural resources*. (New York: Macmillan. 1940. Pp. xv, 335. \$3.50.)

The main theme of this stimulating and valuable study of three basic national resources of the United States—soil, coal, and petroleum—is this: private profit-seeking business enterprise has proved incapable of adequately safeguarding and husbanding natural resources and increased government controls and other institutional adjustments are necessary to assure reforms. Believing that such reforms can succeed in a democracy only if backed by public opinion, the authors speak to a vast audience, in fact to all those "not too

young to think and not too old to feel," and deliberately mix emotional appeal with historical analysis and objective reporting, yes, even poetry with statistics. A bold experiment, no doubt, but worth trying! The book reflects not only the ability and competence of the writers, their training, knowledge and skill of presentation but also the patient effort devoted to its preparation.

The outline is quite simple. Each resource is treated in three chapters arranged as follows: (1) a dramatic account of the present state of affairs, good and bad; (2) an historico-institutional analysis of the causes responsible for this state of affairs; (3) a geological case-history leading up to the present situation as regards reserves, rate of use and abuse, etc. The treatment is definitely focused on the human values and interests involved. These three case studies converge in the last chapter upon a general philosophy and program of resource use. The controversial issues in which the problem abounds are faced with courage—a courage which springs from an abiding faith in American democracy.

ERICH W. ZIMMERMANN

O'CONNOR, H. *The Astors*. (New York: Knopf, 1941. Pp. viii, 488. \$3.75.)
 PARKES, H. B. *Recent America; a history of the United States since 1900*. (New York: Crowell, 1941. Pp. viii, 664. \$4.50.)

Despite its subtitle, *A History of the United States Since 1900*, this book devotes nearly one-third of its six hundred odd pages to an introductory section on the last three decades of the nineteenth century. This long introduction is well worth the space taken, for it provides an unusually clear summary of American development from the Civil War to 1900.

The main part of the book is divided into four sections entitled respectively: The Progressive Era, The World War, The Twenties, and The Thirties. Emphasis is divided between political and economic aspects of our history. American foreign policy is given much attention throughout. Cultural history is treated more briefly. The chapters on economic history, especially those in the introduction and those covering the last two decades, are models of clear, well-balanced, and well-informed treatment in brief compass. The analyses of recent industrial and agricultural problems are on the whole better than can be found in most purely economic histories.

The author suggests that twentieth century America has been confronted with five great problems, namely, "economic insecurity, economic inequality, the waste of natural resources, international rivalries and wars, and the clash of values and traditions among different sections of the American people" (p. 626). The history of the last forty years is largely the account of our attempt to deal with these problems. Despite some promising efforts toward solution, the maladjustments not only remain but have become more serious. But, like Louis Hacker in his recently published *The Triumph of American Capitalism*, the author ends on a note of optimism, a declaration of faith in the ability of the American people to solve these problems and at the same time retain their democratic institutions.

The whole book is written in a lucid and forthright style. The bibliographic references accompanying each chapter, as well as the statistical appendix, add appreciably to the usefulness of the book.

GEORGE R. TAYLOR

PLATT, R. R., WRIGHT, J. K., WEAVER, J. C. and FAIRCHILD, J. E. *The European possessions in the Caribbean area*. (New York: Am. Geographical Society. 1941. Pp. vii, 112.)

A compilation of facts concerning their population, physical geography, resources, industries, trade, government, and strategic importance.

ROBBINS, G. W. and TILTON, L. D., editors. *Los Angeles; preface to a master plan*. Pub. xix of Pac. Southwest Acad. (Los Angeles: Ward Ritchie. 1941. Pp. xvi, 303. \$3.; \$2., paper.)

A critical and interpretive study of Los Angeles. Such problems as land use, housing, zoning, industrial growth, business decentralization, traffic and transportation are discussed by twenty-one authors. The book contains 80 photographs, 14 charts and maps, and 25 tables.

ROSS, M. *A history of Soviet foreign policy*. (New York: Workers Lib. Pub. 1941. Pp. 79. 15c.)

SCHLESINGER, A. M. *Political and social growth of the American people, 1865-1940*. 3rd ed. (New York: Macmillan. 1941. Pp. 804. \$3.25.)

SHUMAN, F. L. *Night over Europe; the diplomacy of Nemesis, 1939-1940*. (New York: Knopf. 1941. Pp. 634 \$3.50.)

SMITH, R. S. *The Spanish guild merchant: a history of the consulado, 1250-1700*. (Durham: Duke Univ. Press. 1940. Pp. xii, 167. \$2.50.)

This study should be widely accepted as indispensable background for the understanding of the so-called "merchant guild" of Seville (*Consulado or Universidad de los Cargadores a las Indias, 1543*). Back of this monopoly of trade with America lay similar foreign trade concessions to Burgos (1494) and to Bilbao (1511), both attempts to regulate wool exports and in that sense growths from the older Mesta. Still further back lay the medieval Catalan-Aragonese "sea consulate," which resembled organizations in Genoa, Marseilles and elsewhere in the western Mediterranean.

The development of the Spanish *consulados de mar* from maritime and mercantile associations is traced with lucidity and impressive brevity from a mass of original materials. Thus is bridged the transition period between the mercantile greatness of Mediterranean Spain in late medieval times and Castile-dominated Spain as a world power in early modern times. The specialist will get more than illuminating synthesis from the book, and the non-specialist will find it most informing and easy to read.

A secondary aim of the study is not so impressively attained. Taking a loose definition of merchant guilds framed by Doren long ago, the author tries to find a common pattern for assorted Mediterranean and Transalpine commercial bodies. After all, the differences in geographic environment, in social institutions and in phases of development as of common periods were not all minor ones. One may even regret that a basically research effort turned so far aside into a field of synthesis where the likenesses are obvious and the unlikenesses important.

M. M. KNIGHT

STAMP, D. L. *Introduction to commercial geography*. (New York: Longmans Green. 1940. Pp. 247. \$1.20.)

TAYLOR, G. E. *The struggle for North China*. I. P. R. inquiry ser. (New York: Inst. of Pacific Relations. 1940. Pp. xiv, 250. \$2.)

THOMAS, D. S. *Social and economic aspects of Swedish movements, 1750-1933*.

Inst. for Soc. Sci., Stockholm Univ. and Inst. of Human Rel., Yale Univ. (New York: Macmillan. 1941. Pp. 510. \$6.)

"This is the first volume in a series concerned with the interrelationships of social and economic factors and population development in Sweden. Thoroughly documented with charts and tables."

VAN DER SLICE, A. *International labor, diplomacy, and peace, 1914-1919.* (Philadelphia: Univ. of Pennsylvania Press. 1941. Pp. xi, 408. \$4.)

WALKER, E. *History of South Africa.* 2nd ed. (New York: Longmans Green. 1940. Pp. 710. \$5.40.)

WALKER, R. A. *The planning function in urban government.* Soc. sci. stud. no. 39. (Chicago: Univ. of Chicago Press. 1941. Pp. 397. \$3.)

WEBB, B. P. *My apprenticeship.* 2 vol. (New York: Penguin Books. 1941. Pp. 503. 25c each vol.)

WHITBECK, R. H. and FINCH, V. C. *Economic geography; a regional survey.* 4th ed. (New York: McGraw-Hill. 1941. Pp. xii, 647. \$3.50.)

"In the present revision greater stress has been placed upon regional contrasts."

WILGUS, A. C. *The development of Hispanic America.* (New York: Farrar and Rinehart. 1941. Pp. xviii, 941. \$4.75.)

"A history of the twenty countries of Hispanic America from the end of the 15th century to the present."

WILSON, C. M. *Central America, challenge and opportunity.* (New York: Holt. 1941. Pp. 303. \$3.)

"A survey of the nations of the Caribbean basin, the six Central American republics, Colombia, in South America, and Cuba and Jamaica in the Caribbean Sea, giving an historical background for each country and discussing the commerce, politics and particularly the agriculture of each."

Administrative procedure in government agencies, report of the committee on administrative procedure, appointed by the Attorney General, at the request of the President, to investigate the need for procedural reform in various administrative tribunals and to suggest improvements therein. (Washington: Supt. Docs. 1941. Pp. 474. 50c.)

Advertising by the states. (Chicago: Council of State Governments. 1940. Pp. 31. \$1.)

Communities and neighborhoods in land use planning. County planning ser. no. 6. (Washington: Supt. Docs. 1940. Pp. 7.)

The heavy industry of Manchoukuo; present conditions of the exploitation of natural resources in Manchoukuo. E. Asia econ. intelligence ser. no. 3. (S. Pasadena, Calif.: P. D. and Ione Perkins. 1940. Pp. 91. 40c.)

An inquiry into national income of Japan, by the research division of the Japan Economic Federation. E. Asia economic intelligence ser. no. 1. (S. Pasadena, Calif.: P. D. and Ione Perkins. 1940. Pp. 126. 80c.)

Men and resources; a study of economic opportunity in the Pacific Northwest. (Portland, Ore.: Northwest Regional Council. 1941. Pp. 81. 75c.)

Problems of the Pacific, 1939: proceedings of the study meeting of the Institute of Pacific Relations, Virginia Beach, Virginia, November 18-December 2, 1939. Edited by KATE MITCHELL and W. L. HOLLAND. (New York: Institute of Pacific Relations. 1940. Pp. viii, 299. \$3.50.)

The economic, political and military positions of Japan and China are reviewed in this volume. A good account of the effects of war and of the developments of recent years upon Chinese unification is combined with a

statement of the problems which any program for reconstruction in China will have to face (pp. 11-14, 49-61). A succinct analysis of the trends of Japan's politico-economic development and of the dilemmas of her position is also given. Economic factors are given careful consideration from the stand-points both of wartime economy and peacetime needs and expectations (pp. 14-18, 40-45). A summary of conditions in the occupied areas completes the picture.

Taken together with appended Documents I, II, and III, the chapter on "Third Parties in the Far Eastern Conflict" presents the international setting in which action by other powers might well decide the outcome of the conflict and the character of the peace settlement. Supplementary Document III by Baron F. M. van Asbeck on the "Foreign Relations of the Netherlands Indies" is of special interest.

The most suggestive and valuable part of the book is chapter IV on "Possibilities of Adjustment in the Far East," which looks forward to the essentials of durable peace. Alternative methods of approaching the achievement of such a peace are reviewed. Probable results, both political and economic, of a Japanese or of a Chinese victory are extensively considered. The study of "The Future of Foreign Investment in China" by W. Y. Lin, presented as Document II, should be read in connection with this chapter.

ARTHUR G. COONS

Studies in British History. Stud. in the Soc. Sci., vol. xi, no. 2. (Iowa City: University of Iowa. 1941. Pp. 231. \$1.)

Contains papers on "The literary history of English field sports, 1671-1850," by Chester Kirby; "The cultural significance of the early English industrial town," by Ralph Turner; "Trade and depression in late nineteenth century England," by Arthur G. Umscheid; "A colonial interregnum," by Leonidas Dodson; "Edward Dummer and his West India packets," by James Hamilton St. John; "Bishop Langton's mission for Edward I," by G. P. Cuttino; "A comparison of the colonial systems of England and Spain," by C. E. Marshall; "Beust's appointment as Austrian foreign minister: an episode in German history," by Gordon W. Prange.

Urban planning and land policies: Vol. II of the supplementary report of the urbanism committee to the Nat. Resources Committee. (Washington: Supt. Docs. 1939. Pp. v, 366. \$1.)

Agriculture, Mining, Forestry, and Fisheries

Land Tenure Policies at Home and Abroad. By HENRY W. SPIEGEL. (Chapel Hill: Univ. of North Carolina Press. 1941. Pp. xii, 171. \$3.00.)

Up to the first World War, and even shortly thereafter, the concept of land tenure was almost identical with the narrowest definition of farm tenancy. Even in the discussion of farm tenancy the main concern of students in this field was how certain undesirable traits and shifts could be adjusted.

The powerful and steady movement toward expansion of the public domain has inevitably led away from the interest in certain symptoms and

strictly applied social pathology of farm tenancy. Policies of enlarged national and state forests, expansion of hydro-electric power, improved water supplies for cities, amelioration of flood control and river regulation have all led to more intelligent studies of the land rights of individuals and the public. Finally, the wholesale attack upon soil erosion by the subsidized soil conservation policy under the AAA, and certain social relief policies focussing rural poverty, have added momentum to the broader interest in institutional agricultural policy. From the earlier search for palliatives one turned to research in quest of an understanding of the complex structure of property in land.

Dr. Spiegel's book is a timely and up-to-date expression of the present frontier in this evolution of American thought on the intriguing subject of the institutions that give man possession and control of land, partly or wholly.

The author, a doctor of jurisprudence of Heidelberg and a graduate in economics of the University of Wisconsin, at home in law as well as agricultural economics, has written a legal and economic treatise on the subject of land tenure policy, the first of its kind in recent years. The subject is bewildering in its scope and in the wide ramifications of even the smallest changes in basic institutions. It reaches far into the philosophy of what constitutes the most desirable forms of living and working for people within a given society; hence it leads into the political philosophy of the state, into constitutional and private law, and into political, economic, and social policy.

In an unassuming, clear and straightforward style, the volume treats in selected and more or less independent chapters the objectives of land tenure policy, public control of land, legal background, land inheritance, tenure of forest land, collective action, farm credit and farm tenancy policy. In parts V and VI the author gives a most useful condensed survey of programs of action in land tenure policy in England and Germany as two outstanding examples of such policies in both a democracy and a totalitarian state.

The special merit of the book lies in the author's familiarity with the relevant American and German literature, his equally competent treatment of the subject from the viewpoint of law and political economy, and his alertness to the very latest trend of American thought concerning land tenure. The book deserves much praise for the sound and levelheaded judgment underlying the presentation of the controversial policies. Occasionally this quality allows the author to excel in a subtle kind of satire when he treats the Teutonic brainstorms of certain Nazi bigwigs and their racial nonsense without any comments—simply quoting them seriously with the same dry, detached objectivity prevailing throughout.

Only twice does it seem that Mr. Spiegel's sound skepticism was not

fully alert. He speaks about Sherwood Eddy's Delta Coöperative Farm as an enterprise whose ". . . membership consists of an elite of farmers who proved their biological and mental fitness and who probably are above the average" (p. 39). In this and the other statements concerning this dilettante's experiment in collective—not coöperative—farming, which the reviewer has visited, the author fell victim to the ballyhoo drummed and preached over the country by well-meant but unwarranted propaganda. On another occasion he identifies farm tenancy with sharecropping: ". . . tenancy . . . as an institution . . . fulfilled the function of the abolished slavery system in the South where the political emancipation did not imply economic freedom . . ." (p. 63), although elsewhere (p. 16) he states that tenancy presupposes exclusive possession. Such instances, however, constitute very few and insignificant flaws. On the whole, the book is a significant contribution and "must" reading for all students of land economics.

KARL BRANDT

Stanford University

NEW BOOKS

- ALLISON, J. H. and CUNNINGHAM, R. N. *Timber farming in the Cloquet District*. Bull. 343. (Minneapolis: Univ. of Minnesota Agric. Exp. Sta. 1939. Pp. 35.)
- DOWELL, A. A. and BJORKA, K. *Livestock marketing*. (New York: McGraw-Hill. 1941. Pp. x, 534. \$4.)
- ENGINE, S. A. and POND, G. A. *Agricultural production and types of farming in Minnesota*. Bull. 347. (Minneapolis: Univ. of Minnesota Agric. Exp. Sta. 1940. Pp. 71.)
- FARNSWORTH, H. C. and JENSEN, B. M. *World wheat survey and outlook, January, 1941*. Wheat stud., vol. xvii, no. 5. (Stanford University, Calif.: Food Research Inst. 1941. Pp. 40. 75c.)
- JESNESS, O. B. *War and the farmer*. Ext. bull. 219. (Minneapolis: Univ. of Minnesota Agric. Ext. Serv. 1940. Pp. 15.)
- GAUS, J. M. and WOLCOTT, L. O. *Public administration and the United States Department of Agriculture*. (Chicago: Public Admin. Serv. for the Committee on Public Admin. of the Soc. Sci. Res. Council. 1940. Pp. x, 534. \$4.50.)

No amount of speculation about the relative merits of private and public management of economic affairs will ever be a substitute for experience in these matters. Economic literature is replete with studies about private entrepreneurship, and especially, in relation to agriculture, in studies done at the farm management level. Practically nothing, however, is available showing how public housekeeping works in practice. The present book enters this field.

The Gaus-Wolcott study is an inquiry into the growth and operation of the United States Department of Agriculture, one of the largest agencies of government in the world. On the one hand, the Department of Agriculture is closely associated with many interest groups representing farmers, consumers and marketing and processing agencies, and on the other, it brings together science and government. The Department has evolved an intricate system of collaboration with state and local agencies. The procedures growing out of this collaboration are among the most successful in our federal system.

In recent years, the Department of Agriculture has been made responsible for a number of action programs in agriculture which enter substantially into the management of the economic affairs of farmers. Because of the increasingly significant rôle which the Department has come to play, this book is especially timely and worth while. It is to the credit of the Committee on Public Administration of the Social Science Research Council that they saw the need of this study and were willing to sponsor it.

Professors Gaus and Wolcott have turned in an exceedingly useful report of their inquiry. It gives a comprehensive picture of the origin of the Department, its growth and variety of activities, including policies and repeated efforts at integration. On the substantive side, the report focuses on production, land use, marketing and distribution, rural life, credit, and the line agencies, which include the recently launched action programs. The report examines the functioning of the Department as a problem in public administration, and it makes available in a well-organized and carefully-integrated form a tremendous amount of material and data about the experiences of the Department. Among the several appendices is one on the budgetary administration prepared by Verne B. Lewis.

Those individuals who have been closely identified with the Department of Agriculture and its development in recent years may complain that the book does not give them much new knowledge. This observation is likely to be forthcoming from some agricultural economists. Nevertheless, most of these persons do not know the historical sequences through which the Department's policies evolved and how the need for reorganization and integration arose repeatedly. Those who are somewhat farther removed from the affairs of agriculture will find the book basic to any appraisal of the Department of Agriculture they may wish to make.

It is always easy to ask for more and this is also the case here. The reviewer can not help wishing that Professors Gaus and Wolcott had given, out of their rich experiences as students of government and out of their first-hand knowledge of the affairs of the Department, more space to a critical appraisal of how it does its many jobs—evaluations which would suggest the nature of the reorientation, both in organization and in programs which appear to be needed. One feels that the book stops a few steps short of having completed this task. There is no long look ahead, pointing the way, although the horizon is clouded with risk and uncertainty. What does all this Department of Agriculture experience mean to us for the future? I doubt if this is asking too much. Perhaps the authors will make available in some major articles or in a pamphlet their appraisal and their recommendations. There are many of us who would want to learn from them.

T. W. SCHULTZ

GLASSCOCK, C. B. *Then came oil; the story of the last frontier.* (New York: Grosset. 1938. Pp. 349. \$1.)

KLEMME, M. *An American grazier goes abroad.* (Salt Lake City: Deseret News Press. 1940. Pp. 352. \$2.50.)

What is being done in the various foreign countries along the lines of live-stock breeding, range management, forestry and general agriculture, as observed by a traveler.

KOLLER, E. F. and JESNESS, O. B. *Trends in the Minnesota dairy industry.* Bull. 346. (Minneapolis: Univ. of Minnesota Agric. Exp. Sta. 1940. Pp. 40.)

- KYLE, E. J. and ALEXANDER, E. R. *Agriculture in the Southwest*. (New York: Scribner. 1940. Pp. 492. \$1.42.)
- LEWIS, R. S. *Elements of mining*. 2nd ed. (New York: Wiley. 1941. Pp. 588. \$5.50.)
- MASON, A. T. *Bureaucracy convicts itself; the Ballinger-Pinchot controversy of 1910*. (New York: Viking. 1941. Pp. 224. \$2.50.)
- MERSEREAU, S. F. *Materials of industry; their distribution and production*. Rev. and enl. (New York: McGraw-Hill. 1941. Pp. 602. \$2.)
- NORTON, L. J. *Financing agriculture*. Rev. ed. (Danville, Ill.: The Interstate. 1940. Pp. 385. \$2.75.)
- RAPER, A. F. and REID, I. DE A. *Sharecroppers all*. (Chapel Hill: Univ. of North Carolina Press. 1941. Pp. x, 281. \$3.)

The term "sharecroppers" as used in this book does not have its traditional meaning. The real meaning of the term is found in such matters as "low wages, insecurity, and lack of opportunity for self-direction and responsible participation in community affairs" (p. vi). Moreover, sharecroppers are found everywhere in the nation, instead of being limited to the South, the only region where the Census reports their presence. Although sharecroppers are found everywhere, the episodes used to describe and dramatize grim phases of human existence and "to convey the meaning of a mass of statistics" are confined to the southern region. In addition to its own particular difficulties, the South shares with the rest of the nation mounting debts and mergers, bigger and better machines, dwindling work opportunities, government subsidy and control, public relief, and increased taxes (p. vii). The political ineffectiveness of the region in the national Congress for the past several decades is shown by the ease with which it has been victimized by tariffs and "colonial" status. The tin roof on the cotton tenant's cabin epitomizes the southerners' place in the nation, and while the raw material used in manufacture may have been crudely processed in Birmingham, southern industry and labor receive only a small part of the sale price. Interest on borrowed capital and dividends paid to persons living outside of the region are referred to as a tribute and used to show the colonial status of the South. In response to current conditions, southern people are said to be adjusting themselves downward.

The authors recognize the shortcomings of the low income group in the dramatized description, but when the tenant does not fill with rocks the hole which is undermining the corner of his house, they place the blame upon the economic and social system. Although the authors are native southerners, their book leaves the uninformed reader with an unbalanced picture of southern economic and social progress, as compared with the rest of the nation. A well-kept farm and farm home or an individual with a satisfied if not contented facial appearance would be quite out of place among the numerous illustrations. Nevertheless, the book is worth reading. It emphasizes the problems associated with poverty; with failure to take advantage of educational and economic opportunities; and with lack of thrift, skill, foresight, and industry on the part of a numerically and socially important element in the population, both black and white. These are problems which a rapidly increasing number of efficient citizens of the South are working hard to alleviate.

The titles given to the four parts of *Sharecroppers All* are suggestive of the thesis. They are "Rich Land—Poor Man," "The Negro Gets Pinched," "The White Man Bows," and "Everybody Pays." In the concluding chapter, entitled "Whither the South," it is said that "the representative of the new

South knows that the region is handicapped less by the sharecroppers than by the heritage of the plantation system, less by outside opposition than by inside complacency, less by the presence of the Negro than by the white man's attitude toward him, less by the spectre of class uprisings and Negro domination than by the fear of them. . . . But the South is not defeated yet, for she is beginning to understand the nature and extent of her difficulties. . . . By integrating national and community efforts she may be able to pay the bills of yesterday's exploitation of land and man, may be able to conserve and use her natural resources and so restore the region to its rightful place in the nation."

BUEFORD M. GILE

RAUP, H. M. and CARLSON, R. E. *The history of land use in the Harvard forest*. Harvard forest bull. no. 20. (Petersham, Mass.: Harvard Forest. 1941. Pp. 64. 65c.)

SALLEE, G. A., POND, G. A. and CRICKMAN, C. W. *Farm organization for beef cattle production in southwestern Minnesota*. Technical bull. 138. (Minneapolis: Univ. of Minnesota Agric. Exp. Sta. 1939. Pp. 80.)

SCHMIDT, C. T. *American farmers in the world crisis*. (New York: Oxford. 1941. Pp. 356. \$3.)

"A study of the economic problems of American farmers, an evaluation of what the government has done to help them, and a look at the farmers' future and long-run trends of our agriculture."

SHUMAN, R. B. *The petroleum industry—an economic survey*. (Norman, Okla.: Univ. of Oklahoma Press. 1940. Pp. xiv, 297. \$3.)

Professor Shuman's book is a useful addition to the general literature of the oil business, although it cannot classify as a contribution to the knowledge or understanding of those already active in the industry. Recent Congressional hearings and governmental investigations have been freely drawn upon for material, emphasizing the current character and scope of the survey. Although the treatment is somewhat deficient in depth and in places carries unsound inflections and shadings of meaning, its scholarship is reasonably sound, balancing cynicism against business practicalities.

The breadth of coverage and the large number of statistical tables brought together in one place make up for the lack of exhaustive or intensive treatment of the problems of the industry. Professor Shuman discusses the character of the industry, demand for petroleum, development and production of oil, refining and manufacturing, transportation and storage, marketing of products, financial policies and investment considerations, taxation of the industry and its products, personnel management and labor relations, international trade in oil, the natural gas industry, and conservation and control in the field of petroleum. In trying to be impartial on controversial issues the author has included the muddled thinking on both sides of the questions, and without independent and incisive analysis this cannot but confuse the general reader. Another flaw is the use of secondary sources of information when primary ones must be sought by the reader who wishes to bring figures up to date.

The book is written in readable style but contributes little toward the solution of the major issues before the industry today. It will appeal to students of business administration and others requiring a broad perspective without technical detail or the necessity for penetrating analysis; and in this sense it fills a gap in the literature of the industry.

JOSEPH E. POGUE

STRAUSS, F. and BEAN, L. H. *Gross farm income and indices of farm production and prices in the United States, 1869-1937*. Technical bull. no. 703. (Washington: U. S. Dept. of Agric. 1940. Pp. 158. 20c.)

TROUP, R. S. *Colonial forest administration*. (New York: Oxford. 1941. Pp. 478. \$9.)

TRUMAN, D. B. *Administrative decentralization*. Stud. in pub. admin., vol. 12. (Chicago: Univ. of Chicago Press. 1940. Pp. 228. \$2.50.)

"A study of the Chicago field offices of the United States Department of Agriculture."

WAITE, C. W. and COX, R. W. *A study of the consumption of fats and oils in Minneapolis, 1938*. Bull. 344. (Minneapolis: Univ. of Minnesota Agric. Exp. Sta. 1939. Pp. 20.)

WELTI, F. *Probleme der Schweizerischen Weinwirtschaft*. (Zürich: Schulthess. 1940. Pp. 209. Fr. 5.50.)

WICKIZER, V. D. *Rice and wheat in world agriculture and consumption*. Wheat stud., vol. xvii, no. 6. (Stanford University, Calif.: Food Research Inst. 1941. Pp. 53. \$1.)

Administrative official in charge of surplus removal and marketing agreement programs, 1940: annual report. (Washington: Supt. Docs. 1941. Pp. 83. 15c.)

Administrator of the Farm Security Administration, 1940: annual report. (Washington: Supt. Docs. 1941. Pp. 25. 5c.)

Agricultural statistics, 1940. U. S. Dept. of Agric. (Washington: Supt. Docs. 1940. Pp. 737. 75c.)

This volume presents information formerly published (until 1935) in the statistical section of the Yearbook of Agriculture.

Alaskan fisheries: hearings, 76th Cong., 3rd sess., pursuant to authority of H. Res. 162, authorizing a study of the fisheries of Alaska. Part 4, January 10-11 and February 1, 1940. (Washington: House Merchant Marine and Fisheries Committee. 1940. Pp. 1011-1136. 15c.)

Chief of the bureau of agricultural economics, 1940: annual report. (Washington: Supt. Docs. 1941. Pp. 100. 15c.)

Chief of the forest service, 1940: annual report. (Washington: Supt. Docs. Pp. 42. 10c.)

Director of finance, agriculture department, 1940: annual report. (Washington: Supt. Docs. Pp. 32. 5c.)

Farmers in a changing world: the yearbook of agriculture, 1940. (Washington: Supt. Docs. 1940. Pp. xii, 1215. \$1.50.)

Forest products statistics of central and prairie states. Statistical bull. no. 73, U. S. Dept. of Agric. (Washington: Supt. Docs. 1941. Pp. 94. 15c.)

Forestry on private timberlands; a pictorial record of what some private timberland owners in the United States are doing to keep their forest lands productive. U. S. Dept. of Agric. misc. pub. no. 381. (Washington: Supt. Docs. 1940. 10c.)

Moratorium on farm mortgages: opinions of the Supreme Court of the United States in certain cases involving the constitutionality of and proceedings under section 75, subsection (S), of the Bankruptcy Act, as amended. 76th Cong., 3rd sess. (Washington: Supt. Docs. 1940. Pp. 47. 10c.)

Price trends as related to agriculture in Iowa. Bull. no. 92.2. (Des Moines: Iowa Dept. of Agric. 1941. Pp. 110.)

Real estate appraising; farm land division, sec. 1-27. (Kansas City, Mo.: Weaver Real Estate Appraisal Training Serv. 1941. Pp. 408.)

- Reglamentacion de la compra-venta de granos a fijar precio.* Pub. no. 47. (Buenos Aires: Comision Nacional de Granos y Elevadores. 1941. Pp. 128.)
- The reply to Mexico.* (New York: Standard Oil Co. 1940. Pp. 126.)
- Sixteenth census of United States, 1940: agriculture, first series, uses of land, principal crops and classes of live-stock, with statistics for counties. Delaware and District of Columbia; Maryland; Michigan; Rhode Island; Vermont.* (Washington: U. S. Census Bur. 1941. Pp. 17, 25, 59, 16, 22. 10c each vol.)
- The Wartime Outlook for Agriculture.* (New York: Nat. Industrial Conf. Board. 1941. Pp. 28.)

Manufacturing Industries

NEW BOOKS

- BARRETT, R. P. *The organization of the motion picture industry.* Univ. microfilms no. 153. (Ann Arbor: Univ. of Michigan Microfilms. 1940. Pp. 153. \$1.91.)
- COLE, A. H. and WILLIAMSON, H. F. *The American carpet manufacture; a history and analysis.* Harvard econ. stud. no. 70. (Cambridge: Harvard Univ. Press. 1941. Pp. xiv, 281. \$3.50.)
- The authors have traced the rise of factory production prior to the development of power machinery, the later tendency toward large-scale operations, the decrease in the number of producing units, and the trend toward domination of the industry by a handful of large, typically consolidated enterprises. The final chapter, "The Nature of Competition," is an interesting addition to the literature of price policies.
- ELLIS, D. M., compiler. *Uses for cotton—selected references in the English language, 1933-July 1940.* Agric. econ. bibliog. no. 91. (Washington: U. S. Dept. of Agric. 1941. Pp. 136, mimeographed.)
- FINNEY, B. *Arsenal of democracy—how industry builds our defense.* (New York: McGraw-Hill. 1941. Pp. x, 284. \$2.50.)
- GUTHRIE, J. A. *The newsprint paper industry: an economic analysis.* Harvard econ. stud. no. 68. (Cambridge: Harvard Univ. Press. 1941. Pp. xxiii, 274. \$3.50.)

This volume, No. 68 of the Harvard Economic Studies, represents a useful addition to the growing list of industrial monographs. It first describes the location, technology, and financial and market organization of the newsprint industry, its price policies, the demand for its product, and its relations with political authority. Then, based on a detailed examination of cost differentials, it analyzes the interregional competition among five major producing areas. A final chapter investigates the potentialities of two relatively unexploited sources of pulpwood: Alaska and the Southern States.

Although Professor Guthrie strives to piece together all discoverable fragments of information, recent and comparable data apparently are not always available. For example, the reference dates of different tables range from 1922 to 1937; an essential table comparing total costs among producing regions is dated 1928; data are frequently grouped into dissimilar classes; and many cost data are subject to unexplained allocations within a joint-cost industry. Hence the quantitative materials employed render it difficult for the author to phrase his conclusions definitively and in the present tense. By the same token, the reader can accept the evidence presented only if he is willing to assume relatively unchanged conditions over the past two decades.

Despite this difficulty, a careful reading of this volume will well repay the student of industry. Not only does it constitute a mine of new information, but also it represents a distinct contribution to the fields of interregional competition and location theory by virtue of its realistic treatment of differences and interrelations among Canadian and American newsprint producers. The author is particularly to be commended for his attempt to transcend political boundaries in his analysis, and for his stimulating description of sporadic market instabilities attributable to incompletely maintained price leadership.

RICHARD GLENN GETTELL

- HOSKINO, S. *The canning industry of Japan*. E. Asia econ. intelligence ser., no. 5. (S. Pasadena, Calif.: P. D. and Ione Perkins. 1940. Pp. 30. 30c.)
- HUNZIKER, O. F. *The butter industry; prepared for factory, school and laboratory*, 3rd ed., enl. (La Grange, Ill.: Author, 103 Seventh Ave., 1940. Pp. 779. \$6.50.)
- NOBLE, H. J. *History of the cast iron pressure pipe industry in the United States of America*. Newcomer address. (Birmingham, Ala.: Author, c/o Am. Cast Iron Pipe Co. 1940. Pp. 92.)
- SATTERLEE, L. DE F. and GLUCKMAN, A. *American gun makers*. (Buffalo: O. Ulbrich Co. 1940. Pp. 186. \$4.)
- STEWART, M. S. *America's factories, 1899-1937*. Pub. affairs pamph. no. 55. (New York: Pub. Affairs Committee. 1941. Pp. 31. 10c.)
- Chief of the food and drug administration, 1940: annual report*. (Washington: Supt. Docs. 1940. Pp. 30. 5c.)
- Public law No. 4. Act (H. Res. 1437) (77th Cong., 1st sess.): authorizing appropriations for additional shipbuilding and ordnance manufacturing facilities and equipment for the United States Navy, and for other purposes (for national defense)*. (Washington: Supt. Docs. 1941. 5c.)
- Commonwealth of Massachusetts: statistics of manufactures in Massachusetts, 1920-1938*. Pub. doc. no. 36. (Boston: Dept. of Labor and Industries. 1940. Pp. 132.)

Transportation and Communication

Transportation and Politics: A Study of Long-and-Short-Haul Policies of Congress and the Interstate Commerce Commission. By CALVIN CRUMBAKER. University of Oregon Monographs. Studies in Economics, No. 1, 1940. (Eugene, Ore.: Univ. of Oregon. Pp. v, 169. \$1.25.)

The first half of this monograph consists of a review of the statutory development of the long-and-short-haul section of the Interstate Commerce act and an analysis of the leading cases in which it has been interpreted by the Interstate Commerce Commission and the Supreme Court. The treatment of these topics is not so comprehensive as that in Dewey's, "The Long-and-Short-Haul Principle of Rate Regulation," but it is adequate in view of the more restricted scope of the present study. The second half of the monograph contains a detailed review and criticism of the Commission's

policies in the transcontinental long-and-short-haul cases and a discussion of the political pressures brought to bear upon Congress and the Commission in connection with these decisions.

The author attempts to establish two main theses. The first is that, contrary to the usual interpretation, the Alabama Midland case did not nullify the long-and-short-haul clause. Professor Crumbaker points out that the decision did not change the legal definition of unjust and undue prejudice and discrimination or the power of the Commission to remove unlawful discrimination, and that the only effect of the decision was to enable the carriers to initiate rates violating the prohibition of the fourth section without securing prior approval of the Commission. He grants that the Commission's efforts to remove fourth section discriminations after the Alabama Midland case were unsuccessful, but contends that they failed because of the weakness of the procedural sections of the law. Therefore the amendment of 1906, which gave binding force to the Commission's orders, would have enabled the Commission to cope with existing fourth section discriminations. He holds that the 1910 amendment, which is generally regarded as restoring the effectiveness of the fourth section, was useful chiefly in providing for prior approval by the Commission of new applications for fourth section relief, and that it permitted the Commission to "assume legislative functions and treat Section 4 as its authorization to deny or permit relief upon its idea of what will best serve public policy" (p. 28).

This last comment suggests the author's second main thesis, which is that the 1922 and the 1926 decisions of the Commission in the Intermountain Rate cases represent a usurpation of legislative power by that body. He argues that this is demonstrated by the inconsistency of these decisions with others involving identical problems and by the consideration given to the competitive position of the intercoastal steamship lines and to the vested interests of various localities and shippers in the existing rate structure. This contention deserves more discussion than space permits but the reviewer would remark that, by reason of the cost conditions prevailing in railway transportation, there is no completely objective basis for determining the relationships among individual rates, and that actually, if not admittedly, the Commission cannot resolve such problems by merely invoking "transportation conditions" and without considering the effects of the adjustment upon the interested parties. The regulation of the railway rate structure cannot but call for economic statesmanship.

ROBERT W. HARBESON

Rutgers University

NEW BOOKS

DAGGETT, S. *Principles of inland transportation*. 3rd ed. (New York: Harper. 1941. Pp. xxv, 906. \$4.)

This revision includes a number of topics which were casually treated in former editions or omitted entirely. Among them are pipe lines, air routes, regulation of air carriers, motor vehicle routes, railroad labor problems, finance, coördination, and national transportation policies. One of the added topics, theories of location, treats the economic significance of transportation in the location of industry. There is a brief survey of literature on the subject, most of which is neither new nor recent, and a brief description of mathematical devices used with the theories. The new material adds to the value of the book.

Certain topics—foreign railroads, street railways, World War experience with the operation of railroads, and valuation—emphasized in former editions, come in for different treatment. Some of them receive brief notice in the discussion of American problems and practices; others are almost entirely omitted. The virtual omission of valuation from discussion seems unfortunate for, no matter how chaotic the field may be, the problems out of which the theories of valuation arose have not to any great extent been solved.

The work involves a rearrangement of material. Some chapters treated separately in former editions have been consolidated. Those designed to provide a background for the study of technical problems have been moved into the fore-part of the book, while those discussing problems have wisely been moved to their logical positions in the latter portion.

On the whole this is an excellent revision of a standard work on transportation. While one may regret that materials found useful by teachers in former years have been omitted, definite limits to length must be observed. As it is, the book is voluminous, and somewhat cyclopedic in nature. It will prove useful as a reference and as a text.

CALVIN CRUMBAKER

DE WILDE, J. C. *The war and American shipping*. For. pol. rep., vol. 16, no. 2. (New York: Foreign Policy Assoc. 1940. Pp. 12. 25c.)

DILTS, M. M. *The telephone in a changing world*. (New York: Longsman Green. 1941. Pp. xiv, 219. \$2.50.)

DONOVAN, F. P. *The railroad in literature; a brief survey of railroad fiction, poetry, songs, biography, essays, travel and drama in the English language, particularly emphasizing its place in American literature*. (Boston: Railway & Locomotive Historical Society, c/o Baker Lib., Harvard Business School. 1940. Pp. 138. \$3; \$2, to members.)

HOARD, G. L. *Modernization of a transit system; factors that determine the choice of vehicle*. Engineering Exp. Sta. ser., bull. no. 100. (Seattle: Univ. of Washington. 1940. Pp. 62.)

MUHLFELD, J. E. *The railroad problem and its solution*. (New York: Devin-Adair. 1941. Pp. 305. \$3.)

TIWARI, R. D. *Railway rates policy*. (Bombay: New Book Co., 188-90 Hornby Rd., Fort. 1940. Pp. 81. Rs 2/8.)

WALDEN, CHARLES F. *Fundamentals of transportation*. 6th ed. Standard traffic management course, book 1. (New York: Traffic Pub. Co. 1940. Pp. 316. \$3.75.)

WILSON, G. L. *Air transportation and regulation*. 2nd ed., rev. and enl. (Chicago: Traffic Serv. Corp., 418 S. Market St. 1940. Pp. 70. 50c.)

———. *Traffic management, industrial and commercial*. Rev. ed. Appleton transportation ser. (New York: Appleton-Century. 1941. Pp. 476. \$3.50.)

"This edition has been revised and brought up to date with particular attention paid to changes in the law and in freight claims."

Federal Communications Commission: annual report for fiscal year ended June 30, 1940 (with notations of subsequent important developments). (Washington: Supt. Docs. 1941. Pp. 136. 20c.)

Interstate Commerce Commission, Nov. 1, 1940: 54th annual report. (Washington: Supt. Docs. 1941. Pp. 202. 75c.)

United States Maritime Commission: annual report to Congress for the period ended October 25, 1940. (Washington: Supt. Docs. 1941. Pp. 52, 10c.)

Emergency cargo ship construction: hearings, 77th Cong., 1st sess., on H. J. Res. 77, making an appropriation to the United States Maritime Commission for emergency cargo ship construction and for other purposes. (Washington: House Appropriations Committee. 1941. Pp. 25. 10c.)

———: *hearings, 77th Cong., 1st sess., on H. J. Res. 77, making an appropriation to the United States Maritime Commission for emergency cargo ship construction, and for other purposes*. (Washington: Senate Appropriations Committee. 1941. Pp. 30. 10c.)

Federal Communications Commission: rules and regulations, title 47, telecommunication, chapter 1. Part 3, rules governing standard and high-frequency broadcast stations, effective June 25, 1940 (rev. to October 5, 1940). (Washington: Federal Communications Commission. 1940. Pp. 41. 10c.)

———. *Part 10, rules governing emergency radio services, effective October 13, 1938 (rev. to Jan. 15, 1941)*. (Washington: Federal Communications Commission. 1941. Pp. 22. 5c.)

The highway, the motor vehicle and the community. (Washington: Nat. Highway Users Conf. 1941. Pp. 80.)

Highway research, 1920-1940. (Washington: Highway Res. Board, 2101 Constitution Ave. N.W. 1940. Pp. 133. \$1.)

Investigation of railroads, holding companies and affiliated companies: additional report of the Committee on Interstate Commerce pursuant to S. Res. 71 (74th Cong.), authorizing an investigation of interstate railroads and affiliates with respect to financing, reorganizations, mergers and certain other matters. Alleghany corporation, plan for reorganization and merger with the Chesapeake Corporation. (77th Cong., 1st sess.) (Washington: Supt. Docs. 1941. Pp. 55. 10c.)

Investigation of railroads, holding companies, and affiliated companies: additional report of the Committee on Interstate Commerce, pursuant to S. Res. 71 (74th Cong.), authorizing an investigation of interstate railroads and affiliates with respect to financing, reorganizations, mergers and certain other matters, railroad combination in the Eastern region. Part 5 (1930-32). (76th Cong., 3rd sess.) (Washington: Supt. Docs. 1940. Pp. 2837-4121. \$1.75.)

Middle and Upper Mississippi River, Ohio River to Minneapolis; compiled and revised to June 30, 1930, under direction of the division engineer, Upper Mississippi Valley Division, St. Louis, Mo. 2d ed. (Washington: War Dept., Corps of Engineers, U. S. Army. 1940. Pp. 345. \$1.)

Railroads and national defense in the United States—some discussions: a biblog. Bur. of railway econ. lib. (Washington: Assoc. of Am. Railroads. 1941. Pp. 62, mimeographed.)

St. Lawrence survey: Part 1, history of the St. Lawrence project. (Washington: U. S. Dept. of Commerce. 1941. Pp. 39. 10c.)

This report is the first of several which are being prepared in the Office of the Secretary of Commerce, at the request of the President. They are designed to explore the economic advantages and disadvantages of the St. Lawrence waterway and power project and its effects upon existing harbors.

Trade, Commerce, and Commercial Crises

Statistika Vneshnei Torgovli (Statistics of Foreign Trade). By S. H. BAKULIN and D. D. MISHUSTIN. (Moscow: Kon'yukturnui Institute Vneshnei Torgovli. 1940. Pp. 317. 10.00 rubles.)

This book is a textbook in courses given by the institutions of higher learning under the Commissariat of Foreign Trade. It has two main parts: (1) statistics of foreign trade of capitalist countries and (2) statistics of foreign trade of the U.S.S.R. The first part deals mostly with criticisms and limitations of statistics of foreign trade in capitalist countries. These criticisms are based upon the fundamental fact that in a bourgeois state, which is based upon private property and in which the means of production and trade are in the hands of private individuals, it is impossible to make a complete and exact survey of all trade operations. Only one method of state-wide survey is possible for a capitalist country, namely, that of customs statistics from imperfect primary sources.

Economic statistics of capitalist states, although greatly developed in recent decades, are stated to have been slow in their development because of the "anarchy of production," prevalence of private property, resistance of entrepreneurs to state interference with their "internal affairs," commercial secrets of private owners, etc. Statistics of agriculture and internal trade are in even a worse state. In this case statistics are based upon indirect indexes and valuations of private specialists, economists and others. A bourgeois country is unable to collect complete, exact, and dependable statistics for the state economy as a whole because, under conditions of private property, the control of the state over the development of this economy is very limited. The methodology of customs statistics is not scientifically developed since it is a product of the "elementary fight" of capitalist countries around foreign trade.

After a brief historical review of the development of customs statistics a detailed account is given of (1) the organization of the customs in the chief countries, (2) methods of valuation of commodities, (3) methods of collecting trade data by country, with a list of periodicals containing such data, (4) classification and nomenclature of commodities in different countries, (5) causes of differences in the data published by various countries, (6) Index Numbers in statistics of foreign trade: computation of Index Numbers of volume and value in Canada, United States, Germany, Italy,

and the League of Nations, (7) customs statistics of Tsarist Russia.

The second part of the book deals with customs statistics of Soviet Russia. Under the Soviet régime customs statistics are used for a different purpose, they have a different aim, and the sources of data are different from those of capitalist countries. Soviet customs statistics are an indivisible part of Soviet foreign trade statistics which in their turn are only a part of the statistics of the whole economy of the U.S.S.R. The source of information is the documents prepared by Soviet organizations (both abroad and in the U.S.S.R.) with all the necessary information. Commodities in transit through Soviet Russia are not included in the statistics of foreign trade of the Soviet Union. Exported and imported commodities are classified into seventeen broad classes, subdivided into groups and sub-groups, identical both for exports and imports. Exported goods are valued at the "F.O.B." price, which is the net price obtained less expenses incurred on the given commodity abroad. Imported commodities are valued on the basis of the factory price of the commodity plus expenses for its transportation to the Soviet Union. Goods in transit are valued at their average world prices.

The value of Soviet exports to the U.S. amounted to 2.8% of the total exports of the U.S.S.R. in 1933; 3.4% in 1934; 7.2% in 1935; 9.6% in 1936; 7.8% in 1937; and 7.3% in 1938. While imports from the U.S. amounted to 4.8% of the total imports of Soviet Russia in 1933; 7.7% in 1934; 12.2% in 1935; 15.4% in 1936; 18.2% in 1937; and 28.5% in 1938.

Two series of indexes are computed: (1) index of world prices for Soviet exports, and (2) an index of world prices for Soviet imports. The base year is 1929. All indexes are weighted arithmetic averages with changing weight. The weights of twenty-two commodities representing 60% to 75% of the total exports, and sixteen commodities representing 70% to 85% of the total imports, are used. The market prices used are expressed in gold prices. The index used is the Swedish index of wholesale

prices published by the periodical Index of the formula:
$$J = \frac{\sum \frac{P_1}{P_0} Q_1}{\sum Q_1}$$

Indexes of physical volume of Soviet exports and imports are computed also, based on world prices.

The last chapter deals with a number of interesting data, such as the percentage of exports by commodity to total production, percentage of exports and imports by commodity to total world trade, etc.

It is interesting to note that no American or English names are given in the bibliography appended.

M. V. CONDOIDE

Ohio State University

NEW BOOKS

DIEBOLD, W., JR. *New directions in our trade policy*. Stud. in Am. for. rel. no. 2. (New York: Council on Foreign Rel. 1941. Pp. x, 174. \$2.)

DIETRICH, ETHEL B. *Far Eastern trade of the United States*. (New York: Inst. of Pacific Relations. 1940. Pp. xii, 116. \$1.)

This new volume in the I. P. R. Inquiry Series contains a general review of American Far Eastern trade, four chapters on the trade with specific countries (notably Japan, China, the Philippine Islands, Malaya and the Netherlands Indies), and a final chapter analyzing the instruments of American commercial policy in the Far East. In 103 pages of text, Dr. Dietrich manages to present the highlights of American commercial relations with the Orient in a manner which should be helpful both to the average student and to those already well informed. Many points commonly overlooked in more generalized textual treatments of American commerce are covered, such as cartel controls of tin and rubber and specific phases of reciprocal trade policy.

For the specialist on the Far East, however, the book leaves some things to be desired. Certain problems are insufficiently covered. Somewhat more could have been made of the possible bases of trade relations with China or of the necessary considerations for Japanese commerce if Japan loses in her bid for power. The tendency to canvass the likely results of a Japanese ascendancy, though desirable, should not blind us to the situation which may be faced in a victorious China, or to the conditions which a durable peace in the Far East may require with reference to Japan. The consideration of the future of the Open Door (pp. 48 ff.) might have been carried somewhat further to suggest what is involved in "a new interpretation . . . which will define equal opportunity under modern trade controls" (p. 102). The linkage of the problem with world commercial trends could have been emphasized more. The question whether the Open Door can be maintained as a purely regional policy of America or of other foreign powers in China, if general international policy is not in accord with its spirit and methods, though hinted at, could have been pushed further. Some variations from equality of treatment in American policy in other parts of the world are mentioned (p. 50), and suggested in reference to the Philippines (pp. 62-63, 70-72), yet elsewhere it is suggested that the present American policy of equality of treatment will be rigorously applied to the Far East.

A few minor points caught the eye of the reviewer. The discussion of the prospects for replacing Far Eastern sources of rubber (pp. 77-78) fails to consider possible feasible quantities of domestic synthetic rubber production or of Brazilian or other tropical rubber development. Comparative prices and costs as given are not enough. Both the short-run and long-run possibilities are important. On page 35 it is stated that after 1929 China had full control over foreign trade. What is meant is full tariff autonomy. China has not established at law the basis for a "full control over foreign trade," and it is not the latter but tariff control which was seen to be basic to "the execution of any such national economic plan" as is described on page 34 in reference to national economic reconstruction. A more inclusive scheme of economic planning would involve full trade control but not the economic plans as so far conceived. There is an error in footnote 6, p. 26. It states the exact opposite of the textual reference. Table 16 (p. 38) does not show "value in 1,000 dollars" but percentage of total value by economic classifications.

Finally, the first sentence of the text reads: "Trade forms the principal focus of American interest in the Far East and will undoubtedly prove, in the future as in the past, an all important determinant of American policy in that area." This may be true, but in the light of the many phases of American interest in the Far East, of the evident shifts of American opinion and policy in recent years, and particularly of the increased American concern in respect of China in 1939 and 1940, based on broader grounds of policy formation, one wonders if the emphasis of this sentence may not be too strong.

ARTHUR G. COONS

GORDON, M. S. *Barriers to world trade: a study of recent commercial policy.* (New York: Macmillan. 1941. Pp. xii, 530. \$4.)

HENIUS, F. *Latin American trade: how to get and hold it.* (New York: Harper. Pp. xi, 143. \$2.)

KRAMER, R. L., editor. *Our foreign commerce in peace and war.* Annals, vol. 211. (Philadelphia: Am. Academy of Pol. & Soc. Sci. 1940. Pp. 262. \$2.50; \$2, paper.)

"An account of the status and the characteristics of United States foreign commerce, looking to the future."

SCHWARZ, S. *Research in international economics by federal agencies.* Internat. handbooks no. 2. (New York: Columbia Univ. Press. 1941. Pp. xl, 360. \$1.75.)

SCOTT, F. R. *Canada and the United States.* America looks ahead, no. 2. (Boston: World Peace Found. 1941. Pp. 80. 50c; 25c, paper.)

Europe's trade: a study of the trade of European countries with each other and with the rest of the world. (Geneva: League of Nations. New York: Columbia Univ. Press. 1941. Pp. 116. \$2.)

Monetary policy as it affects foreign trade. Report of the foreign commerce department committee. (Washington: Chamber of Commerce of the United States. 1941. Pp. 9.)

Reciprocal trade, supplementary agreement between the United States of America and Canada, amending with regard to fox furs and skins the agreement of November 17, 1938. State Dept., Executive Agreement Ser. 184. (Washington: Supt. Docs. 1941. Pp. 7. 5c.)

Reglèmentation du commerce des devises: France. 3ème ed. (Basle: Banque des Règlèments Internationaux. 1940. Pp. 56.)

Summary of foreign trade of the United States, calendar year 1939. Trade promotion ser. 215. (Washington: Bur. of Foreign and Domestic Commerce. 1940. Pp. 77. 10c.)

Tax barriers to trade; a symposium conducted by the Tax Institute, December 2-3, 1940, Chicago, Illinois. (Philadelphia: Tax Inst. 1941. Pp. viii, 344. \$2.50.)

A symposium by twenty-nine authors under the headings "The menace of tax barriers to trade"; "Highway trade barriers"; "Commodity trade barriers"; "Marketing trade barriers"; "Tax barriers to international trade"; "What can be done about trade barriers?"

Accounting, Business Methods, Investments and the Exchanges

The Ebb and Flow of Investment Values. By EDWARD S. MEAD and JULIUS GRODINSKY. (New York: D. Appleton-Century. 1939. Pp. x, 513. \$5.00.)

The professional economist and the practical financier have long embraced or, at least, fondled the idea that industries, like living organisms, are subject to certain laws of growth and decay. During the early phases of the life cycle of industries and corporations, productivity of the capital investment is high, but as the cycle continues a period of decadence sooner or later sets in. At this juncture profits and investment values in the industry decline, and, although temporary expedients may be applied to ward off the approach of senility, the chances of a successful economic rejuvenation are about as remote as are the chances of successful physiological rejuvenation.

The authors of this book have made a real contribution to the philosophy of capital management in emphasizing so vividly the important characteristics of declining and expanding industries. Once an industry loses the vitality which arises from expanding demand and faces a static or declining demand, then the best of management is usually powerless to do much more than temporarily to delay an era of declining profits. The first task, therefore, in the successful direction of investments is to determine the movement of profits in leading production and consumption goods and service industries over a sufficient period of time to establish definite comparative trends. Certain industries will be found that are enjoying increasing profits; others will have passed into the stage of declining profits. Between these two stages, will be found industries in which the forces of decline and expansion are temporarily balanced.

Part I of the book is devoted first to an analysis of the competitive forces that have influenced movements in the demand for consumers' goods and services. Thereafter a broad classification of industries is made under five primary classes: I, Consumers' Goods; II, Consumers' Services; III, Consumers' Capital Goods; IV, Producers' Goods; and V, Producers' Services. The final test of investment value, or profit trend, is the disbursement of business corporations to investors, the interest and dividends paid to creditors and stockholders over a period sufficiently long to establish comparable trends of profits. Studies are presented showing trends in investment returns from 1923 to 1936 by primary classes, and by groups of companies classified according to industry. One hundred and eleven industries, divided into eighteen groups, were studied. Index numbers of distributions to investors from 1923 to 1936 inclusive, by industrial groups, are presented, with average distributions 1928 to 1930 as a base or com-

mon denominator, each index number being weighted according to the relative importance of the distributions of the individual companies.

The entire statistical study is summarized in two charts showing the index of distributions, one chart presenting declining industries, the other expanding industries. The profit trend of each classification is at once apparent. The group of declining industries shows a modest advance in distributions from 1923 to 1929, although many groups show declines during this period, a depression drop of some magnitude from 1929 to the end of 1932, and thereafter a modest advance. With few exceptions, however, the post-depression recoveries fail to reach the 1929 level. Expanding industries show a vigorous advance from 1923 to 1929, a severe depression drop in most cases, but thereafter recoveries into new high ground.

Part II is devoted to a discussion of the proper selection of securities for purchase. Consideration is given to the industry or industries to be selected, to the proper selection of companies within an industry, and to the selection of types of securities. The authors continuously emphasize the advantage of confining investments to expanding industries and to companies that have the greatest differential advantages over competitors. Differential advantages, or factors enabling one corporation within a given industry to report a higher profit or smaller loss than its competitors, may arise either from supply or from demand differentials. Supply differentials include cost items, raw materials, transportation, taxes, wages, special discounts and concessions, plant modernization and affiliated interests. Demand differentials include the shift of production from a declining to an expanding market, as well as appropriation of a larger proportion of a given market.

Part III, relating to the sale of securities, emphasizes that phase of investment management which, although as important as the act of purchasing, is too often neglected or entirely ignored. In a rapidly changing economic world capital commitments should never be regarded as permanent; every industry like every human being has a life cycle. Latent obsolescence, unless recognized and corrected, will be followed by more obvious symptoms of decay: stationary demand, resort to costly capital improvements to maintain profits, failure of plant capacity in industry to expand, reliance on price advances to maintain profits, and an increase in the ratio of debt to total capitalization.

What can be done to limit or prevent capital losses when industries are confronted with stationary or declining demand and increasing competition? Reduction in costs, modernization of plant, inter-industrial coöperation, and improvement of product or service, are devices frequently employed by management. Yet too often there is no escape. The railroad industry at one time or another has tried all these devices without being able effectively to check the drastic decline in net operating income. Demand

correctives, the development of new products through market research, diversification into new fields, and types of rejuvenation effort aimed at increasing sales are frequently successful, especially where plant facilities are not too fixed in nature.

Where the industry is impotent to check the adverse effects of declining demand, the individual investor can withdraw his investment by a sale. This method, however, is unavailable to investors as a class. "What the composite investor buys he can not sell. He must hold to the end." The only method of escape for the composite investor is a greater use by corporations of a portion of earnings during periods of expanding demand to retire at least a proportion of the original investment. Unless corporate debt is thus liquidated, substantial capital losses must be suffered by investors as a group.

Investment practice in this country has for many years been predicated upon a scarcity economy. During the past decade, however, a rather widespread feeling has crystallized among economists that this country has already passed from a scarcity economy to a surplus economy. The authors rightly suggest the necessity for a wholesale revision in the art of investment as hitherto practiced, if new conditions are to be successfully met.

Our economy has indeed been subjected to major stresses during the past decade and faces even more trying times ahead. The share that capital will receive from our total national income will be less in the years ahead, and the constant impingement of new and higher taxes will upset many a well-conceived investment program. For example, the excess profits tax, as applied to three years' average past earnings, certainly penalizes growth companies. Nevertheless the authors of this book have chosen and have developed, logically and well, a subject highly important to successful capital management.

RALPH E. BADGER

Detroit, Michigan

NEW BOOKS

AGNEW, H. E. and HOUGHTON, D. *Marketing policies*. (New York: McGraw-Hill, 1941. Pp. xii, 615. \$4.)

ARKIN, H. *A statistical analysis of the internal factors affecting the yields of domestic corporate bonds*. (New York: Author, 17 Lexington Ave. 1940. Pp. 152.)

BARTELT, E. F. *Accounting procedures of the United States government*. (Chicago: Public Admin. Serv. 1940. Pp. 167. \$2.)

BOGERT, G. G. and others. *Introduction to business law*. New ed. (Boston: Ginn. 1941. Pp. 594. \$1.68.)

"The text has been brought up to date, discussing the legal aspects of recent legislation affecting such questions as social security, unemployment insurance, labor relations, etc."

BRINK, V. Z. *Internal auditing: its nature and function and methods of proce-*

- due.* (New York: Ronald. 1941. Pp. vi, 549. \$4.50.)
- BRISCO, N. A. and others. *Store salesmanship*. Rev. ed. (New York: Prentice-Hall. 1941. Pp. 485. \$1.60.)
- CAIN, J. H. *Auditing of colleges and universities*. (Washington: Am. Council on Educ. 1940. Pp. 74. 50c.)
- COLEMAN, R. S. *Elements of accounting*. (New York: McGraw-Hill. 1941. Pp. 305. \$3.)
- CHUTE, A. H. *Retailing by pharmacists*. (Minneapolis: Burgess. 1941. Pp. 333, mimeographed.)
- DEVENEAU, W. F. and others. *Efficient management of the sales organization*. Marketing ser., no. 40. (New York: Am. Management Assoc. 1940. Pp. 56. \$1.25.)
- ELWELL, F. H. and others. *Business record-keeping*. (Boston: Ginn. 1941. Pp. 525. \$1.72.)
- FINNEY, H. A. *General accounting*. (New York: Prentice-Hall. 1941. Pp. 612. \$5.35; \$4, school ed.)
- FISHMAN, N. *Heirs to your money and how to protect them*. Introduction by P. B. Olney. (New York: Liveright. 1941. Pp. 133. \$1.50.)
- FOSTER, L. O. *Introduction to accounting*. (Chicago: Richard D. Irwin. 1941. Pp. xvi, 742. \$4.)

Compared with the usual text, Professor Foster has employed a very different approach to the introduction of accounting. The approach used stresses the economic, rather than the legalistic, aspects of the business enterprise; and accounting procedures are explained in terms of assets rather than in terms of a mathematical equation.

Two other radical departures are also employed. The first is the emphasis on the corporate form of business organization, with little attention to the single proprietorship, and with frequent illustrations drawn from diverse types of businesses. The second departure is the unusually long treatment of terminology, and the description of business practice. To some this part of the work may seem over-long, particularly if elementary accounting is preceded by courses in economic principles or business administration. However, with the possible exception of this section, the text is well-balanced and the whole is excellently written. The asset approach employed is an interesting departure and one which seems well worth a trial in the classroom.

FRANK P. SMITH

- GILLESPIE, C. *Introductory cost accounting*. Rev. ed. Complete accounting course. (New York: Ronald. 1941. Pp. 397. \$4.25; \$5.50, loose-leaf, with practice set.)
- GREIDINGER, B. B. *Accounting requirements of the Securities and Exchange Commission for the preparation of financial statements*. Rev. ed., including regulation S-X. (New York: Ronald. 1940. Pp. 587. \$6.)
- HANSON, S. G. *Introduction to business*. (New York: Nelson. 1941. Pp. 859. \$3.50.)
- HAVEN, T. K. *Investment banking under the Securities and Exchange Commission*. Mich. bus. stud., vol. 9, no. 3. (Ann Arbor: Univ. of Michigan, Bur. of Bus. Res. 1940. Pp. 154. \$1.)
- HOWARD, K. S. *Methods of sales promotion*. McGraw-Hill practical bus. manuals. (New York: McGraw-Hill. 1940. Pp. 273. \$2.25.)
- KEHL, D. *Corporate dividends; legal and accounting problems pertaining to corporate distribution*. (New York: Ronald. 1941. Pp. 378. \$7.50.)

- KLEIN, J. *The practice of commercial arbitration in business disputes; abridgment of thesis.* (New York: N.Y. Univ. Grad. School of Arts & Science. Pp. 12. 75c.)
- LAGERQUIST, W. D. *Balancing and hedging an investment plan.* (New York: Ronald. 1941. Pp. xiv, 296. \$3.50.)
- MACDONALD, J. H. *Controllershship; its functions and technique.* (New York: Controllers Inst. of Am., 1. E. 42d St. 1940. Pp. 144. \$2.08.)
- McKEE, W., editor. *Lectures for bankers and business executives.* (New Wilmington, Pa.: Am. Econ. & Bus. Found. 1940. Pp. 663. \$5.)
 "Thirty-nine lectures delivered in the Department of Economics and Business Administration, Westminster College, 1936-40, before a group of bankers and business executives."
- NEUNER, J. J. W. *Cost accounting problems.* (Chicago: Richard D. Irwin. 1940. Pp. 153. 35c.)
- NEWMAN, W. H. *Business policies and management.* (Cincinnati: South-Western Pub. Co. Pp. 656. 1940. \$4.)
- PORTER, R. B. *Design for industrial coordination.* (New York: Harper. 1941. Pp. 264. \$3.)
 "A technique for coordinating the primary functions in the field of industrial organization."
- REED, C. A. and MORGAN, V. J. *Introduction to business.* Rev. ed. (Boston: Allyn and Bacon. Pp. 572. \$1.40.)
- ROSENKAMPFF, A. H. and WALLACE, W. C. *Bookkeeping and accounting; principles and practice; introductory course.* 4th ed. (New York: Prentice-Hall. 1941. Pp. 368. \$1.60.)
- ROTHACKER, F. J. *Study book for accounting and auditing assistant.* Civil serv. home study courses. (New York: Cord Publishers. 1941. Mimeographed. \$1.50.)
- SHERWOOD, J. F. and NISWONGER, C. R. *Federal tax accounting.* 12th ed. (Cincinnati: South-Western Pub. Co. 1941. Pp. 526. \$3.41.)
- SIMMONS, L. T. *The issuance and distribution of corporate securities under the new federal regulation.* Univ. microfilms, pub. no. 209. (Ann Arbor: Univ. of Mich. Microfilms. 1940. Pp. 676. \$8.45.)
- SMITH, F. P. *Management trading; stock-market prices and profits.* (New Haven: Yale Univ. Press. 1941. Pp. xii, 146. \$2.50.)
- SPURRIER, L. *Common stocks and bonds as long-term investments.* (Chicago: Univ. of Chicago Press. 1941. Pp. vii, 91. \$1.)
- STEIN, E. *Government and the investor.* (New York: Farrar and Rinehart. 1941. Pp. xv, 223. \$1.50; \$1, textbook ed.)

In this small volume, Dr. Stein has compressed a large amount of interesting and valuable information, illuminated by some sound comment. Starting with two meaty chapters on the corporation and its security holders and an admirably condensed description of the securities market, the author discusses the federal and state regulation of security issues, the regulation of the securities market, and the specific regulation of public utility holding companies and investment trusts. In each chapter the discussion of regulation is preceded by a highly condensed and yet, for the purpose, adequate analysis of the institution to be regulated. This is followed by a discussion of the abuses which call for correction, the machinery of regulation, and the results of regulation.

Dr. Stein, while sympathetic with the objectives of this legislation, and not over-critical of its machinery and methods, is slightly skeptical as to its results. His conclusion on the effectiveness of control may be summarized as follows:

"It was not intended that the Securities Act should take the risk out of securities and make it impossible for purchasers to lose money. On the contrary, it was recognized that risky ventures are a necessary part of economic development and that our leading industries started their careers as highly speculative businesses. . . . Apparently the sponsors of the act believed that the mere telling of the truth would somehow operate, not only to prevent frauds and misrepresentation, but also to promote sound investment."

E. S. MEAD

TOSDAL, H. R. *Introduction to sales management*. (New York: McGraw-Hill. 1940. Pp. xiii, 526. \$4.)

This book is a revision of *Introduction to Sales Management* which was first published in 1933. It is a sort of junior case-book containing fewer and much simpler problems than those included in the author's more voluminous *Problems in Sales Management*. The book is especially adapted for use in short courses in sales management. Professor Tosdal has done his usual excellent job of selecting, editing, and annotating these cases. About half of those included in the book are new; the remainder were in the first edition. The author titles his book *Sales Management*. His definition of this term is so broad, however, that the volume could almost be used as a case-book for a general course in marketing. The division headings cover most of the subjects included in the standard case-book on marketing.

R. S. ALEXANDER

TRENT, E. *Dollars and sense*. (New York: Kensington Press, 730 Fifth Ave. 1941. Pp. 84. \$2.)

VIRTUE, MAJOR C. M. *Company administration and personnel records*. 8th ed. (Harrisburg, Pa.: Military Service Pub. Co. 1940. Pp. 298. \$1.75; \$1.25, paper.)

WICKENS, D. L. *Residential real estate, its economic position as shown by values, rents, family incomes, financing, and construction, together with estimates for all real estate*. (New York: Nat. Bur. of Econ. Research. 1941. Pp. xxii, 300. \$3.50.)

Administration of the Bankruptcy act: report of the Attorney General's Committee on Bankruptcy Administration, 1940. (Washington: Supt. Docs. 1941. Pp. 330. \$1.)

Commercial law. (New York. Am. Inst. of Banking, 22 E. 40th St. 1940. Pp. 413. \$3.)

Federal securities laws; 1940 ed. Dollar book ser. (Chicago: Commerce Clearing House. 1940. Pp. 194. \$1.)

Foreign long-term investment in the United States. U. S. Dept. of Commerce, Bur. of For. & Dom. Commerce. (Washington: Supt. Docs. 1940. Pp. 75. 15c.)

Survey of American listed corporations; subsidiaries of 2052 registrants under the Securities Exchange act of 1934, showing relationship to and control by parent. Works Projects Admin. stud. (Washington: Securities and Exchange Commission. 1940. Pp. 381, mimeographed.)

Capital and Capitalistic Organization

NEW BOOKS

ABRAMS, E. R. *Power in transition*. (New York: Scribner. 1940. Pp. 318. \$3.)

ADAMS, W. G. S. and others. *The deeper causes of the war and its issues*. (New York: Norton. 1941. Pp. 206. \$1.50.)

Addresses by Gilbert Murray, Viscount Samuel, Sir William Beveridge, and others, arranged and collected by the British Institute of Philosophy.

AUMANN, F. R. *The changing American legal system; some selected phases.* Contribs. in hist. and pol. sci. no. 16, grad. school ser. (Columbus: Ohio State Univ. Press. 1940. Pp. 291. \$2.25.)

BALDWIN, W. D. *Baldwin's digest service, patent, copyright trade work cases, including unfair competition, 1940 issue.* (Cleveland: Banks-Baldwin Law Pub. Co. 1940. Pp. 46. \$3.50.)

BANSE, E. *Germany prepares for war; a nazi theory of "national defense."* Translated by Alan Harris. (New York: Harcourt Brace. 1934. Pp. 379. \$3.)

"Originally published in Germany in 1932 and out-of-print in this country in recent years, this book has been accepted as containing the basic war plan now being followed by Hitler."

BENNER, C. L. *Some economic consequences of the war and the preparedness program.* Wilmington, Del.: Author, c/o Continental Am. Life Insurance Co. 1940. Pp. 20.)

BONBRIGHT, JAMES C. *Public utilities and the national power policies.* (New York: Columbia Univ. Press. 1940. Pp. vi, 82. \$1.25.)

In this little book, one of the series based upon summer session lectures on public policy at Columbia University, Professor Bonbright, with his usual felicity of statement and clearness of exposition and analysis, gives a brief résumé of recent aspects of public policy, especially federal policies, as they affect the electric light and power industry. After a brief statement of what are usually taken to be the fundamentals of the public utility problem and the reasons for regulation, the author pays his respects to the fair value doctrine. Although Professor Bonbright often protests that the literature relating to this subject is lengthy, unilluminating and dismal, he nevertheless usually ends by adding a quota to the same lacking any of those qualities. The fact of the matter seems to be that concealed in the "fair value doctrine" is one of those matrixes of ideologies about which thought necessarily revolves.

After reviewing briefly the "golden twenties," which saw the rise of the holding companies, the treatment continues with the power policies of the Roosevelt Administration in their threefold aspects of measures designed to make regulation more effective, measures intended to advance public ownership and national water-power projects, and a program of rural electrification.

Bonbright's summary is so well done that a summary here would be useless. Anyone desiring a brief but well-balanced interpretation of recent developments in the electric power field can certainly find it here. For good measure, the author has reprinted from the *Yale Review* his recent article on public ownership in relation to a national power policy in which the author defends some of the more recent public ownership projects from the point of view of the economic experimentalist.

MARTIN G. GLAESER

BRODIE, F. M. *Peace aims and post-war reconstruction: an annotated bibliography.* (Princeton, N.J.: Am. Committee for Internat. Studies. 1941. Pp. 31, mimeographed.)

CHERNE, L. M. *Adjusting your business to war.* 2nd ed., enl. and rev. (New York: Research Inst. of Am., 292 Madison Ave. 1940. Pp. 496. \$6.50.)

— and others. *Guns or butter? must national defense lower your standard of living?* Round table broadcast no. 153. Chicago: Univ. of Chicago Round Table. 1941. Pp. 26. 10c.)

CLARKE, R. W. B. *Britain's blockade*. Oxford pamph. on world affairs, no. 38. (Oxford: Clarendon Press. 1940. Pp. 32. 3d.)

CUSACK, SISTER M. T. *The significance of a changing concept of ownership in social and economic planning. A dissertation*. (Washington: Catholic Univ. of America Press. 1940. Pp. x, 146.)

All economists, the author holds, work within a framework of specific attitudes toward property. These attitudes uphold the superstructure of their theory and condition directly the type of social control implicit in it. Property concepts in turn are dependent upon the rapidity of change assumed for the social order. Thus, the gamut may be run from those who hold change itself to be the only reality to those who hold that the old order never changeth—or hardly ever.

The author selects the writings of eight economists and analyzes their advocacy (or resigned acceptance) of certain kinds of social reform in terms of their belief or non-belief in the reality of change in the social process. In the first group—those who view change as the only reality—she places Lange, Veblen, Mill, and Pigou; in the second—those who view human relations as fundamentally stable but subject to modification—belong (strange bed-fellows!) Keynes and Knight; and in the third—those who view human relations as fundamentally stable—she puts Robbins and von Mises. The battle is joined between the changing form of ownership and the lagging concept of ownership. If the changing form has the only reality, the writers must inevitably advocate or accept socialization of all forms of property as the solution. The first group, therefore, although differing widely among themselves in the degree of instability affirmed to exist in social and economic relationships, must admit that the "evolution in ownership, however conceived, eventually attains in theory a goal or a final stage of rest"—the socialist state. Thus, for Pigou at one end of the scale, "the gradual approach to the socialist state is imperceptible" and for Lange, at the opposite end, "immediate state-decreed socialism is essential as a matter of political expediency." The third group, however, consistently may advocate non-interference by the state and the maximum amount of individualism since no cultural lag may be expected from property forms changing too fast for property concepts to keep pace. The middle group, recognizing the equal validity of the changing form and the lagging concept, advocates balance between the individual and the social aspects of property; it is the goal of the state to achieve and to maintain a permanent balance.

The first group of writers, the author relates to the social philosophy of Marx, the third to Locke, and the middle group to Aquinas. The first and third attitudes are equally unacceptable; the first because it neglects the "reality" of stable principles during change (chief among them the Catholic doctrine of an ultimate standard of morality); the third because it neglects the "reality" of evolutionary social change. The middle group therefore which accepts equally stability and change in the social order is the only one which is consistent with the fundamental dualism of man and the state and the individual and the social aspects of property. Although economic balance in a changing world is admittedly difficult, it can only be found by those economists who walk in the path of Aquinas.

MILDRED B. NORTHROP

GALLAGHER, B. G. *The American caste system*. Social action, vol. 7, no. 1. (New York: Social Action. 1941. Pp. 38. 15c.)

- GARLAND, J. V. *War and the Americas*. Contemporary soc. prob., discussion ser., no. 3. (New York: H. W. Wilson. 1941. Pp. 564. \$2.)
- GELBER, L. and GOOCH, R. K. *War for power, and power for freedom*. American in a world at war, no. 2. (New York: Farrar and Rinehart. 1940. Pp. 32. 10c.)
- HAXO, G. *The philosophy of freedom*. (New York: Land and Freedom, 150 Nassau St. 1941. Pp. 224. \$1.)
- Adapted from Henry George's *Progress and Poverty*.
- HUGHES, R. O. *Problems of American democracy*. New ed. (Boston: Allyn and Bacon. 1940. Pp. 672. \$1.60.)
- JACK, D. T. *Studies in economic warfare*. (New York: Chemical Pub. Co. 1941. Pp. 175. \$4.)
- KLEINSORGE, P. L. *The Boulder Canyon project; historical and economic aspects*. (Stanford University, Calif.: Stanford University Press. 1941. Pp. xiv, 330. \$3.50.)
- KRUEGER, M. C. and others. *Can capitalism defend America?* Round table broadcasts, no. 150. (Chicago: Univ. of Chicago. 1941. Pp. 27. 10c.)
- LAVES, W. H. C. *The foundations of a more stable world order*. Harris Found. lectures, 1940. (Chicago: Univ. of Chicago Press. 1941. Pp. 205. \$2.)
- MACQUIGG, C. E. *America's sources of power and national defense*. Ohio State Univ. engineering ser., vol. 9, no. 6; Engineering Exp. Sta. circular, no. 38. (Columbus: Ohio State Univ. 1940. Pp. 15.)
- MARX, F. M., editor. *Public management in the new democracy*. (New York: Harper. 1940. Pp. 266. \$3.)
- MILLER, E. I., compiler. *A selected list of books, theses, and pamphlets on TVA*. (Knoxville: Tenn. Valley Authority. 1940. Pp. 7, mimeographed.)
- MILLER, J. P. *Unfair competition; a study in criteria for the control of trade practices*. Harvard stud. in monopoly and competition, no. 3. (Cambridge: Harvard. Univ. Press. 1941. Pp. xiii, 438. \$4.)
- MOULTON, H. G. *Fundamental economic issues in national defense*. Pamph. no. 26. (Washington: Brookings Inst. 1941. Pp. 32. 25c.)
- MUNK, F. *The economics of force*. (New York: George W. Stewart. 1940. Pp. xii, 254. \$2.)

The scope is broader than the title, ranging from the philosophical and psychological foundations of nazism to topical comment upon America's defense effort. The chapters on specifically economic topics are brief and give a fairly muddled picture of totalitarian economy. Written with intense emotional bias, as a warning to Americans, the book tends to run to half-truths and tendentious commentary, contrasting the "irrational" and "bestial" "economics of force" with the economics of "the profit motive" which represents the interests of democracy and "welfare." Whatever one's thoughts about the nazi system, one cannot regard the view of the author's own Czechoslovakia and of the United States as less than naïve.

ROBERT A. BRADY

- OWENS, R. N. *Owens on business organizations and combination*. Rev. ed. (New York: Prentice-Hall. 1941. Pp. 708. \$5; \$3.75, school ed.)
- PAISH, G. *The defeat of chaos*. (New York: Appleton-Century. 1941. Pp. vi, 122. \$1.)
- PICKERT, C. C. and BAERMAN, R. B. *The way out for America*. (St. Paul: Inst. for Christian Econ. Action. 1941. Pp. 151. \$1.50.)
- Aid for American agriculture through trade agreements with "have-not"

(Axis) countries, presupposed to have won the war for which Germany is held substantially blameless.

PIGOU, A. C. *The political economy of war*. New and rev. ed. (New York: Macmillan. 1941. Pp. viii, 169. \$1.50.)

POLLARD, K. *War and the people*. (New York: Workers Lib. Publishers. 1941. Pp. 63. 10c.)

PORTER, S. F. *If war comes to the American home; how to prepare for the inevitable adjustment*. Introduction by Harry Scherman. (New York: McBride. 1941. Pp. 319. \$2.50.)

"A personal defense program and forecast of an economic invasion."

PRATT, F. *American and total war*. (New York: Smith and Durrell. 1941. Pp. 318. \$3.)

"A discussion of problems and policies related to the great national defense effort, by the military expert for the *New York Post*."

QUITMAN, G. and ALLEN, W. H. *Dictator isms and our democracy*. (New York: Inst. for Public Service, 5 Beekman St. 1940. Pp. 56. 25c.)

ROHLFING, C. C., CARTER, E. W., WEST, B. W. and HERVEY, J. G. *Business and government*. 4th ed. (Chicago: Foundation Press. 1941. Pp. xvi, 803. \$4.)

ROSEN, S. MCK. and ROSEN, L. *Technology and society: the influence of machines in the United States*. (New York: Macmillan. 1941. Pp. xiv, 474. \$3.)

This is a useful text for students in courses introducing them to the social sciences, and especially for students in schools of engineering and technology by way of "introducing them to the world of social relationships and social problems." From the great mass of material in the National Resources Committee's report, *Technological Trends and National Policy*, to which Mr. Rosen contributed, and from other sources, the authors have written an easily read and well organized book of twenty-two chapters. Dealing with the technologic base in manufacture, transportation and communication, agriculture, construction, and science in the professions, the authors proceed to analyze the economic effects, the social effects, and the political effects.

Under the heading of economic effects, they deal with the industrialist, labor, and the farmer, and economic motives for resistance, and summarize as an interesting case study the report on the cigar industry made by the National Research Project of WPA. Under social effects, the subjects dealt with are the development of urban communities and social disorganization, the family, the comforts of life, public resistance, and human welfare through the case study of the doctor and the hospital. Under political effects, there are chapters on the growing services provided by municipal, state and national governments. Finally, there is a concluding chapter on technology and the new society.

Professor Ogburn, who directed the research for the National Resources Committee report referred to, has contributed a valuable introductory chapter drawing upon his many years' reflection on the effects of invention in our time. This, together with the fact that the volume is profusely illustrated, is of a handy size, and has well selected bibliographies at the end of each chapter, makes an excellent first attempt, as the authors write, "to present a balanced picture which might aid the student and the citizen to gain some kind of perspective of the kind of world which they are called upon and will be called upon to face."

RUDOLF A. CLEMEN

SIMPSON, K. *Big business, efficiency and fascism*. (New York: Harper. Pp. x, 203. \$2.50.)

STONE, W. T. *America rearms; the citizen's guide to national defense*. Headline books, no. 28. (New York. Foreign Policy Assn. 1941. Pp. 64. 25c.)

STRAUSZ-HUPÉ, R. *Axis America; Hitler plans our future*. Current hist. book. (New York: Putnam. 1941. Pp. 291. \$2.50.)

"An analysis of the nazi interpretation of the character of the United States and a description of German, Italian and Japanese plans for North and South America, culled from documents circulated in the Axis countries."

THOMPSON, C. W. and SMITH, W. R. *Public utility economics*. (New York: McGraw-Hill. 1941. Pp. x, 727. \$4.50.)

VON GOTTL-OTTLILIENFELD, F. *Wirtschaft als Wissen, Tat und Wehr: über volkswirtschaftslehre, Autarkie und Wehrwirtschaft*. (Berlin: Junker und Dünnhaupt. 1940. Pp. 97. RM. 3.80.)

WARD, B. and others. *Hitler's route to Bagdad*. Introduction by Leonard Woolf. (New York: Norton. 1941. Pp. 356. \$3.)

"Brief studies of the contemporary political and economic situation of Yugoslavia, Rumania, Bulgaria, Greece and Turkey."

WELLS, H. G. *The common sense of war and peace; world revolution or war unending*. (New York: Penguin. 1941. Pp. 116. 25c.)

WILLIAMS, F. *War by revolution*. (New York: Viking. 1941. Pp. 158. \$1.50.)

"A doctrine of democracy for the future and a plan for the conquered countries to win this goal by a united revolution."

ZELOMEK, A. W. and SHOOK, R. C. *American business in a changing world*. New York: Whittlesey House, McGraw-Hill. 1941. Pp. xiv, 264. \$2.50.)

Defense and the consumer. Prepared by the Inst. for Consumer Educ. Pub. affairs pamph. no. 54, consumer ser. no. 3. (New York: Public Affairs Committee. 1941. Pp. 32. 10c.)

Federal Trade Commission: twenty-sixth annual report for the fiscal year ended June 30, 1940. (Washington: Supt. Docs. 1940. Pp. 217. 30c.)

Legal aspects of mobilization for defense. Conf. board reports. (New York: Nat. Industrial Conf. Board. 1941. Pp. 28.)

Lend-lease bill: hearings, 77th Cong., 1st sess., on H. R. 1776, further to promote the defense of the United States, and for other purposes, January 15, 15-18, 21-25, and 29, 1941. (Washington: House Foreign Affairs Committee. 1941. Pp. 692. 65c.)

National defense: hearings, 77th Cong., 1st sess., on S. 275, bill further to promote the defense of United States, and for other purposes. Part. 1. January 27-February 3, 1941. (Washington: Senate Foreign Relations Committee. 1941. Pp. 306. 35c.)

_____. Part 2, February 4-10, 1941. (Washington: Senate Foreign Relations Committee. 1941. Pp. 307-830. 50c.)

A plan for Britain. Planning pamph. no. 3. (Washington: Nat. Econ. and Soc. Planning Assoc. 1941. Pp. 56. 20c.)

Special libraries; World War II, a bibliography (New York: Special Libraries Assoc. 1941. Pp. 16. 25c.)

Studies in war economics. (Washington: Internat. Labor Office. 1941. Pp. 199. \$1.)

Tennessee Valley Authority: annual report for the fiscal year ended June 30, 1940. (Washington: Supt. Docs. 1941. Pp. 528. 75c.)

Labor and Labor Organizations

The Unemployed Worker: A Study of the Task of Making a Living Without a Job. By E. WIGHT BAKKE. (New Haven: Yale Univ. Press for the Inst. of Human Relations. 1940. Pp. xix. 465. \$4.00.)

Citizens Without Work: A Study of the Effects of Unemployment Upon the Workers' Social Relations and Practices. By E. WIGHT BAKKE. (New Haven: Yale Univ. Press for the Inst. of Human Relations. 1940. Pp. xiv, 311. \$3.00.)

These two books might well have been published under one title, as Volumes I and II in the order listed above. They are really one integrated work, and either volume would be inadequate if read alone. Together, they are surely more than adequate.

The study represents the culmination of one important phase of the program being conducted by the Yale Institute of Human Relations toward the creation of a new *social* science, a science which is broader than the area restrictions imposed by the traditional delimitations of economics, sociology, psychology, or statistics. It is all of these and more. It is a study of a significant segment of the human race in its relation to the society in which it lives. It is, further, a study of that segment from its own point of view.

I have always felt that the Whiting Williams books (*What's on the Worker's Mind*, *Mainsprings of Men*, etc.) represented the perversion of a good idea. Professor Bakke has taken the same basic good idea and, rather than pervert it, has produced a real and immensely valuable picture of "what's on the unemployed worker's mind" and why. The author and his staff lived and worked among the unemployed of New Haven for years, collecting statistical data and impressions. Often the latter are the more important, for, with such matters as are dealt with here, "totals mean very little" (I, p. 71). Professor Bakke states "that we are concerned with the worker's view of his world," (I, p. 35) a world which, at best, is confusing and baffling. Ignorant of theory and of broader fact, the worker is obliged to adjust himself after his own fashion and with beclouded understanding to the cataclysmic changes which happen to him. Unemployment and relief are such changes. What adjustments are made, upon the appearance of unemployment, by the worker and his family and his group? Adequate answers are here given to most of the subsidiary questions which are implicit in that generalized question.

The basic conclusion of both volumes is found in Professor Bakke's statement that a reader "has missed the whole trend of this study who has not become aware that men work for more than money, that a job means more than the wages received for the effort" (I, p. 308). The vast mass of evidence cited in the books is not only ample support for this proposition, but also clearly suggests the nature of those things which are "more than money, . . . more than wages." Briefly, these things may be summed

up as family and community status. "Those men and women and children impressed one as secure and as most thoroughly motivated toward self-reliance who . . . were geared into the life of their community. The degree of their insecurity and the loss of their desire to be self-reliant appeared to be almost directly proportional to the extent of the breaking of these ties" (II, p. 304).

In considerable detail, the second volume marshals evidence quite thoroughly damaging to the common complaint that relief and social insurance are responsible for a general decay of self-reliance. But at the same time, the identical evidence suggests grave errors in the contemporary law and in the administration of aid to the unemployed. Numerous important suggestions for improvement are made, but in no case is there a blueprint of the genus *panacea*. The author's feet are too firmly planted on the ground for him to fly off into the clouds of visionary cure-alls.

Professor Mark A. May, the Director of the Institute, states that, with regard to the Institute's program for the creation of a unified social science, "the research embodied in these volumes is exploratory in nature" (I, p. vi). Undoubtedly this is true; it is essentially a pioneering work. Much more needs to be done. It is very much to be hoped, for example, that Professor Bakke will follow out his present intention of applying the same, or an improved technique to the study of the worker's relation to labor unions. But a reader should not conclude that these volumes are *merely* exploratory. In a very real sense they are definitive. And I think that to any reader they will be tremendously informing. It came as something of a shock when I realized that most of us can read with profit a simple account of the way in which our neighboring workingmen live and think. These books indicate the extent of our own lack of understanding and go a long way toward rectifying it. They tell us little of the statistical "average unemployed man"; that is, they contain few enumerative samples from which hasty readers may concoct sweeping generalizations. But they tell us a great deal about the feelings, reactions, and personal adjustments of flesh-and-blood unemployed human beings. The reader concludes the books with few satisfying generalizations but with an immensely improved understanding.

Professor Bakke has written in an engaging and attractive style. While they might be read with pleasure and advantage by any literate person unfamiliar with the technical language of experts, these volumes are of especial value to the expert students of labor, of relief, and of the social insurances.

WILLIAM S. HOPKINS

Stanford University

Labor under German Democracy: Arbitration, 1918-1933. By FRIEDA WUNDERLICH. (New York: New School for Social Research. 1940. Pp. xiii, 101. \$1.00.)

The fate of arbitration, writes Frieda Wunderlich in her timely and instructive book, reflects the fate of German democracy. The tie between arbitration of labor disputes and democracy in Germany goes further and deeper than the mere chronological parallelism: five years of political and economic instability, struggle and insecurity after the first revolution; three years of terrific crisis preceding the second revolution; and six relatively quiet years between the two stormy periods.

After the first revolution, under the Weimar Republic, labor did not have to fight for the right to collective bargaining. This was—or at least seemed to be—secure. The problem labor was facing was to obtain collective agreements most favorable to its interests. In the struggle for this goal, arbitration of disputes by the state, originally regarded as an emergency measure, gradually became the general rule. The “political wage” was praised by labor leaders as a glorious achievement, and used by political representatives of labor as a vote-catching slogan. But the German government did not use its prerogative of arbitration in order to secure a system of wages which it would consider as just in regard to workers and advantageous for the national economy as a whole. During a decade it arbitrated cases merely by splitting the difference between the parties involved. There was a political wage without wage policy, a “planless arbitration system” as Frieda Wunderlich describes it. And she shows how the long practice of authoritarian wage regulations made it easy for the government to decree the general wage reduction which was the foundation stone of the suicidal deflation policy of Chancellor Brüning.

The author also shows how the arbitration policy led to a split of interests within labor itself, alienating the unemployed, weakening union influence on the employed rank and file. “Unions lost much of their fighting spirit, spontaneity, self-reliance and power of attraction. Petrification was the price paid for changing from free organizations into semi-official state organs.”

But Frieda Wunderlich neither makes a case against arbitration nor advocates unrestricted liberalism in bargaining and fighting for labor conditions. She concludes her study with these lines: “To have built labor law on class antagonism was a fundamental mistake. . . . Willingness to co-operate, more common sense, more democratic responsibility on the part of capital and labor, could have made the collective liberalism function; but political power, prerogatives of large associations and state regulation made some new corporative étatism embodying powerful state influence inevitable, essential to any workable system in Germany. . . .”

The history of arbitration under German democracy is a history of illusions and deceptions. Frieda Wunderlich tells this story with impartiality and objectivity based on a conviction that experience of a frustrated nation may be of use for other countries.

W. S. WOYTINSKY

Social Science Research Council

NEW BOOKS

ANDREWS, J. B. *Labor law administration in North Carolina*. (New York: Am. Assoc. for Labor Legislation, 131 E. 23rd St. 1940. Pp. 24. 20c.)

DECKER, J. A. *Labor problems in the Pacific mandates*. (New York: Inst. of Pacific Relations. 1940. Pp. xiii, 246. \$2.75.)

This brief volume is essentially a report on the nature of and the control of labor in the four Pacific Ocean mandates, New Guinea, Western Samoa, Nauru, and the Japanese mandate, since their establishment at the close of the World War. The study is based on a wide range of official documents issued by the mandatory powers, by the League of Nations, by the Permanent Mandates Commission, and by the International Labor Office. These sources are supplemented by the use of the better known, though limited, secondary materials.

Following an introductory chapter on the general problem of labor in the Pacific Mandates, the subject is organized under the following topics: "Japanese Immigrant Labor in the South Sea Islands under Japanese Mandate," "Chinese Labor in the Phosphate Mines of Nauru," "Chinese Plantation Labor in Western Samoa," "Native Contract Labor in the Phosphate Mines of the Japanese Mandated Territory," "The Native Indentured Labor System in New Guinea," and "Conclusion: the Supervision of the Permanent Mandates Commission over Labor Matters in the Pacific Mandates."

While the mandate principle has not been used primarily for the benefit of the native peoples and it was never reasonable to suppose that it would be, Dr. Decker's account does present a picture which should be somewhat encouraging to those who wanted to believe that it would be so used. In the main, the problems of native and immigrant labor in these mandates have been treated with some degree of practical idealism which in part may be attributed to the mandate principle.

In the welter of rumor which has emerged on the Pacific Mandates, Dr. Decker maintains a detached, scholarly and moderate attitude. He does not believe that the mandatory powers have done all that can be done, yet he refrains from being dogmatic and from the repetition of unsubstantiated charges. The labor and related problems of Japan's mandate are not those of the Australian mandate of New Guinea. Dr. Decker clarifies these differences with skill, and herein lies, perhaps, the greatest contribution of his work.

There are some weaknesses. Dr. Decker does not appear to have personal knowledge of the countries and peoples of whom he writes. Some of his conclusions on labor conditions today are based on the observations of travelers made some years ago (see p. 40). The index is poor and there are no maps. These are minor faults in what generally is a scholarly and stimulating study.

PAUL H. CLYDE

GAFFEY, JOHN DEAN. *The productivity of labor in the rubber tire manufacturing industry*. Studies in History, Economics and Public Law. Number 472. (New York: Columbia Univ. Press. London: P. S. King. 1940. Pp. 204. \$2.50.)

The number of tires produced per man-hour tripled between 1921 and 1937, an increase in productivity equalled by few other manufacturing industries. Dr. Gaffey has undertaken to explore the causes and consequences of this increase, and to discuss certain other economic characteristics of tire production.

The available facts concerning productivity are competently summarized, though a number of important problems are passed over rather too briefly.

The behavior of productivity indexes between 1929 and 1935 (p. 87), the effect of incentive methods of wage payment on productivity (p. 97), and the importance of technical innovations involving an increase in invested capital as compared with those requiring no increase in capital (p. 89) might well have been examined more thoroughly. The conclusion that "unstable conditions in labor relations have been in large measure responsible for the reduced rate of productivity increase since 1933" (p. 181) is not supported by adequate evidence. Statements that the union has "undermined the confidence between management and labor," "undermined the pride in skilled craftsmanship," and made "the present day workmen much more dollar minded than ever before" (p. 117) would be difficult to verify. The discussion of the recent tendency toward decentralization of tire production is perhaps as adequate as it could be with the imperfect information available. Detailed material on labor productivity and unit labor costs in Akron and outside Akron would be necessary to shed much light on this problem.

On the explanatory and theoretical side the study is hardly satisfactory. The discussion of the distribution of the gains from increased productivity makes no use of refined techniques, such as those suggested by Professor Mills, and exhibits theoretical confusion at several points. The statement that money wages in a particular industry "normally reflect changes in productivity," and that "the marked upward trend of wages in the tire industry is largely explainable in terms of increasing labor productivity" (p. 144) applies to a particular industry propositions which are true only of the economy as a whole, and moreover confuses marginal with average productivity.

Students of productivity will find Dr. Gaffey's work a useful source of raw material. It makes little headway toward answering the questions posed by economic theory in this field, but it has the merit of exhibiting how difficult these questions are to answer.

LLOYD G. REYNOLDS

GILSON, MAY BARNETT. *What's past is prologue: reflections on my industrial experience.* (New York: Harper, 1940. Pp. xii, 307. \$3.)

It is seldom that a person with more than a dozen years of practical experience in management turns to research and teaching as a profession and gives us an absorbing life's history as replete with rich experiences and acute observations as was done by the author of this book. Its significance does not lie only in its contents relating to Miss Gilson's activities. It is above all a segment of America's cultural life.

The daughter of an editor of a church publication and brought up in the strictest Presbyterian milieu, Miss Gilson went to college at the time when sociology and economics were barely visible above the horizon of college curricula-makers. She plunged into direct contact with the life of the working people of teeming industrial Pittsburgh as the holder of a modest public library job. But she was destined for much bigger things. Her great experience came as a pioneering interpreter of the principles of scientific management in the clothing factory of Joseph and Feiss. Here she very evidently went beyond Frederick W. Taylor, whom she revered, and unselfconsciously worked out a technique of job administration based upon consent and an understanding of the deep-seated aspirations of the wage-earners employed in that establishment. Her account of her activities as one of America's pioneer personnel managers gives us a rich insight into the psychology of our welfare capitalists as well as of labor.

Miss Gilson then turned to research and made a thorough investigation of the British system of unemployment insurance. The author is not one of those who see in the British employer group a uniformly more mature attitude toward unionism than is shown by their American confreres, and she clearly shows that it is a mistake to assume that with every British employer collective bargaining has become a mere matter of procedure rather than that of concession in principle.

Miss Gilson's experience as a researcher was thrilling while meeting people and gathering the data but she confesses to a decided let-down when she was confronted with the necessity to conform to the established academic form of presenting the data and the enforced ultra-conservatism in drawing conclusions. It is the reviewer's conviction that any possible over-shooting of the mark in Miss Gilson's theorizing about her data would perhaps have been more instructive to the research fraternity and to the reading public than a coerced restraint. The reviewer is certain, however, that she more than makes up for that as an inspiring teacher of her students at the University of Chicago.

SELIG PERLMAN

HAMBURGER, L. *How nazi Germany has mobilized and controlled labor*. (Washington: Brookings Inst. 1940. Pp. 63. \$.25.)

The control of labor in Germany described by Dr. Hamburger in his pamphlet is the technical control of the supply of labor force rather than the political control of workers. The problems which the Hitler government has been facing in its labor market policy were those known not only by the nazi régime: surplus in the supply of labor and lack of work opportunities, maladjustments in the distribution of labor force by industries and occupations, shortage of labor and especially of skilled labor are the most important among them. Characteristic of the nazi régime were, however, the methods used for mastering these problems. Dr. Hamburger shows the trend which these methods followed, beginning with administrative regulations and mild compulsion and ending with rigid regimentation.

The story is told by Dr. Hamburger in a lucid and condensed way, and most of the readers will agree with the statement that the labor market policy of Nazis rests upon their "fundamental philosophy, a philosophy in which war itself is a mere incident." Some readers may, however, object that it is but natural if the nazi labor policy were in alignment with the political ideas of nazism. What makes the labor policy of Nazis particularly interesting and instructive for those who do not share their philosophy is the technique they develop for achieving aims toward which all nations are aspiring. The crucial question, whether and to what extent these aims may be achieved at a price short of destroying democratic freedom, is not elaborated in the reviewed pamphlet.

Dr. Hamburger, a former professor of the University of Geneva, is now with the Brookings Institution.

W. S. WOYTINSKY

HARBISON, F. H. *Seniority policies and procedures as developed through collective bargaining*. (Princeton: Princeton Univ. Industrial Rel. Sect. 1941. Pp. 63. \$1.)

KNOWLES, A. S. *Merit rating in industry*. Northeastern Univ. pub. bull. no. 1. Boston: Northeastern Univ. 1940. Pp. 41. Gratis.)

- LESTER, R. A. *Economics of labor*. (New York: Macmillan. 1941. Pp. xv, 913. \$3.75.)
- LOVETT, R. M. *The middle class and organized labor*. L.I.D. pamph. ser. (New York: League for Industrial Democracy. 1940. Pp. 32. 10c.)
- MORGAN, R. *Arbitration in the men's clothing industry in New York City: a case study of industrial arbitration and conference method with particular reference to its educational implications*. Contribs. to educ. no. 823. (New York: Bur. of Pubs., Teachers Coll., Columbia Univ. 1940. Pp. viii, 153. \$1.85.)
- MYERS, G. E. *Principles and techniques of vocational guidance*. McGraw-Hill ser. in educ. (New York: McGraw-Hill. 1941. Pp. 389. \$3.)
- RUBIN, R., compiler. *Index to labor articles*. (New York: Rand School of Soc. Sci. 1940. Pp. 8, mimeographed.)
- RUSSELL, JOHN DALE, editor. *Student personnel services in colleges and universities*. Proc. of Inst. for Administrative Officers of Higher Institutions. (Chicago: Univ. of Chicago Press. 1941. Pp. 309. \$2.50.)
- SCHNEIDER, F. H. *Patterns of workers' education: the story of the Bryn Mawr summer school*. Introduction by Hilda W. Smith. (Washington: Am. Council on Public Affairs. Pp. 158. \$2.50, cloth; \$2, paper.)
- SLICHTER, S. H. *Economic factors affecting industrial relations policy in national defense*. Industrial rel. monog. no. 6. (New York: Industrial Rel. Counselors. 1941. Pp. 112. \$1.50.)
- In twenty-one brief sections of from one to five pages, Professor Slichter succeeds in giving a remarkably comprehensive statement of the labor situation and problems of labor policy relating to the defense program.
- SLOCOMBE, C. S. *Skilled workers for defense industries; a skilled labor supply study*. (New York: Personnel Res. Federation, 60 E. 42d St. 1940. Pp. 79. \$2.)
- STARR, M. *Workers' education today*. L. I. D pamph. ser. (New York: League for Industrial Democracy. 1941. Pp. 48. 15c.)
- Strong, E. D. *The Amalgamated Clothing Workers of America*. (Grinnell, Iowa: Herald-Register Pub. Co. 1940. Pp. 307. \$2.50.)
- WIECK, EDWARD A. *The American Miners' Association: a record of the origin of the coal miners' unions in the United States*. (New York: Russell Sage Found. 1940. Pp. 330. \$2.)

The results of Mr. Wieck's resourceful research justify his conclusion that this union (1861-1867) merits more than the line or less accorded it in labor histories. His study adds considerably to the information available in little known previously published histories of coal unionism, and throws light on community and employer attitudes in the coal areas of Illinois, Missouri and Pennsylvania. He has proved the sound trade union policy of the organization and, while he can trace no direct connection between them, its influence on the succeeding predecessors of the United Mine Workers. His research, however, does not justify the statement made by the Director of the Department of Industrial Studies of the Foundation in her introduction, as to the direct line between the Association and industrial unionism in mass production under the C.I.O. For Mr. Wieck's knowledge of mining—he was himself a miner active in the Illinois union—and his research show that coal mining at the time was virtually limited to a single craft, and that the Association devoted itself rather more to the craft than to the interests of the mine laborers.

Mr. Wieck himself is not convincing in his claim that the Association was more significant to the development of American unionism than its con-

temporaries in the other basic industries. The molders, under Sylvis, did not turn to producers' coöperation until after serious setbacks in trade union struggles; the same is true of the machinists' reliance on Ira Stewart's eight-hour legislation panacea. These deviations from sound union policy came after the dissolution of the miners' association and were the result of the same economic influences.

The study, while not giving a complete picture, is all the more remarkable in view of the fact that no trace could be found of union records or of the *Weekly Miner*, a journal listed by its contemporaries as important. The interesting documentary material presented in an appendix was gathered from widely scattered sources, the discovery of which must be credited to Mr. Wieck's intimate knowledge of mining communities and his care as a research worker.

ELSIE GLÜCK

WINANT, J. G. *A report to the governments, employers and workers of member states of the International Labour Organisation*. (Montreal: Internat. Labour Office. 1941. Pp. 16.)

WUNDERLICH, F. *British labor and the war*. Stud. on war and peace, no. 8. Social Res. Suppl. iii. (New York: New School for Social Research. 1941. Pp. v, 67. 40c.)

Addresses on industrial relations, 1940. (Ann Arbor: Univ. of Michigan. 1940. Mimeographed. \$1.)

The American Labor Press: an annotated directory. Introduction by John R. Commons. (Washington: Am. Council on Public Affairs. 1940. Pp. vii, 120. \$2.)

Average hourly earnings in the drug, medicine, and toilet preparations industry. (Washington: U. S. Dept. of Labor, Bur. of Labor Stat. 1941. Pp. 19.)

Commonwealth of Pennsylvania: Pennsylvania labor and industry review, January, 1941. (Harrisburg, Pa.: Dept. of Labor and Industry. 1941. Pp. 90.)

Community employment problems under defense; a memorandum of the Council for Democracy. (Washington: Am. Council on Public Affairs. 1941. Pp. 23.)

Earnings and hours in the iron and steel industry, April, 1938. Part. 1. Hourly earnings. Part 2. Occupational differences. *Annual earnings in the iron and steel industry, 1937*. (Washington: U. S. Dept. of Labor, Bur. of Labor Stat. 1941. Pp. 51.)

Earnings and hours in the portable-lamp and lamp-shade industries, February and March, 1940. (Washington: U. S. Dept. of Labor, Bur. of Labor Stat. 1940. Pp. 15.)

Entrance wage rates of common laborers, July, 1940 (Washington; U. S. Dept. of Labor, Bur. of Labor Stat. 1941. Pp. 24.)

REYNOLDS, L. G. and THE LABOR COMMITTEE. *Labor and national defense: a survey of the special labor problems arising from America's defense activities and a program for action. The factual findings by LLOYD G. REYNOLDS; The program by THE LABOR COMMITTEE*. (New York: Twentieth Century Fund. 1941. Pp. xiii, 130. \$1.)

Labor laws—federal. (Chicago: Commerce Clearing House. 1940. Pp. 145. \$1.)

Labor's rights in the United States; an outline for teachers and students. (New York: Workers Defense League, 112 E. 19th St. 1941. Pp. 36. 15c.)

The labour situation in Great Britain. A survey: May-October, 1940. (Washington: Internat. Labour Office. 1941. Pp. 56. 25c.)

List of American trade union journals and labor papers currently received by

- the Department of Labor library.* (Washington: U. S. Dept. of Labor Lit. 1941. Pp. 32, mimeographed.)
- Maximum hour legislation in France, 1936-1940.* (Washington: U. S. Dept. of Labor, Wage & Hour Div. 1941. Pp. 70, mimeographed.)
- National Labor Relations act: hearings, 76th Cong., 3rd sess., pursuant to H. Res. 258 (76th Cong.), creating a select committee to investigate the National Labor Relations Board.* Vols. 24-30. (Washington: House Spec. Committee to Investigate NLRB. 1940. Vol. 24, pt. 1, 25c., pt. 2, \$1.50; vols. 25, 26, 20c. each; vol. 27, 15c.; vol. 28, 30c., suppl., 10c.; vol. 29, 30c.; vol. 30, 10c.)
- National Labor Relations act: Part 1. Report submitted by Mr. Smith of Virginia, December, 1940. (76th Cong., 3rd sess.)* (Washington: Supt. Docs. 1941. Pp. 172. 20c.)
- . *Part 2. Minority views pursuant to H. Res. 258, 76th Cong.* (Washington: Supt. Docs. 1941. Pp. 3. 5c.)
- Outline of industrial relations policies in defense industries.* Res. rep. ser., no. 62. (Princeton: Princeton Univ. Industrial Rel. Sect. 1940. Pp. 47. 75c.)
- Reducing fluctuations in employment; experience in 31 industries.* Stud. in personnel pol. no. 27. (New York: Nat. Industrial Conf. Board. 1940. Pp. 60.)
- Regulating hours of labor in Great Britain.* (Washington: U. S. Dept. of Labor, Wage and Hour Div. 1941. Pp. 21, mimeographed.)
- Salaries and hours of labor in municipal fire departments:* Vol. 1. *New England cities*; Vol. 8. *Mountain Division cities.* Bur. of labor stat. bull. 684, vols. 1 and 8. (Washington: U. S. Dept. of Labor. 1940. Pp. 31; 22. Vol. 1, 10c; vol. 8, 5c.)
- Union wages and hours in the bakery industry, June 1, 1940.* (Washington: U. S. Dept. of Labor, Bur. of Labor Stat. 1941. Pp. 8.)
- Union Wages and hours in the building trades, June 1, 1940.* (Washington: U. S. Dept. of Labor Bur. of Labor Stat. 1941. Pp. 30.)
- Union Wages and hours of street-railway employees, June 1, 1940.* (Washington: U. S. Dept. of Labor, Bur. of Labor Stat. 1941. Pp. 12.)
- Wage and hour division, U. S. Dept. of Labor: annual report for 1940.* (Washington: Supt. Docs. 1941. Pp. 223. 30c.)
- Wages and hours in the jewelry industry, February, 1940.* (Washington: U. S. Dept. of Labor, Bur. of Labor Stat. 1940. Pp. 17.)
- Women workers in their family environment.* Women's bur. bull. no. 183. (Washington: U. S. Dept. of Labor. Pp. 82. 15c.)

Money, Prices, Credit, and Banking

- Government Agencies of Consumer Instalment Credit.* By JOSEPH D. COPPOCK. Stud. in consumer instal. finan. No. 5. (New York: Nat. Bur. of Econ. Res. 1940. Pp. xxii, 216. \$2.50.)
- Industrial Banking Companies and Their Credit Practices.* By RAYMOND J. SAULNIER. Stud. in consumer instal. finan. no. 4. (New York: Nat. Bur. of Econ. Res. 1940. Pp. xxi, 192. \$2.00.)
- The Pattern of Consumer Debt, 1935-36; a statistical analysis.* By BLANCHE BERNSTEIN. Stud. in consumer instal. finan. no. 6. (New York: Nat. Bur. of Econ. Res. 1940. Pp. xviii, 237. \$2.50.)

Sales Finance Companies and Their Credit Practices. By WILBUR C. PLUMMER and RALPH A. YOUNG. Financial res. program. Stud. in consumer instal. finan. no. 2. (New York: Nat. Bur. of Econ. Res. 1940. Pp. xxiii, 298. \$3.00.)

Under a financial grant from the Association of Reserve City Bankers and the Rockefeller Foundation, the National Bureau of Economic Research in 1938 began a series of studies in the general field of consumer instalment financing. The four volumes listed here constitute a part of the findings in this large field. It may be said, in general, that all these studies place emphasis upon the factual and descriptive aspects of instalment finance rather than upon a critical and analytical appraisal of the institutions currently providing such credit. They present a compendium of fact which may give a background for appraisal and philosophical generalization and in no sense attempt to deduce conclusions as to the adequacy with which the institutions work or the relative value of existing facilities in contrast with others that might be suggested. In this presentation the authors have provided a factual basis that should aid in the formulation of financial policy, a policy they do not attempt to prescribe.

Each volume is a model in clear presentation, the salient points and general picture being presented in a summary which is followed by a detailed picture that is clarified by numerous statistical data and charts. Probably most students of consumer instalment finance will limit themselves to an examination of these summary chapters. One who wishes a bill of particulars on any special aspects of the problem, however, may find it in the following chapters. Because of the nature of the work this review will be limited to some of the more significant findings of each volume.

In volume 2 Messrs. Plummer and Young define sales finance companies as "middlemen" between producers and dealers and between dealers and consumers, providing the funds that make the transition possible (pp. 1 and 40). The extent of this type of financing is indicated by the estimate that in 1937 retail dealers extended nearly \$4,300,000,000 in instalment credit and half this amount was provided by sales finance companies (p. 2). Nearly 5,900,000 non-relief families (one-fourth of total families) had in 1935-1936 a change in the amount of retail instalment debt. Average losses by six month intervals in a four-year period for auto paper varied from one-half to two per cent of the paper liquidated (p. 12). For diversified financing in 1938 the down payment averaged ten per cent. Repossessions for the appliance sales through the Electric Home & Farm Authority showed an inverse correlation with the income of purchasers (p. 16). Financing charges in 1935-1938 for new cars ranged from twelve to twenty per cent and on used cars from eighteen to thirty-seven per cent. Earnings on capital invested in finance companies were 7.9 per cent for independent companies and somewhat lower for factory controlled

companies. These figures indicate that sales finance companies have assumed an importance to the economy that justifies examination and appraisal.

Professor Saulnier in volume 4 traces the history of industrial banking from the beginning of the Morris Plan Bank in Norfolk, Virginia, in 1910. He shows that in 1938 industrial banking comprised 410 units which loaned from 375 to 425 million dollars during the year. The companies first dealt only in co-maker loans but have branched out into loans on single name and on collateral security, as well as into sales finance business. The charge-off for ten large companies in 1929-1938 was less than one per cent of the volume of loans. Profits of Morris Plan banks for the period 1922-1938 averaged ten per cent on owners' equity. These banks serve the double function of promoting savings and lending to consumers. Perhaps the most significant observation, from the social point of view, is that more than half the loan volume comes from former borrowers (p. 99).

Volume 5 on Government Agencies of Instalment Consumer Credit, by Coppock, is limited to a study of lending by the Federal Housing Administration and by the Electric Home & Farm Authority. The former was designed to promote property improvement and the latter to assist in the purchase of electric appliances from approved dealers and coöperating utilities. The F.H.A. was aimed to relieve unemployment and to reduce the cost of financing. The Administration obligated itself to insure up to twenty per cent of the loans made for a period not over five years at an interest rate of not more than five per cent. Volume of loans from August, 1934, to April, 1937, aggregated \$560,000,000. The author is uncertain as to how much this lending stimulated improvements and reduced costs; he is of the opinion that the chief effect was to educate bankers in making small loans on an amortization basis.

The Electric Home & Farm Authority was created by executive order to remove obstacles to the wider use of electricity: high electric rates, heavy finance charges and lack of knowledge of electric devices. By June, 1938, the Authority had made 74,095 contracts aggregating \$11,640,452. Funds were derived from bank loans. Net profit on invested capital was 1.1 per cent in 1936-1937 and 4.2 per cent in 1937-1938. For the year 1937 repossessions were only 7.4 per cent of sales. This agency helped introduce bankers into consumer lending.

Blanche Bernstein in volume 6 presents *The Pattern of Consumer Debt, 1935-1936*. This is an analysis of 60,000 expenditure schedules of non-relief families for the year 1935-1936. One-fourth of the families during this period had a net change in instalment debt. This increase is attributed largely to a higher standard of living in anticipation of larger income in an expansion year. The author traces the changes in instalment debt for furniture, automobiles, electric equipment and radios. The data used in this study were based on a Works Progress Administration project of 1936 for 51 cities, 140 villages and 66 farm counties in 30 states.

Knowledge of the factual basis presented in all these volumes should promote wise economic policy.

CLYDE OLIN FISHER

Wesleyan University

NEW BOOKS

- ARNDT, E. H. D. *Peoples banks in South Africa*. Pubs. of Univ. of Pretoria, ser. no. iii: arts and soc. sci. no. 10. (Pretoria: J. H. de Bussy. Pp. 42. 2s.)
- BERGENGREN, R. F. *Credit union, North America*. (Madison, Wis.: Credit Union Nat. Assoc., 1342 E. Washington Ave. 1940. Pp. 397. \$2.)
- CRAGG, A. *Do you need some money? consumer credit as a means to economic stability*. (New York: Harper. 1941. Pp. xiii, 271. \$2.25.)
- KISER, F. H. *The hidden power of money*. (Los Angeles: Wetzel. 1941. Pp. 305. \$2.)
- LEBNER, A. *What we ought to know about credit unions*. (Madison, Wis.: Credit Union Nat. Assoc. 1940. Pp. 15.)
- MEGRAH, M. *The organization and functioning of branch banking in England and Wales*. (New York: Am. Economists Council for the Study of Branch Banking. 1941. Pp. 38.)
- SIMPSON, W. H. *The small loan problem in South Carolina*. (Columbia: Univ. of South Carolina, Ext. Div. 1940. Pp. 59.)
- WARREN, R. B. *The search for financial security*. (New York: Columbia Univ. Press. 1940. Pp. vi, 91. \$1.25.)

This book represents one of the courses of lectures offered in the 1940 Summer School at Columbia University, designed "to summarize" and "relate" recent contributions in the social sciences, especially those ideas "significant in shaping public policy."

According to Professor Warren, "The whole course of economic history is the record of an increasing search for security, the adoption of ideas designed to provide security, and of the incorporation of those ideas into institutions . . ." (p. 72). This conclusion holds for changes of law and practice in the financial sphere. Although the unending search for security has often meant "repealing reforms and substituting their precise antitheses" (p. 71), the shortcomings of earlier measures provide no reason for sweeping condemnation, reforms are to be appraised in terms of their "functional adaptation to a given time and place" (p. 78). Even the Continental currency and the wildcat banking of later decades can be justified from this viewpoint. The Federal Reserve System, with its emphasis on "transactional" (commercial) loans, was aimed at the special problems of a pre-war environment. After the difficulties of 1920, banks sought safety and liquidity in the security markets; and after the debacle of 1929, in investments in government securities. From being purveyors of "credit," banks have become large suppliers of "capital," thus adding to the heavy institutional demand for "debt-capital" without there being a comparable increase in "ownership capital" (p. 65). Consideration of the changes in banking reform and practice leads Professor Warren to the conclusion that the "system of 1939 has protected itself against every danger disclosed in the past" (p. 31), especially against the risk of inconvertibility of deposits revealed in 1933.

In view of the book's general character and purpose, criticisms of technical minutiae are hardly appropriate. But it may not be unfair to mention a few points at which specialists will find grounds for controversy or further quali-

fiction: the cost theory of bank interest (p. 44); the definitions of "bank credit" and "capital" (pp. 42-43); the view that low interest rates are no evidence of oversaving (p. 77); the institutional concept of capital and interest (pp. 50-51).

Although the book is written primarily for a general audience, the thesis and the supporting evidence are of interest to all persons concerned with the course and direction of financial reform.

LEONARD L. WATKINS

WILCOX, U. V. *The bankers be damned*. (New York: Daniel Ryerson. 1940. Pp. 171. \$2.)

The author, Washington correspondent for *The American Banker*, presents a program of action for bankers.

The capital market of Japan. E. Asia Econ. intelligence ser., no. 4. (South Pasadena, Calif.: P. D. and Ione Perkins. 1940. Pp. 72. 65c.)

Director of the mint: annual report for the fiscal year ended June 30, 1940, including report on the production of the precious metals during the calendar year 1939. (Washington: Supt. Docs. 1940. Pp. 110. 15c.)

Federal Home Loan Bank Board: annual report for the period July 1, 1939, through June 30, 1940, covering operations of the Federal Home Loan Bank System, Federal Savings and Loan Associations, Federal Savings and Loan Insurance Corporation, Home Owners' Loan Corporation. (Washington: Supt. Docs. 1941. Pp. 262. 25c.)

How to organize teacher credit unions. (Madison, Wis.: Credit Union Nat. Assoc. 1940. Pp. 31. 15c.)

Measures provisoires pour le règlement des paiements entre la Suisse et différents pays. (Basle: Banque des Règlements Internationaux. 1940. Pp. 86.)

Money and banking. (New York: Am. Inst. of Banking, 22 E. 40th St. 1940. Pp. 548. \$3.50.)

Ten close-ups of consumer credit. Credit union sect. circ. no. 25. (Washington: Farm Credit Admin. 1940. Pp. 47. 15c.)

Public Finance, Taxation, and Tariff

NEW BOOKS

BUEHLER, ALFRED G. *Public finance*. 2nd. ed. (New York: McGraw-Hill. 1940. Pp. xx, 846. \$4.)

In this edition of his *Public Finance*, Professor Buehler has done a work of genuine revision. Changes include four new chapters and marked internal changes within many of the other chapters. New chapters deal with federal and state grants, accounting and financial reporting, regulatory taxation, and budgetary procedure. This second edition contains two hundred and fourteen more pages than were in the first edition. More than one-half of the volume is devoted to topics other than taxation.

The state general sales tax is more fully treated, and the author's opinion of this tax appears still to be unfavorable. He is adverse also to the special taxation of chain stores, although it is his general conclusion that "regulatory taxation is neither altogether desirable nor entirely undesirable." On the hotly disputed policies of pump-priming and redistribution of income he likewise fails to take an unqualified position. In the fields of the social sciences where truth though pursued is still uncaptured it is perhaps more scholarly not to be

dogmatic. The chapters dealing with public borrowing give the debt history of the United States, as well as an account of depression finance, down to 1940. The present national defense program lends special interest to his well-balanced discussion of the financing of war.

Besides its improved usefulness as a textbook, this work by Professor Buehler can be commended to the "man-on-the-street" who may wish to learn something of the principles of government finance because of their significance in these days of unprecedented government expenditures.

E. T. MILLER

BUEHLER, A. G., editor. *Billions for defense*. Annals, vol. 214. (Philadelphia: Am. Acad. of Pol. and Soc. Sci. 1941. Pp. 219. \$2.50; \$2, paper.)

"Articles discussing the question: 'How can the American people pay the cost of rearmament?'"

CONNELLY, W. F. *Income tax manual for New York State, for residents and non-residents*. 1941 ed. (New York: Harian Pubs. 1941. Pp. 28. 50c.)

FORD, R. S. and SHEPARD, E. F. *The Michigan retail sales and use taxes*. Mich. govt. stud., no. 5. (Ann Arbor: Univ. of Michigan Bur. of Govt. 1941. Pp. 154. 75c.)

FRIEDRICH, C. J. and MASON, E. S., editors. *Public policy: a yearbook of the Graduate School of Public Administration, Harvard University, 1941. Vol. 2.* (Cambridge: Harvard Univ. Grad. School of Pub. Admin. 1941. Pp. viii, 458. \$4.)

Part I: Budgetary and fiscal problems. I—"The government and the Bank of France," by Karl R. Bopp; II—"Budgetary symbolism," by Harvey S. Perloff; III—"The investment budget," by Spencer Thompson; IV—"The formulation of the federal budget," by Robert H. Rawson; V—"Deficit finance—the case examined," by Benjamin Higgins and Richard A. Musgrave; VI—"Foreign trade policy in the business cycle," by William A. Salant; VII—"The effect of governmental expenditures and tax withdrawals upon income distribution, 1930-1939," by Charles Stauffacher; VIII—"How government buys: an appraisal," by Albert M. Freiberg; IX—"Three topics in comparative administration—organization of government departments, government corporations, expenditures in relation to population," by Arnold Brecht. Part II: Defense problems and miscellaneous. I—"The new antitrust procedure as illustrated in the construction industry," by Corwin D. Edwards; II—"The historical and comparative background of the Hatch law," by Otto Kirchheimer; III—"Controlling broadcasting in wartime: a tentative public policy," by Carl J. Friederich; IV—"Administrative planning for national defense," by Capt. O. L. Nelson.

GEORGE, H. *Protection or free trade*. Reprint of 1886 ed. (New York: Robert Schalkenbach Found. 1940. Pp. 335. \$1.)

GUSHING, H. G. *A study of the sales tax with special reference to the Missouri law of August, 1935*. Univ. microfilms pub. no. 197. (Ann Arbor: Univ. of Michigan Microfilms. 1940. Pp. 244. \$3.05.)

HAENSEL, P. *The place of Illinois in a rational scheme of tax reform*. (Evanston, Ill.: Chandler's Bookstore. 1941. Pp. 35. 75c.)

IYENGAR, S. K. *"British" and "Indian" finance*. (Hyderabad: Author, Nizam College. 1940. Pp. viii, 53.)

LASSER, J. K. *Your corporation tax*. 1941 ed. (New York: Simon and Schuster. 1940. Pp. 128. \$1.)

LELAND, S. E., editor. *State-local fiscal relations in Illinois*. (Chicago: Univ. of Chicago Press. 1941. Pp. xxi, 453. \$2.)

The local government of Illinois may be taken as a classic example of what Sidney Webb called "the anarchy of local autonomy." There are thousands of independent units with overlapping areas so that a given piece of property pays taxes to from three to nine separate authorities, each levying rates with little regard to the others. Each body is governed by numerous uncoded statutes passed under various circumstances in the past century, with the result that there is no great uniformity in activities, responsibilities of officers, or financial procedures. While the mere number of taxing units defies effective control by the electorate, no adequate substitute in the form of central supervision has been provided, except incidentally to the grants-in-aid or where local officials voluntarily accept the advice of state administrators. Statutes may be enforced by the courts, but legal action is slow and uncertain even in cases of flagrant abuse. (*Cf.* pp. 333-340.)

The literature of public finance and public administration contains many generalized descriptions of local government practice and ample prescription for its improvement, though the conclusions have not been supported by enough concrete investigations, while casual prescription is easier than the examination of innumerable statutes and records. This monograph is significant, not for the novelty of its conclusions, but for the completeness of its data. It presents a careful analysis of the statutes governing state financial assistance, local appropriations, taxes, debts, budgets, accounting and financial procedure. Actual practice is illustrated by legal cases and historical and statistical data. There are normative suggestions but they are subordinated to fact-finding.

This report will greatly facilitate further research in Illinois fiscal problems, and will provide valuable data for more general studies. Similar investigations for other states are needed. The monograph is an interesting illustration of what can be accomplished by group research and coöperation between the universities and government offices. Several young writers whose dissertations would otherwise have gone unpublished are represented here because their work was directed toward a common end. Some of the contributors were able to obtain data more easily as part of the staff of the tax commission than they would have been as private students, while publication in a university series freed them from the limitations of the official report.

HENRY J. BITTERMANN

McMULLEN, S. Y. *Federal income tax accounting*. 2nd ed. Complete accounting course. (New York: Ronald. 1940. Pp. 446. \$5, loose-leaf.)

RYAN, H. M. *Federal income tax guide, 1941*. (New York: State Law Reporting Co. 1940. Pp. 16. 10c.)

STEWART, MAXWELL S. *How shall we pay for defense?* Pub. affairs pamph. no. 52. (New York: Public Affairs Committee. 1941. Pp. 30. 10c.)

VOGEL, M. and BERGNER, R. W., editors. *1941 manual of federal income and excess profits tax procedures*. 27th an. ed. (Chicago: LaSalle Extension Univ. 1941. Pp. 319, mimeographed. \$2.50.)

WYCKOFF, V. J. and WALKER, W. P. *The state fiscal capacity of Maryland and other selected states*. Bull. no. 438. (College Park: Univ. of Maryland Agric. Exp. Sta.) 1940. Pp. 165-204. Gratis.)

- Budget of United States government for the fiscal year ending June 30, 1942.* (President of the United States, Budget Bur.) Washington: Supt. Docs. 1941. \$2.)
- Budget of United States government for fiscal year ending June 30, 1942, budget message of the President and summary budget statements.* (Washington: Supt. Docs. 1941. 35c.)
- Combined statement of receipts, expenditures, and balances of United States, for fiscal year ending June 30, 1940.* (Washington: Treasury Dept., Bookkeeping and Warrants Div. 1940. Pp. 631. \$1.50.)
- Federal tax coordinator; 2 vols.* (New York: Research Inst. of Am., 292 Madison Ave. 1940. Pp. 3000. \$80 for year's service, loose-leaf.)
- Financing the defense program.* Defense pubs. 6. (New York: Nat. Econ. League. 1941. Pp. 22. Gratis.)
- Financing national defense.* Mich. pamph., no. 10. (Ann Arbor: Univ. of Michigan Bur. of Govt. 1941. Pp. 28. 10c.)
- Fiscal capacity of the states: a source book.* 3rd ed., rev. 1940. Bur. (of res. and stat.) mem. no. 43. (Washington: Social Security Board. 1941. Pp. 406, mimeographed.)
- Haitian finances: supplementary agreement between the United States of America and Haiti, further modifying the agreement of August 7, 1933.* Exec. agreement ser. 46. (Washington: U. S. State Dept. 1941. Pp. 2. 5c.)
- New Hampshire state tax commission: thirtieth annual report for tax year 1940.* (Concord, N.H.: State Tax Commission. 1940. Pp. 419.)
- Public debt: hearings, 77th Cong., 1st sess., on H. R. 2653, bill to increase the debt limit of the United States, to provide for the federal taxation of future issues of obligations of the United States and its instrumentalities, and for other purposes, January 29-30, 1941.* Rev. print. (Washington: House Ways and Means Committee. 1941. Pp. 106. 15c.)
- Public Debt act of 1941: act (H. R. 2959) to increase the debt limit of the United States, to provide for the federal taxation of future issues of obligations of the United States and its instrumentalities, and for other purposes. Approved February 19, 1941. (77th Cong., public law 7.)* (Washington: Supt. Docs. 1941. 5c.)
- Public Debt act of 1941: hearing, 77th Cong., 1st sess., on H. R. 2959 to increase the debt limit of the United States, to provide for the federal taxation of future issues of obligations of the United States and its instrumentalities, and for other purposes, February 12, 1941.* (Washington: Senate Finance Committee. 1941. Pp. 47. 10c.)
- Secretary of the Treasury: annual report on the state of the finances for fiscal year ended June 30, 1940.* (Washington: Supt. Docs. 1941. Pp. 873. \$1.)
- Starches, dextrines, and related products.* U. S. Tariff Commission, rep. 138, 2nd ser. (Washington: Supt. Docs. 1940. Pp. 182. 30c.)
- Treasury decisions amending or relating to Regulations 103, promulgated under the income tax provisions of the Internal Revenue Code.* (Washington: U. S. Treasury Dept. Internal Revenue Bur. 1940. Pp. 71. 10c.)
- United States master tax guide, 1941; based on the Internal Revenue Code and the regulations, rulings and decisions to 1941.* (New York: Commerce Clearing House. 1941. Pp. 256. \$1.)
- United States tariff commission: twenty-fourth annual report.* (Washington: Supt. Docs. 1940. Pp. 61. 10c.)

Population and Migration

Population, a Problem for Democracy. By GUNNAR MYRDAL. (Cambridge: Harvard Univ. Press. 1940. Pp. xvi, 237, \$2.00.)

Probably John Stuart Mill thought that almost the last word had been said on population *theory*; that what remained to be discovered was merely the extent to which birth-control methods could be popularized. This view continues to be widely prevalent among economists, and differential birth- and death-rates are indeed factors of great significance in human relations. Long ago, to be sure, Henry George, Edgeworth, Wicksell, and others showed that the optimum population of any nation or region is relative to its resources and technology; moreover the military import of the contrast (*e.g.*) between French and German population trends was an old story even by 1914. Continued decreases in national fertility rates have produced the present-day flux of social theories and policies relative to investment, maternal and child welfare, and other parts of the "declining population" complex.

A milestone was placed on this road by the Swedish government's appointment in 1935 of a Population Commission, whose seventeen reports have profoundly influenced social legislation. Professor Myrdal's Godkin Lectures at Harvard discussed various problems raised by his distinguished cosmopolitan research and practical contacts, and the little volume here reviewed gives the substance of these lectures. Though the factual material relates to Sweden, Myrdal's incisive analysis makes his lectures relevant at nearly every point to other societies attempting democratic ways of life.

What population problems does he expound, and how? We find here a minimum of technical apparatus—no tables or charts, virtually no footnotes—but fortunately an index. An omission the wisdom of which is less apparent is specific indication of what the Swedes have done besides talk about their population outlook; a few more concrete particulars might well have replaced some of the abstract statements. For most readers Mrs. Myrdal's article in the *International Labour Review* (June, 1939) is an invaluable supplement to these lectures by her husband.

One feature of the latter is a concise and acute treatment (chapter 6) of some major economic implications of the slackening rate of population growth, and the probable actual decline. Myrdal argues that "the expansionist capitalistic system of private enterprise had as one of its prerequisites a progressive population" and that after not many years the policies he recommends can at best only arrest a democratic population's decline. He favors increased government spending for child and maternal welfare, *e.g.*, subsidized housing. One reason he prefers such assistance in kind to the "child endowment" cash grants favored by many English-speaking reformers is that state house construction can be modulated in relation to the

business cycle. His enthusiasm is much greater for socialism in consumption than in production—especially in an aging population. He is apprehensive that lowered investment in urban types of industries may raise new barriers against the flow of people from agricultural regions into the cities, and thus promote a vicious circle of poverty and fertility on the farms.

More of the space of the book is occupied by a fresh and realistic study of the social psychology and ideals involved. Various pressure-group influences are mentioned, and we may surmise also that the Swedish farmer was benefited by the increased supplies of protective foods made available at public expense (*e.g.*, through free meals at school), which is one expression of the current population policy. The intelligent conservative finds that his traditional reverence for the family now demands a more positive policy of encouragement rather than of mere repression of contraceptive knowledge, says Myrdal, in whose program birth control retains an important place. Radicals require some conversion, too: their demands for "soaking the rich" for new social services (including old-age benefits) are largely accepted, yet low earners with two children or less are also called upon to pay a share of the new taxes required to assist other people voluntarily to be more fecund. No doubt it is due in no small measure to the persuasiveness of the Myrdal brain trust that a good deal of the latter type of taxation has been accepted.

Z. C. DICKINSON

University of Michigan

Studies in American Demography. By WALTER F. WILLCOX. (Ithaca, N.Y.: Cornell Univ. Press. 1940. Pp. xxx, 556. \$4.50.)

For some reason, probably the backwardness of the registration of births and deaths in the United States, this country, despite the fact that it has long supported the most elaborate census in the world, has until recently produced very few outstanding vital statisticians or demographers. Prior to the past decade or so, Willcox was almost alone in this country as a scientific demographer who attained real international reputation and distinction.

Willcox rightly points out that statistical knowledge of the vital processes of a population can be had only where there are available both adequate census and registration data. Our ability to make scientific demographic analyses of population movements, especially birth, death, and morbidity rates, depends not only on the completeness and detail of census enumeration but also on the fullness and accuracy of registration of vital phenomena. One of the first things the student of population statistics has to learn is to take heed of the probable range of error in the fundamental data supplied by the census and by the state registration bureaus. To single out only one of Willcox's studies, the student could be given no better warning

against taking official statistics at their face value than his paper on the "Development and Use of American Registration Statistics." There is no better introduction to the shortcomings of our American registration system. Certainly, the interpretation of registration statistics is not for the layman.

The same is true, in lesser degree, as Willcox well notes, of census tables. The Census Bureau has apparently abandoned the issuance of interpretative studies or supplementary reports as indispensable aids to the inexperienced general student in getting at the meaning and significance of census and registration statistics. With Professor Willcox, we regret this change in policy. Many of the country's leading experts have had a share in these analytical studies in past decades. From the Eleventh Census on to 1930, some of the most valuable of these have been contributed by Willcox.

Twelve of the studies of the present volume relate to American census statistics, eight to American registration statistics, and four to miscellaneous subjects. In addition there are appendices on definitions of statistics and of demography, and on the population of China. Finally, there is a bibliography of the author's more important publications. It is impressive, not only for the amount of work he has done in a pioneer field, but because it represents the lifetime interest of a scholar who has held unwaveringly to a clear-cut and definite purpose, the advancement of the science of demography in this country.

Since the main body of Willcox's work was accomplished, the analysis of vital statistics has entered on a new phase, both here and abroad. Thanks to new methods and refinements, all laborious and some mathematically abstract, we now know that stationary or declining population is in the not far-distant offing, unless there is a change upward in fertility rates. Whether certain economists and others are being unduly concerned over this prospect is not here in point. In any case we owe this new trend in analysis, with its new insight and its new (partly hypothetical) predictions, in no small measure to the earlier work of Willcox. The new development was foreshadowed long ago by such studies as Kuczynski's study of the "Fecundity of Native and Foreign-Born Population in Massachusetts" (*Quart. Jour. Econ.*, 1901-02) and Willcox's article on "The Change in Proportion of Children in the United States" (*Am. Stat. Assoc. Pub.*, 1910-11). The turning point came with the publication of Dublin and Lotka's article on "The Real Rate of Natural Increase," 1922, and Kuczynski's book, *The Balance of Births and Deaths*, 1928. Willcox has not taken part in these later analyses, no doubt because one of his major interests has been in the improvement of our basic statistical data. Happily there have been other competent analysts to take up and carry on this laborious but highly important work.

The Cornell University Press has performed a valuable service in publishing this volume. It will stand as a monument to the pioneering and

developmental period of American demography. It is far more than that, however, for nearly all these studies retain contemporary value. Instructors of classes in population and vital statistics will certainly wish to refer their students to them.

A. B. WOLFE

Ohio State University

Population Policies and Movements in Europe. By D. V. GLASS. (London: Oxford. 1940. Pp. vi, 490. \$6.00.)

Six of the eight chapters in this book are devoted to a detailed description and analysis of the efforts which have been made to control population growth in France, Belgium, Italy, Germany, Denmark, Norway, and Sweden, and of the conditions which have given rise to these efforts. The remaining two chapters deal with (a) the extent of, and the reasons for, the decline in fertility in England and Wales, (b) the decrease in population which is expected in the future in the absence of a population program, and (c) the problems which the decrease may bring. The appendix contains an excellent explanation of life tables, net and nuptial reproduction rates, "true" or "intrinsic" rates of natural increase, and the age composition of a "stable" population. There is an extensive "Notes" section, a selected bibliography, an index of subjects, and an index of persons and organizations.

In France and Belgium, it appears that the population program has had little effect on the birth-rate up to the present but that the 1939 French legislation might cause an important increase in the course of time. It provides an allowance per child which increases as the number of children increases, the total allowance to a family probably being large enough to cover the usual expenses for children if there are seven or more.

For Italy, the conclusions are that marriage loans may have slowed down the decrease in the marriage rate, that the slight rise in the birth-rate in 1937 was due less to the various inducements to have children than to the end of the Abyssinian War, and that the campaign *against* contraception was a good advertisement *for* it. The continued fall of fertility rates in industrial areas is increasing the differential between industrial and agricultural areas.

Since the nazi population program began in 1933, there has been a marked rise in marriage and fertility rates in Germany (the net reproduction rate was 69.8 in 1933, 93.4 in 1936, and 98.2 in 1939). The author believes the rise in the marriage-rate is due chiefly to an improvement in economic conditions. The rise in the birth-rate *could* be due entirely to the campaign against abortions, but it is believed that pro-child propaganda and economic inducements have played an important part.

The Swedish program, begun about 1933, has the best scientific base

(thanks largely to Professor and Mrs. Myrdal), is the least repressive, and provides economic inducements by transferring from the family to the state part of the cost of bearing and rearing children, rather than by giving cash allowances to the family. So far, the measures have not been on a scale sufficient to increase the birth-rate.

The fertility trend in England and Wales indicates that there will be a slight growth in population after 1940 and then a decrease of 15 to 40 per cent by the end of the century. Hence it is probable that an effort will be made to develop a program designed to raise the birth-rate or at least to check its decline. The author's discussion of the programs in other countries and the results obtained should be of great help in this connection. With the possible exception of Germany, and of France in 1939, the economic inducements have not covered a sufficient part of the expenses connected with children to affect birth-rates significantly.

Mr. Glass has done an excellent job in describing and analyzing the population programs of the countries mentioned. Since the United States is not far behind England in its population trend, the book should be almost as useful to Americans as to Englishmen.

A minor omission is the failure to mention Thompson's use of standardized ratios of children to women in computing "reproduction index" (p. 395). A minor error occurs in Table 41 where the "Net total female fertility rate" should be 954.716.

P. K. WHELPTON

Miami University

NEW BOOKS

BLEGEN, T. C. *Norwegian migration to America; the American transition.* (Northfield, Minn.: Norwegian-American Historical Assoc. 1940. Pp. 667. \$3.50.)

A companion volume to the author's *Norwegian Migration to America, 1825-1860.*

MAYER-DAXLANDEN, H. *The status of American citizenship and the future of immigration.* (New York: Savoy Book Pub., 63 Park Row. Pp. 61. \$1.)

STIX, R. K. and NOTESTEIN, F. W. *Controlled fertility.* (Baltimore: Williams & Wilkins. 1940. Pp. 200. \$3.)

VÖCHTING, F. *Die Binnenkolonisation in Italien.* Kieler Vorträge im Inst. für Weltwirtschaft an der Universität Kiel, heft 64. (Jena: Fischer. 1941. Pp. 27.)

WALSHAW, R. S. *Migration to and from the British Isles.* (London: Jonathan Cape. 1940. Pp. 94. 5s.)

With the assistance of passenger figures and supplementary official data, the author measures, analyzes and explains the net outward movement of native population from the United Kingdom to Europe, the Empire Overseas and the United States during the six years preceding 1930, and the net inward movement from that time to the outbreak of the present war. He shows how after 1930, when the United States closed its doors to immigrants, the movement of population from Eire to the United Kingdom increased to an estimated

yearly maximum of 32,300 in 1936, and how alien immigration to the United Kingdom grew during the past decade until by October, 1939, the number of registered aliens totalled 238,000. Government policy with respect to the admission, employment and naturalization of alien immigrants is briefly explained and a more liberal system of labor permits and naturalization is forecast. A chapter is devoted to assisted Empire emigration schemes which are credited with having been responsible for much of the population movement from the United Kingdom to Canada and more particularly to Australia and New Zealand during the 1920's. The suggestion is advanced that after the war the United Kingdom will reconsider its policy of assisting emigration because of declining home population, shortage of exportable capital and the progressive industrialization of the Dominions. The only available surplus for Empire settlement will be from Eire.

While the book contains much interesting and valuable material it would have been greatly improved by a concluding chapter summarizing the principal findings scattered through the work. It also suffers from the absence of any serious attempt to explore the possible factors in the post-war situation which might make for the overseas movement population from the United Kingdom. Even more disconcerting, however, are certain evidences of carelessness or superficiality. For example, on page 46 the author appears to attribute the intercensal decline of "the percentage British among the Canadian population in the decade 1921-31" solely to declining British immigration, while the major cause was differentially low fertility of the British races as compared with the non-Anglo-Saxons already resident in Canada. The percentages quoted refer to racial origins, not nativity. Again on pages 16 and 65 the "net reproduction rate" is improperly defined. The rates used *are* net rates but the definition given in each case is that of the gross rate of reproduction. Omissions and errors of the above sort tend to detract from the importance of the volume.

W. BURTON HURD

Admission of Chinese into the United States, January, 1941. (Washington: U. S. Dept. of State. 1941. Pp. 35. 15c.)

Interstate migration: hearings, 76th Cong., 3rd sess., pursuant to H. Res. 63 and H. Res. 491, to inquire into the interstate migration of destitute citizens, to study, survey, and investigate the social and economic needs and the movement of indigent persons across state lines. Part 2. Montgomery, August 14-16, 1940. Part 3. Chicago, August 19-21, 1940. Part 3. Lincoln, September 16-17, 1940. (Washington: House Select Committee to Investigate the Interstate Migration of Destitute Citizens. 1940. Pp. 399-811; 813-1346; 1347-1758. Pt. 1, 50c.; pt. 2, 60c.; pt. 3, 55c.)

Social Problems and Reforms

NEW BOOKS

BAUER, C. *A citizen's guide to public housing.* (Poughkeepsie, N.Y.: Vassar Coöp. Bookshop. 1940. Pp. 90. 60c.)

BRADY, D. and others. *Study of consumer purchases.* Urban and village ser., U. S. Dept. of Agric. misc. pub. no. 375. *Family income and expenditures, Southeast region.* Part 1, *Family income.* No. 396. *Family income and expenditures, five regions.* Part 2, *Family expenditures.* (Washington: Supt. of Docs. 1940. Pp. 394; 413. Pt. 1, 35c.; pt. 2, 40c.)

BROWN, C. Y. *Did God forget economics?* (Greenville, Pa.: Beaver Press. 1941. Pp. 107. \$1.35.)

COLEMAN, M. L. and THE HOUSING COMMITTEE. *Housing for defense: a review of the rôle of housing in relation to America's defense and a program for action. The factual findings by M. L. COLEMAN; The program by THE HOUSING COMMITTEE.* (New York: Twentieth Century Fund. 1940. Pp. xx, 198. \$1.50.)

This is essentially a policy guidebook to be followed by those who have the responsibility of instituting housing programs in the United States during the period of mobilization. As a guidebook it will doubtless be very useful, and the Twentieth Century Fund's foresight in getting it published early in the rearmament effort (September, 1940) deserves praise. On controversial points the following in general represent the authors' views: Wherever possible, private building should preclude federal building, efforts to build "temporary" dwellings should be minimized, prefabrication merits encouragement, and rents are to be controlled only as a last resort. The importance of adequate statistical housing data, of technical research, and of defense contract publicity are stressed.

In addition to the program the study includes a review of the housing experience during the first World War. The conclusion of the review is that "more than a year went by from the entry into the war to the time that effective action was taken on the housing question. . . . Action came too late to prevent the congestion, which at least might have been lessened by planning in advance." *Housing for Defense* will certainly have a rôle in guaranteeing more favorable experience during this war.

JAMES MCCREARY

COTTRELL, E. A. and others. *Pasadena social agencies survey.* (Pasadena, Calif.: Pasadena Community Chest, 120 N. Highland Ave. 1940. Pp. 420. \$1.)

DAVIS, M. M. *America organizes medicine.* (New York: Harper. 1941. Pp. 343. \$3.)

ELLIOTT, M. G. and MERRILL, F. E. *Social disorganization.* Rev. ed. (New York: Harper. 1941. Pp. 1102. \$3.75.)

HAEFNER, J. H. and others. *Housing America; a source unit for the social studies.* (Washington: Nat. Council for Soc. Stud. Pp. 80. 50c.)

KAPLAN, A. D. H. and assistants. *Study of consumer purchases: urban ser. bull. no. 645. Family expenditure in seven New England cities, 1935-36. Part 2. Family expenditure.* Bull. no. 646. *Family income in seven urban communities of the West Central-Rocky Mountain region, 1935-36. Part 1. Family income.* Bull. no. 649. *Family expenditure in four urban communities in the Pacific Northwest region, 1935-36. Part 2. Family expenditure.* (Washington: U. S. Dept. of Labor, Bur. of Labor Stat. in coöp. with WPA. 1941; 1939; 1940. Pp. x, 251; x, 436; x, 201. 25c.; 50c.; 20c.)

KOBBÉ, H. *Housing and regional planning.* (New York: Dutton. 1941. Pp. 233. \$3.)

KORSON, G. G. *Black land; the way of life in the coal fields.* Unitext program; way of life ser. (Evanston, Ill.: Row, Peterson. 1941. Pp. 72. 96c.)

KYRK, H. and others. *Study of consumer purchases. U. S. Dept. of Agric. misc. pub. no. 399. Family housing and facilities, five regions.* (Washington: Supt. Docs. 1940. Pp. 229. 25c.)

MARTIN, D. S. and others. *Study of consumer purchases: farm ser. U. S. Dept.*

of Agric. misc. pub. no. 383. *Family income and expenditures, Middle Atlantic, North Central and New England regions*. Part 1. *Family income*. (Washington: Supt. Docs. 1940. 262. 25c.)

OLSEN, O. E. W. *Post-war housing problems*. Geneva stud., vol. xi, no. 6. (Geneva: Geneva Res. Centre. New York: Columbia Univ. Press. Pp. 69. 40c.)

RATCLIFF, R. U. *The housing status of industrial and university employees in Ann Arbor*. Bur. of bus. res. rep. no. 5. (Ann Arbor: Univ. of Michigan, School of Bus. Admin. 1940. Pp. 44.)

REID, C. F. *Education in the territories and outlying possessions of the United States*. Contris. to educ. 825. (New York: Bur. of Pubs., Teachers Coll., Columbia Univ. 1941. Pp. xxv, 593. \$3.85.)

A remarkably competent and comprehensive survey and analysis. The value of each chapter is enhanced by sections covering the historical background, population, social and economic organization, and government and political status of each of the territories and possessions. One of the author's primary conclusions is that "the chief failure of educational administration is due to the lack of an educational philosophy based on the cultural, economic, and social conditions, and the peculiar needs and problems of each territory" (p. 563).

RYAN, J. A. *Social doctrine in action—a personal history*. (New York: Harper. 1941. Pp. vii, 297. \$3.)

SENIOR, C. *Democracy comes to a cotton kingdom; the story of Mexico's la laguna* (Mexico: Centro de Estudios Pedagogicos e Hispano Americanos. New York: League for Industrial Democracy. 1941. Pp. 56.)

SORENSEN, H. *The consumer movement: what it is and what it means*. Pub. of Inst. for Consumer Educ., Stephens Coll. (New York: Harper. 1941. Pp. xiii, 245. \$2.50.)

STAFFORD, P. T. *Government and the needy: a study of public assistance in New Jersey*. (Princeton: Princeton Univ. Press. 1941. Pp. xiv, 328. \$3.)

To the existing histories of public welfare in a dozen scattered states Professor Stafford has added his workmanlike story of public assistance in New Jersey. This contribution to the history of American public welfare is valuable as one more section of the structure, and likewise as a method of clarifying the complicated record of ancient practice which almost parallels chronologically the English Poor Law itself. Through the first two and a half centuries of New Jersey's history the author sketches the rough adaptation of that Poor Law to an industrial society which, except during severe cyclical depressions, provided employment for all but its social misfits. In contrast, the author points out that the unprecedented burden of unemployment during the past decade led to radical changes in the principles and scope of such aid, while in New Jersey much of the old administrative machinery was retained. Thus categorical relief and general relief continue to be dispensed by separate state agencies, although this decentralization leads to more or less administrative and jurisdictional overlapping. The very complexity of the state's pre-depression poor relief machinery tended to block efforts to substitute an integrated state authority, such as more "backward" states have recently created *de novo*.

To his analysis of past and current practice Professor Stafford has added a chapter on suggested lines of reform. The author's judicious appraisal is the outgrowth of his investigation of relief administration in New Jersey under the

joint auspices of the Brookings Institution and Princeton University, and is the third volume in the Cromwell Fund Studies in Government and Finance sponsored by the State and Local Government Section of Princeton University. Numerous tables, charts and graphs support the text.

ELINOR PANCOAST

TAYLOR, M. *The Jewish community of Pittsburgh, December, 1938: a sample study.* (Pittsburgh: Fed. of Jewish Philanthropies. 1941. Pp. iv, 195, mimeographed.)

TROELSTRUP, A. W. *Housing in the United States.* Unit stud. in Am. problems, North Central Assoc. of Coll. and Secondary Schools. (Boston: Ginn. 1941. Pp. 89. 48c.)

VAN KLEECK, M. and others. *Social work, peace and the people's well-being.* Soc. work today pamph. no. 7. (New York: Social Work Today. 1941. Pp. 48. 25c.)

WARNE, C. E. *The challenge of the consumer movement.* Social Action, vol. 6, no. 10. (New York: Social Action. 1940. Pp. 35. 15c.)

ZORBAUGH, G. S. M. *The consumer movement and business. The consumer conference of Greater Cincinnati, October 20, 1940.* (Columbus: Ohio State Univ. Bookstore. 1941. Pp. 15. 35c.)

The Carnegie Foundation for the Advancement of Teaching: thirty-fifth annual report, 1939-1940. (New York: Carnegie Found. for the Advancement of Teaching. 1941. Pp. 170.)

Changes in cost of living, December 15, 1940. (Washington: U. S. Dept. of Labor, Bur. of Labor Stat. 1941. Pp. 25.)

Child-welfare service under the Social Security act, development of program, 1936-38. Children's bur. pub. 257. (Washington: U. S. Dept. of Labor. 1940. Pp. 82. 15c.)

This bulletin includes a brief general review and state summaries of the major developments during the initial period of this pioneer program of federal and state coöperation in extending social services to children in rural areas.

Federal Works Agency: first annual report, 1940. (Washington: Supt. Docs. 1940. Pp. v, 451. 55c.)

Grants to states for maternal and child welfare under the Social Security act of 1935 and the Social Security act amendments of 1939, title 5, parts 1, 2, and 3, maternal and child-health services, services for crippled children, child-welfare services, services for crippled children, child-welfare services. Children's bur. pub. 253. (Washington: U. S. Dept. of Labor. 1940. 10c.)

Housing, the continuing problem. Issued by Nat. Resources Planning Board. (Washington: Supt. of Docs. 1940. Pp. 60. 10c.)

Housing legislation in the United States. (Washington: U. S. Dept. of Labor, Bur. of Labor Stat. 1941. Pp. 14.)

Public administration organizations; a directory of unofficial organizations in the field of public administration in the United States and Canada. Prepared by Public Administration Clearing House. (Chicago: Public Admin. Serv. 1941. Pp. 187. \$1.50.)

Retail prices—food, electricity, and gas, December, 1940. (Washington: U. S. Dept. of Labor, Bur. of Labor Stat. 1941. Pp. 29.)

Statistique de logement dans les grandes villes, 1928-1934. (Hague: L'inst. Internat. de Statistique. 1940. Pp. 170. 3 florins holl.)

Insurance and Pensions

NEW BOOKS

- ARNDT, E. H. D. *Insuring our insurance: a survey of insurance legislation with recommendations for the union.* (Pretoria, South Africa: Union Booksellers. 1941. Pp. 129.)
- ATKINSON, R. C. *The federal rôle in unemployment compensation administration.* (Washington: Soc. Sci. Res. Council Committee on Soc. Security. 1941. Pp. x, 192. \$2.)
- BENNER, C. L. *The current economic situation and its relation to life insurance.* (Wilmington, Del.: Continental Am. Life Insurance Co. 1940. Pp. 16.)
- CRANEFIELD, P. F. and others. *Social security and life insurance.* (Madison, Wis.: Security Press, 501 Insurance Bldg. 1940. Pp. 202. \$2.50.)
- MAGEE, J. H. *Property insurance.* (Chicago: Richard D. Irwin. 1941. Pp. 800.)

This is the third volume of Mr. Magee's insurance textbooks; the first covers general insurance; the second, life insurance (See *The American Economic Review*, June, 1939, p. 429). It is the most voluminous of the three and the most extensive on the subject ever published by a single American author. It is also one of the best. The author is able to offer both the experiences of an insurance professor and of an insurance practitioner. He avoids giving too many details and excels in picking out the important problems. The book contains more than what usually is called "property insurance." It includes liability and workman's compensation insurance. In this Magee has the courage to avoid the traditional, often controversial term "casualty insurance." The first seven chapters, covering almost 180 pages, may be called general insurance. The following 160 pages, chapters 8 to 16, contain fire insurance and side lines. Chapters 17 to 22, including 140 pages, deal with the treatment of transportation risks. Three hundred pages in eleven chapters are dedicated to the manifold other branches. It would not be correct to say all other branches, because there is nothing to be found, for example, on bank deposits or loan housing insurance, both administered by the federal government. That is the more surprising because crop insurance has been explained and the author is director of the Federal Housing Administration. To many readers, the selected references at the end of each chapter will be more than welcome as Magee proves to be acquainted with the literature and considers quotations worth while to an unusual degree. The reviewer regrets that the author prefers to explain facts and avoids adding his own opinion about important matters like the extension of all-risk policies or compulsory insurance, etc. Mr. Magee is too learned to be so reserved.

ALFRED MANES

- SAKMANN, M. and others, compilers. *An outline of foreign social insurance and assistance laws.* Social Security Board. Bur. of res. and stat. rep. no. 5. (Washington: Supt. Docs. 1940. Pp. 62. 15c.)
- Adequacy of unemployment compensation benefits in the Detroit area during the 1938 recession.* Employment sec. mem. 14. (Washington: Social Security Board. 1941. Pp. 72. 15c.)

Gives benefits rights acquired and used, reemployment after the exhaustion of benefits, and unemployment relief experience of beneficiaries who had exhausted their benefit rights.

Proceedings of the thirty-fourth annual convention of the Association of Life

Insurance Presidents, New York. December 5-6, 1940. (New York: Assoc. of Life Insurance Presidents, 1941. Pp. 261.)

Social Security Board: fifth annual report for the fiscal year ended June 30, 1940, with supplementary data July 1-October 31, 1940. (Washington: Supt. Docs. 1941. Pp. 208. 30c.)

Social Security yearbook for the calendar year 1939; annual supplement to the Social Security Bulletin. (Washington: Supt. Docs. 1940. Pp. 271. 50c.)

Chapter I—Significant events in the development of the Social Security program, 1934-39; Chapter II—Social and economic factors; Chapter III—Old-age and survivors insurance; Chapter IV—Employment security; Chapter V—Public assistance; Chapter VI—Financial aspects of social security; Chapter VII—Bibliographical notes; Chapter VIII—Publications of the Social Security Board. Also contains a full complement of informative tables and charts.

State of New York: eighty-first annual report of the superintendent of insurance for the year ended December 31, 1939. Vol. 2. Fire and marine insurance companies. Leg. doc. (1940) no. 34. (Albany: State of New York Insurance Dept. 1940. 174a. 1302.)

Pauperism, Charities, and Relief Measures

NEW BOOKS

CALDWELL, R. G. *The New Castle County Workhouse, Greenbank, Delaware.* Delaware notes, 13th ser. (Newark: Univ. of Delaware. 1940. Pp. 267. \$2.50.)

GOLD, N. L., HOFFMAN, A. C., and WAUGH, F. V. *Economic analysis of the food stamp plan.* Spec. rep. U. S. Dept. of Agric. Bur. of Agric. Econ. and the Surplus Marketing Admin. (Washington: Supt. Docs. 1940. Pp. vi, 98. 20c.)

HARVEY, R. *Want in the midst of plenty: the genesis of the food stamp plan.* (Washington: Am. Council on Public Affairs. 1941. Pp. 35. 50c.)

Report on progress of the WPA Program. (Washington: Work Projects Admin. 1940. Pp. 147.)

Socialism and Coöperative Enterprises

NEW BOOKS

BLOOM, S. F. *The world of nations.* (New York: Columbia Univ. Press. 1941. Pp. 225. \$2.50.)

"A study of the national implications in the work of Karl Marx."

BOYLE, G. *Democracy's second chance; land, work and coöperation.* (New York: Sheed and Ward. 1941. Pp. 190. \$2.)

BROWN, B. *Can we coöperate?* (Pleasant Plains, S. I., N. Y.: Author, 97 Bloomingdale Rd. 1940. Pp. 232. \$1.75.)

BROWDER, E. *The way out.* (New York: Internat. Pubs. 1941. Pp. 255. \$1.75.)

A collection of articles and speeches by the head of the Communist Party in America, mainly directed against American intervention in the "war of capitalist imperialism."

LEFEBVRE, REV. R. R. *Lenin's materialism; an evaluation of the philosophical basis of Russian communism.* Univ. microfilms, pub. no. 193. (Ann Arbor: Univ. of Michigan Microfilms. 1940. Pp. 265. \$3.31.)

KEMPTON, M. *Socialism now! democracy's only defense.* (New York: Young People's Socialist League, 303 4th Ave. 1940. Pp. 22. 5c.)

KRESS, A. J., editor. *Introduction to the coöperative movement.* (New York: Harper. 1941. Pp. xii, 370. \$3.)

LEROSSIGNOL, JAMES EDWARD. *From Marx to Stalin: a critique of communism.* (New York: Crowell. 1940. Pp. x, 442. \$3.)

This book is somewhat more comprehensive than its title might suggest. There is a rather full description of early forms of economic radicalism, and one chapter is devoted to the classification and definition of the various types of socialistic theory and organization. There is also much interesting historical material dealing with the life of Marx and with socialistic tactics and strategy in general. The author's main interest, however, is concerned with criticism of the Marxian theory, rather than with an examination of communism in action.

Dr. LeRossignol describes Marxian communism as "an extraordinary fusion of German philosophy, French revolutionism, and British economics with social pathology, glorification of the proletariat, and a naïve faith in human destiny" (Preface, p. vii). It may be best understood as a by-product of the political and industrial revolutions beginning with the eighteenth century. Today it is the most complete and the most formidable of all socialistic theories and programs. While the author believes that the Marxian doctrine is fallacious, he does not underestimate its potentialities. He describes the recent happenings in other countries and suggests that socialism is something that might happen here. But he feels that such an outcome may be avoided if our leaders will unite in an effort to increase production and to achieve a more equitable distribution of wealth and income.

The relation of fascism and nazism to Marxism is of course a controversial question. Dr. LeRossignol stresses the differences rather than the similarities. He claims that both fascism and nazism are reactionary in origin and nature, and that they are antisocialistic in their repudiation of democracy and the doctrine of class struggle. "Nazism poses as a variety of socialism, but, in view of the history of the movement and the politico-economic order which has been established, it has the marks of a capitalistic reaction with concessions to radicalism designed to stop the drift toward socialism and communism" (p. 49).

As regards the general criticism of the Marxian doctrine, it is obviously impossible to evaluate the various arguments in a brief review. Marxians will feel that some of the conclusions are too sweeping; while some opponents of Marxism will complain that the criticism has not been carried far enough. Be that as it may, this volume represents much labor and thought on the part of its author. It is very readable, contains a wealth of excerpts and references, and is provided with a helpful selected bibliography.

J. E. MOFFAT

MYERS, J. *Organized labor and consumer coöperation.* (New York: Coöp. League. Pp. 39. 15c.)

PETERSON, A. *Democracy; past, present and future.* (New York: N.Y. Labor News Co. 1940. Pp. 78. 10c.)

A Marxist study.

THOMAS, N. *We have a future.* (Princeton: Princeton Univ. Press. 1941. Pp. viii, 236. \$2.50.)

TREHEY, REV. H. F. *Foundations of a modern guild system.* (Washington: Catholic Univ. of Am. Press. 1940. Pp. 215. \$2.)

WARBASSE, J. P. *The socialistic trend as affecting the coöperative movement.* (New York: Coöp. League. Pp. 32. 15c.)

WINSTANLEY, G. *The works of Gerrard Winstanley; with an appendix of documents relating to the Digger Movement.* Ed. with introduction by George H. Sabine. (Ithaca, N.Y.: Cornell Univ. Press. 1941. Pp. 686. \$5.)

"A reprint in full of all of the writings of one of the first English socialists that have any bearing upon his political and economic ideas, and also some specimens of his religious pamphlets."

WILLIAMS, F. *Frederick Ozanam and social reform.* (Paterson, N.J.: St. Anthony Guild Press. 1940. Pp. 22. 5c.)

Coöperative purchasing of farm supplies in Georgia. Coöp. res. and serv. div., circular C-120. (Washington: Farm Credit Admin. 1940. Pp. 38. 10c.)

Housing agencies in the Soviet Union. 3rd ed. For. housing stud. (New York: New York City Housing Authority, 122 E. 42d St. 1940. Pp. 54.)

Statistics and Its Methods

NEW BOOKS

COWDEN, R. D. *Exercises and problems in business statistics.* Rev. ed. (New York: Prentice-Hall. 1940. Pp. 193. \$1.95.)

LARSON, N. G., compiler. *The sampling method in social and economic research: a partial list of references.* Agric. econ. bibliog. no. 90. (Washington: U. S. Dept. of Agric., Bur. of Agric. Econ. 1941. Pp. vi, 155, mimeographed.)

MIGONE, R. C. and others, editors. *Interamerican statistical yearbook.* (New York: Macmillan. 1940. Pp. 612. \$6.)

WOLD, HERMAN. *A study in the analysis of stationary time series.* (Uppsala: Almqvist and Wiksells. 1938. Pp. viii, 214. Kr. 6; Kr. 8, bound.)

The reviewer has digested only about half of the present study but does not hesitate to say that it is a most important contribution to the analysis of time series. Dr. Wold is concerned with the more restricted class of time series, namely, that in which sectional characteristics are generally unchanged in time. He rejects the classical schemes of searching for periodicities of fixed period and amplitude, and develops methods, based chiefly on the work of the contemporary Russian mathematicians Khintchine and Kolmogoroff, in which the random elements in time series are active rather than residual factors.

A detailed critique of periodic analysis and several applications of random processes to economic time series are included. One of the two appendices gives an example of the use of the ω^2 test of goodness of fit, a test which for small samples is superior to χ^2 .

The mathematical analysis is rather difficult and the reader will need to be acquainted with general function theory, modern probability, and at least the main features of statistical distribution theory.

H. A. FREEMAN

Annual review of the cost of living, 1940. Conf. board rep. (New York: Nat. Industrial Conf. Board. 1941. Pp. 20.)

Federal Reserve charts on bank credit, money rates, and business. Rev. Fed. Reserve chart book 1. (Washington: Board of Governors of the Fed. Reserve System. 1941. Pp. 73. 50c.)

Statistical yearbook of the League of Nations. (Geneva, New York: Columbia Univ. Press. 1940. Pp. 285. \$3.50.)

This is a new edition of the most complete and most reliable international yearbook on vital and economic statistics. The present issue contains a new table giving absolute figures of deaths by sex and age groups. Moreover, modifications and additions have been made to several tables dealing with matters of special interest at the present time, such as area and population of the countries of the world and exchange rates.

J. C. ROCCA

Statistics of income supplement, compiled from federal income tax returns of individuals for the income year 1934. Section ii. *Distribution and sources of individual incomes.* (Washington: U. S. Treasury Dept., in coöp. with W.P.A. 1940. Pp. xx, 86, mimeographed.)

Statistics of income supplement compiled from income tax returns for 1936; individual incomes. Section ii. *Incomes of husbands and wives filing separate returns.* Section iii. *Patterns of incomes.* (Washington: U. S. Treasury Dept. in coöp. with W.P.A. 1940. Pp. ix, 121, mimeographed.)

PERIODICALS

General Works, Theory and Its History

- BRATT, E. C. *Timing pump-priming expenditure*. Am. Econ. Rev., Mar., 1941. Pp. 2.
- BAIN, J. S. *The profit rate as a measure of monopoly power*. Quart. Jour. Econ., Feb., 1941. Pp. 23.
- CARR, H. J. *John Francis Bray*. Economica, Nov., 1940. Pp. 19.
- CLAPHAM, J. H. *Eileen Power, 1889-1940*. Economica, Nov., 1940. Pp. 9.
- CHENAULT, L. R. *Business concepts and economic theory*. Am. Econ. Rev., Mar., 1941. Pp. 3.
- COLBERG, M. R. *Monopoly prices under joint costs: fixed proportions*. Jour. Pol. Econ., Feb., 1941. Pp. 8.
- DELFGAUW, G. T. J. *De economische achtergrond van den stedenbouw*. De Econ., Nov., 1940. Pp. 27.
- DERKSEN, J. B. D. *Het onderzoek van het nationale inkomen*. De Econ., Sept., 1940. Pp. 24.
- DI MISURATA, G. V. *L'economia di domani*. Riv. di Pol. Econ., Sept.-Oct., 1940. Pp. 2.
- DORFMAN, J. *The Seligman correspondence I*. Pol. Sci. Quart., Mar., 1941. Pp. 18.
- DUNN, W. C. *Adam Smith and Edmund Burke: complementary contemporaries*. So. Econ. Jour., Jan., 1941. Pp. 17.
- EINAUDI, L. *Rileggendo Ferrara—a proposito di critiche recenti alla proprietà latteraria ed industriale*. Riv. di Storia Econ., Dec., 1940. Pp. 40.
- EZEKIEL, M. and WYLIE, K. H. *Cost functions for the steel industry*. Jour. Am. Stat. Assoc., Mar., 1941. Pp. 9.
- GRIFFITH, E. S. *Classification of social science phenomena*. Jour. Soc. Philos., Apr., 1941. Pp. 14.
- GRUCHY, A. G. *John R. Commons' concept of twentieth-century economics*. Jour. Pol. Econ., Dec., 1940. Pp. 28.
- GUNN, G. and DOUGLAS, P. H. *The production function for American manufacturing in 1919*. Am. Econ. Rev., Mar., 1941. Pp. 14.
- HASSAN, M. *Gandhi's economic ideal and creed*. Indian Jour. Econ., Oct., 1940. Pp. 17.
- HORNEDO, E. *Keynes, el aborro y la inversion*. Trimestre Econ., Jan.-Mar., 1941. Pp. 23.
- JANTZEN, I. *Lidt om samfundets regnskab*. Nord. Tids. for Teknisk. Økon., Dec., 1940. Pp. 10.
- KEESING, F. A. G. *De economische theorie en het evenwichtsbegrip*. De Econ., Oct., 1940. Pp. 12.
- . *De economische theorie en het evenwichtsbegrip*. De Econ., Dec., 1940. Pp. 2.
- KELLERER, H. *Lagerumschlag und lagerdauer in handelsbetrieben*. Archiv f. Math. Wirt. und Sozialforschung, Band vi, Heft 3, 1940. Pp. 11.
- KOZLIK, A. *Note on terminology convex and concave*. Am. Econ. Rev., Mar., 1941. Pp. 2.
- KREUKNIET, P. B. *De economische theorie en het evenwichtsbegrip*. De Econ., Sept., 1940. Pp. 16.
- . *De economische theorie en het evenwichtsbegrip*. De Econ., Dec., 1940. Pp. 2.
- KRISTENSEN, T. *Problemer vedrørende prisdifferentiering*. Nationaløk. Tids., 78 Bind, 3-4 Hefte, 1940. Pp. 17.
- LEWIS, H. G. *The nature of the demand for steel*. Jour. Am. Stat. Assoc., Mar., 1941. Pp. 6.
- LORIA, A. *Sobre una pretendida incoherencia de Adam Smith*. Rev. de Econ. y Estat., No. 4, 1940. Pp. 4.
- MEHTA, J. K. *Diagrammatical representation of marginal, average, and total prime and supplementary costs*. Indian Jour. Econ., July, 1940. Pp. 6.
- MILLS, F. C. *Economics in a time of change*. Am. Econ. Rev., Mar., 1941. Pp. 14.
- MIRKOVIĆ, N. *Nekoliko primjedaba na teoretski rad Josepha Schumpetera*. Ekonomist, Nov., 1940. Pp. 5.
- MIRKOWICH, N. *The place of J. M. Clark and E. R. A. Seligman in American economic science*. Indian Jour. Econ., July, 1940. Pp. 7.

- MOSAK, J. L. *Some theoretical implications of the statistical analysis of demand and cost functions for steel*. Jour. Am. Stat. Assoc., Mar., 1941. Pp. 10.
- MUKERJEE, R. *The sociological elements in price economics*. Indian Jour. Econ., Oct., 1940. Pp. 22.
- PAISH, F. W. *Capital value and income*. Economica, Nov., 1940. Pp. 3.
- PASCUAL, R. R. *A critique of Karl Marx's theory of commodity in capital*. Philippine Soc. Sci. Rev., Nov., 1940. Pp. 17.
- PERIES, H. E. *A note on the problem of a durable good*. Indian Jour. Econ., Oct., 1940. Pp. 3.
- PLESNER, R. *Proportionsloven contra landbrugets udbyttekurver*. Nord. Tids. for Teknisk. Økon., Dec., 1940. Pp. 25.
- PRASAD, P. S. N. *Disinterring the labour theory of value*. Indian Jour. Econ., Oct., 1940, Pp. 9.
- RAPPARD, W. E. *Trois économistes genevois et leurs carrières parlementaires Sismondi, Rossi, Cherbuliez*. Zeitschr. f. Schweiz. Stat. und Volkswirtschaft, 76 Jhrg., 3 Heft, 1940. Pp. 30.
- REDER, M. W. *Inter-temporal relations of demand and supply within the firm*. Canadian Jour. Econ. and Pol. Sci., Feb., 1941. Pp. 14.
- RICHTER, H. *Eine bemerkung zum erneuerungsproblem*. Archiv. f. Math. Wirt. und Sozialforschung, Band vi, Heft 3, 1940. Pp. 2.
- SCHNEIDER, E. *Über den einfluss von leistung und beschäftigung auf kosten und erfolg einer unternehmung mit homogener massenfabrication*. Archiv f. Math. Wirt. und Sozialforschung, Band vi, Heft 3, 1940. Pp. 15.
- SMITHIES, A. *Monopolistic price policy in a spatial market*. Econometrica, Jan., 1941. Pp. 11.
- SPIESS, W. *Der eisenbahngütertarif in der volkswirtschaft*. Archiv f. Eisenbahnw., Jan.-Feb., 1941. Pp. 48.
- SVENNILSON, I. *Ersättningsproduktionens ekonomiska förutsättningar*. Ekon. Tids., Dec., 1940. Pp. 11.
- TAKATA, Y. *Money, the economic veil*. Kyoto Univ. Econ. Rev., Oct., 1940. Pp. 19.
- TINBERGEN, J. *De invloed van werktijd, loon en rentestand op de arbeidsproductiviteit*. De Econ., May, 1940. Pp. 10.

Economic History and Geography

- APPLETON, J. B. *Migration and economic opportunity in the Pacific northwest*. Geograph. Rev., Jan., 1941. Pp. 17.
- ARRARTE, J. P. *El "espíritu" de la vida economica*. Trimestre Econ., Jan.-Mar., 1941.
- CARANO-DONVITO, G. *La politica monetaria nel reame di Napoli durante il regime borbonico (1734-1859)*. Riv. di Pol. Econ., Sept.-Oct., 1940. Pp. 9.
- CLAPHAM, J. H. *Charles Louis, elector palatine, 1617-1680*. Economica, Nov., 1940. Pp. 16.
- COLTON, H. S. *Prehistoric trade in the Southwest*. Scientific Mo., Apr., 1941. Pp. 12.
- DE VARGAS, P. *William C. Hunter's books on the old Canton factories*. Yenching Jour. Soc. Stud., July, 1939. Pp. 27.
- DESTLER, C. MCA. *The labor-populist alliance in Illinois, 1894*. Miss. Valley Hist. Rev., Mar., 1941. Pp. 14.
- EINAUDI, L. *Corporazioni d'arti e mestieri, bilancio del commercio e moneta negli economisti milanesi della seconda metà del settecento*. Riv. di Storia Econ., Dec., 1940. Pp. 9.
- ELEKES, D. *Ungarno gebietszuwachs im Osten und siene wirtschaftliche bedeutung*. Jour. de la Soc. Hongroise de Stat., No. 2-3, 1940. Pp. 22.
- GÄRLUND, T. *Teknik och tekniker i den tidiga Svenska verkstads-industrien*. Ekon. Tids., Dec., 1940. Pp. 13.
- GONGGRIJP, G. *Onde en nieuwe meningen over het cultuurstelsel*. De Econ., Jan., 1941. Pp. 18.
- KERR, W. B. *Newfoundland in the period before the American revolution*. Penn. Mag. of Hist. & Biog., Jan., 1941. Pp. 23.

- KUEHN, G. W. *The words of Thomas Deloney as source for "climate of opinion" in sixteenth century economic history.* Jour. Pol. Econ., Dec., 1940. Pp. 12.
- LADEJINSKY, W. I. *Agriculture in British Malaya.* Foreign Agric., Mar., 1941. Pp. 23.
- LOGAN, R. R. *Early banking in New Mexico.* New Mexico Bus. Rev., Oct., 1940. Pp. 16.
- NBF, J. U. *Industrial Europe at the time of the Reformation (ca. 1515-ca. 1540).* Jour. Pol. Econ., Feb., 1941. Pp. 40.
- OLIVER, H. *War and inflation since 1790 in England, France, Germany, and the United States.* Am. Econ. Rev. Suppl., Feb., 1941. Pp. 8.
- PENDLETON, R. L. *Laterite and its structural uses in Thailand and Cambodia.* Geograph. Rev., Apr., 1941. Pp. 26.
- PERALI, P. *Industria: forza di Roma.* Riv. di Pol. Econ., Sept.-Oct., 1940. Pp. 7.
- PLATT, E. T. *Books and national defense: a brief survey of some library resources of geographical pertinence.* Geograph. Rev., Apr., 1941. Pp. 8.
- POL, D. J. H. *De economische positie en de economische politiek van Nederlandsch-Indië gedurende den oorlog.* De Econ., June, 1940. Pp. 35.
- RICH, J. L. *The nitrate district of Tarapacá, Chile: an aerial traverse.* Geograph. Rev., Jan., 1941. Pp. 22.
- RICHARDSON, H. G. *Business training in medieval Oxford.* Am. Hist. Rev., Jan., 1941. Pp. 22.
- SELEKMAN, B. M. and S. K. Mathew Carey. *Harvard Bus. Rev.*, Spring No., 1941. Pp. 16.
- SINGER, H. W. *German economic periodicals 1939.* Econ. Jour., Dec., 1940. Pp. 12.
- STRAUSS, F. *Wartime agricultural surpluses of the Danube basin.* Foreign Agric., Dec., 1940. Pp. 6.
- THEGE, J. de K. *L'extension et l'importance des banx ruraux dans la Hongrie de Trianon.* Jour. de la Soc. Hongroise de Stat., No. 2-3, 1940. Pp. 34.
- THIRRING, L. *Le tableau démographique d'un pays démembré. La Hongrie de 1919-1938, telle qu'elle a été délimitée par le traité de Trianon. Avec des remarques sur la question du surpeuplement.* Jour. de la Soc. Hongroise de Stat., No. 2-3, 1940. Pp. 29.
- THORP, W. L. *Postwar depressions.* Am. Econ. Rev. Suppl., Feb., 1941. Pp. 10.
- WAIBEL, L. *The tropical plantation system.* Scientific Mo., Feb., 1941. Pp. 5.
- WEISS, E. *Eisenbahn-vorarbeiten bei bahnbauten in Afrika.* Archiv f. Eisenbahnw., Jan.-Feb., 1941. Pp. 38.
- WISH, H. *The revival of the African slave trade in the United States, 1856-1860.* Miss. Valley Hist. Rev., Mar., 1941. Pp. 20.
- Principales acontecimientos económicos y financieros ocurridos en el país y en el mundo en el cuarto trimestre de 1940.* Rev. de Econ. y Estat., No. 4, 1940.

Agriculture, Mining, Forestry, and Fisheries

- APODACA, J. L. *Agriculture's rôle in hemisphere defense.* Foreign Agric., Mar., 1941. Pp. 20.
- BLACK, J. D. *Measures for the improvement of agriculture.* Am. Econ. Rev. Suppl., Feb., 1941. Pp. 10.
- DORRONSORO, J. M. *El credito agricola en españa.* Trimestre Econ., Jan.-Mar., 1941. Pp. 25.
- DUNCAN, J. S. *The effect of the N.R.A. lumber code on forest policy.* Jour. Pol. Econ., Feb., 1941. Pp. 12.
- HIBBARD, B. H. *The farmer is dependent on national programs.* Am. Econ. Rev. Suppl., Feb., 1941. Pp. 10.
- HORRING, J. *De agrarische ordening in Duitschland.* De Econ., Jan., 1941. Pp. 15.
- KOSSORIS, M. D. *Coal-mine disasters in 1940.* Lab. Inf. Bull., Mar., 1941. Pp. 3.
- MANTEROLA, M. *La situación actual de la industria del petróleo en México.* Rev. de Econ., Jan., 1941. Pp. 13.
- _____. *La situación actual de la industria del petróleo en México.* Rev. de Econ., Feb., 1941. Pp. 9.

- MUKERJEE, B. *The economics of soil erosion and its influence on national life*. Indian Jour. Econ., Oct., 1940. Pp. 10.
- ORTEGA, F. *Las oleaginosas y la manteca de cerdo*. Rev. de Econ., Mar. 1941. Pp. 10.
- QURESHI, A. I. *The unit of farming and credit*. Indian Jour. Econ., Oct., 1940. Pp. 5.
- SCHULTZ, T. W. *Economic effects of agricultural programs*. Am. Econ. Rev. Suppl., Feb., 1941. Pp. 28.
- STERN, B. *Technology and the farm*. Lab. Inf. Bull., Jan., 1941. Pp. 4.
- STRANGE, H. G. L. *The wheat industry in western Canada*. Canadian Banker, Jan., 1941. Pp. 15.
- TIVARONI, C. *La casa rurale in Italia*. Riv. di Pol. Econ., Sept.-Oct., 1940. Pp. 11.
- TOLLEY, H. R. *An appraisal of the national interest in the agricultural situation*. Am. Econ. Rev. Suppl., Feb., 1941. Pp. 19.
- WERNIMONT, K. *State rural land-use legislation in 1940*. Jour. Land and Pub. Util. Econ., Feb., 1941. Pp. 5.
- WILSON, A. D. *Progress under the Minnesota resettlement plan*. Jour. Land and Pub. Util. Econ., Feb., 1941. Pp. 2.
- ZYCHA, A. *Zur neuesten literature über die wirtschafts- und rechtsgeschichte des deutschen bergbaues. Zweiter bericht, fortsetzung*. Vierteljahrschr. f. Sozial- und Wirtschaftsgeschichte, Dreiunddreissigster Band, Heft 3, 1940. Pp. 23.
- America's raw material needs, the potential availability of strategic supplies*. Index, N. Y. Trust Co., Winter, 1940. Pp. 11.
- Evolución de la industria vitivinícola y la acción de las leyes Nos. 12.137 y 12.355*. Bol. Informativo, Min. Agric., Junta Reg. de Vinos, Dec., 1940. Pp. 7.
- The Petroleum Industry*, Index, Spring, 1941. Pp. 10.
- Plantas y laboratorios para ayudara la mineria en México*. Rev. de Econ., Mar., 1941. Pp. 4.
- Produção e Comércio de mica do Brasil*. Bol. Con. Fed. Com. Exter., March 3, 1941. Pp. 2.

Manufacturing Industries

- GRAZIA-RESI, B. *Data statistici sulla produzione e sul consumo dello spettacolo cinematografico nel mercato italiano*. Riv. di Pol. Econ., Dec., 1940. Pp. 16.
- HARRIS, C. D. *Electricity generation in London, England*. Geograph. Rev., Jan., 1941. Pp. 8.
- HELLERN, B. *Industriens behov for produktionsteknisk forskning*. Nord. Tids. for Teknisk. Økon., Dec., 1940. Pp. 11.
- KAEMPFERT, W. *War and technology*. Am. Jour. Soc., Jan., 1941. Pp. 14.
- LACHMANN, K. *The Hermann Göring works*. Soc. Research, Feb., 1941. Pp. 17.
- MEYER, H. R. *Über den wettbewerb im verkehr*. Zeitschr. f. Schweiz. Stat. und Volkswirtschaft, 76 Jhrg., 3 Heft, 1940. Pp. 13.
- NICHOLLS, W. H. *Price flexibility and concentration in the agricultural processing industries*. Jour. Pol. Econ., Dec., 1940. Pp. 6.
- OLIVER, H. M., JR. *The relationship between total output and man-hour output in American manufacturing industry*. Quart. Jour. Econ., Feb., 1941. Pp. 16.
- OVERMAN, DR. *Hundert jabre niederländische seeschiffahrt*. Archiv f. Eisenbahnw., Jan.-Feb., 1941. Pp. 8.
- PASCHEN, W. *Das verkehrswesen kanadas und seine probleme*. Archiv f. Eisenbahnw., Jan.-Feb., 1941. Pp. 42.
- PISTOLESE, G. E. *La valorizzazione industriale dell'impero*. Riv. di Pol. Econ., Nov., 1940. Pp. 11.
- THIRLBY, G. F. *The report of the rural industries commission*. So. African Jour. Econ., Sept., 1940. Pp. 9.
- WYLIE, K. H. and EZEKIEL, M. *The cost curve for steel production*. Jour. Pol. Econ., Dec., 1940. Pp. 46.
- Protección a la industria*. Rev. de Econ., Mar., 1941. Pp. 5.
- Synthetic fibers*. Index, Spring, 1941. Pp. 8.

Transportation and Communication

- BARTON, F. L. *The rail class rate structure*. Jour. Land and Pub. Util. Econ., Feb., 1941. Pp. 7.
- CURRIE, A. W. *Some economic aspects in air transport*. Canadian Jour. Econ. and Pol. Sci., Feb., 1941. Pp. 12.
- DE LA PEÑA, M. and NAVARRETE, A. *Reorganizacion de los ferrocarriles nacionales*. Trimestre Econ., Jan.-Mar., 1941. Pp. 19.
- DEWEY, R. L. *The transportation act of 1940*. Am. Econ. Rev., Mar., 1941. Pp. 12.
- GEORGE, J. L. and BOLDT, J. R., JR. I. *Certification of motor common carriers*. Jour. Land and Pub. Util. Econ., Feb., 1941. Pp. 10.
- GIANNINI, A. *Le basi di un nuovo statuto della navigazione aerea*. Riv. di Pol. Econ., Nov., 1940. Pp. 6.
- . *Verso un nuovo statuto della navigazione aerea*. Riv. di Pol. Econ., Sept.-Oct., 1940. Pp. 5.
- IRELAND, P. W. *Berlin to Baghdad up-to-date*. Foreign Affairs, Apr., 1941. Pp. 6.
- MEULDJIK, J., JR. *Der englische schiffbau während der periode 1870-1912 und das problem des ersatzbaues*. Weltwirtsch. Archiv, Nov., 1940. Pp. 26.
- NELSON, J. C. *Large-scale operations in the trucking industry*. Jour. Land and Pub. Util. Econ., Feb., 1941. Pp. 3.
- REITSMA, S. A. *Van particuliere naar staatsexploitatie der Nederlandsche spoorwegen*. De Econ., Dec., 1940. Pp. 38.

Trade, Commerce, and Commercial Crises

- ALDERSON, W. *Drug trade problems and fair trade contracts*. Dun's Rev., Jan., 1941. Pp. 6.
- BACH, F. *México y la cooperación económica Pan-Americana*. Rev. de Econ., Jan., 1941. Pp. 15.
- BERGER, T. *Samfärdsmedlens utbyggande*. Ekon. Tids., Dec., 1940. Pp. 7.
- BIDWELL, P. W. and UPGREN, A. R. *A trade policy for national defense*. Foreign Affairs, Jan., 1941. Pp. 15.
- CASPER, W. *Machtpolitische gedankengänge in den anfängen der modernen englischen handelspolitik*. Vierteljahrschr. f. Sozial- und Wirtschaftsgeschichte, Dreiunddreissigster Band, Heft 3, 1940. Pp. 16.
- CASSADY, R., JR. *Municipal trade barriers*. Harvard Bus. Rev., Spring, 1941. Pp. 13.
- CH'EN, G. *Early history of China's external debts*. Yenching Jour. of Soc. Stud., Feb., 1940. Pp. 24.
- DE HAAS, J. A. *Buying Latin American loyalty*. Harvard Bus. Rev., Spring, 1941. Pp. 13.
- EVANS, J. W. *Economic policy and Latin America*. Yale Rev., Spring, 1941. Pp. 20.
- FLERÈ, J. *Novi oblici vanjske trgovine i poljodjelstvo*. Ekonomist, Aug.-Oct., 1940. Pp. 9.
- FÜRNKORN, D. A. *Creación de un ente no oficial de fuerzas vivas y economistas para colaborar en la consolidación económica panamericana*. Rev. de Ciencias Econ., Nov., 1940. Pp. 12.
- GABRIELSSON, A. *Lastbilen som samfärdsmedel*. Ekon. Tids., Dec., 1940. Pp. 4.
- GØTRIK, H. P. *Samhandel under clearingforhold*. Nationaløk. Tids., 78 Bind, 5-6 Hefte, 1940. Pp. 14.
- GULINELLI, A. *Considerazioni sulla formazione dell'impero coloniale francese*. Riv. di Pol. Econ., Sept.-Oct., 1940. Pp. 13.
- HALL, R. O. *Some neglected relationships in the balance of payments*. Am. Econ. Rev., Mar., 1941. Pp. 6.
- MACROSTY, H. W. *The overseas trade of the United Kingdom 1930-39*. Jour. Royal Stat. Soc., Part IV, 1940. Pp. 40.
- MELLON, H. J. *United States trade with the British Empire*. Conf. Bd. Econ. Record, Jan. 23, 1941. Pp. 2.
- MERDIAN, B. C. *World cacao production and trade*. Foreign Agric., Feb., 1941. Pp. 28.
- PHILLIPS, C. F., *Price policies of food chains*. Harvard Bus. Rev., Spring, 1941. Pp. 12.

- RÉPACI, F. A. *Le vicende del commercio internazionale italiano dal 1871 al 1938*. Riv. di Storia Econ., Dec., 1940. Pp. 5.
- SILVA, J. *La política económica en América y la creación de un Banco Central Interamericano*. Rev. de Econ. y Estat., No. 4, 1940. Pp. 14.
- SPIEGELENSBERG, J. H. *De toekomst van de wereldhuishouding*. De Econ., Nov., 1940. Pp. 10.
- SURÁNYI-UNGER, T. *L'état actuel des relations économiques internationales*. Jour. de la Soc. Hongroise de Stat., No. 2-3, 1940. Pp. 16.
- SYRETT, W. W. *Banker/customer in overseas trade finance*. Bankers Mag., Jan., 1941. Pp. 5.
- WESTRATE, C. *De theorie van den internationalen handel en de praktijk*. De Econ., Jan., 1941. Pp. 16.
- WHEELER, L. A. *World war, hemisphere trade, and the American farmer*. Foreign Agric., Jan., 1941. Pp. 10.
- WILSON, L. S. *Latin-American foreign trade*. Geograph. Rev., Jan., 1941. Pp. 7.
- A conferência regional do prata*. Bol. Con. Fed. Com. Ext., Feb. 17, 1941. P. 1.
- Efeitos da guerra no comércio exterior do Canadá*. Bol. Con. Fed. Com. Ext., Mar. 3, 1941. P. 1.
- Gold and dollar resources of the United Kingdom*. Fed. Res. Bull., Feb., 1941. Pp. 4.
- Jugoslawiens währungsposition im kriege*. Währ. und Wirtschaft, Nov., 1940. Pp. 3.
- La situación económica*. Bol. del Banco Cen. de Reserva del Perú, 1941. Pp. 3.

Accounting, Business Methods, Investments, and the Exchanges

- ALTMAN, O. L. *Private investment, full employment, and public funds*. Am. Econ. Rev. Suppl., Feb., 1941. Pp. 9.
- BENHAM, F. *The terms of trade*. Economica, Nov., 1940. Pp. 17.
- BISSELL, R. M., JR. *Prices, costs, and investment*. Am. Econ. Rev. Suppl., Feb., 1941. Pp. 28.
- BLOOMFIELD, A. I. *The significance of outstanding securities in the international movement of capital*. Canadian Jour. Econ. and Pol. Sci., Nov., 1940. Pp. 30.
- CAPODAGLIO, G. *A proposito del rendimento delle azioni di Suez*. Riv. di Storia Econ., Dec., 1940. Pp. 5.
- CLARKE, J. W. *Pre-audit requirements under war department contracts on a cost-plus-a-fixed-fee basis and organization of Field Auditor's office*. Jour. Accountancy, Jan., 1941. Pp. 6.
- DE VEGH, I. *Savings, investment, and consumption*. Am. Econ. Rev. Suppl., Feb., 1941. Pp. 11.
- DOHR, J. L. *On the understanding of accounting*. Jour. Accountancy, Mar., 1941. Pp. 6.
- DUE, J. F. *A theory of retail price determination*. So. Econ. Jour., Jan., 1941. Pp. 18.
- FITCH, S. G. H. *Distribution of manufacturing expenses*. N.A.C.A. Bull. Jan. 1, 1941. Pp. 18.
- GEIGER, T. *Reklame og erhvervspolitisk propaganda*. Nationaløk. Tids., 78 Bind, 3-4 Hefte, 1940. Pp. 19.
- HAGSTROEM, K. G. *The theory of depreciation: a reply*. Econometrica, Jan., 1941. Pp. 4.
- HERCHES, H. H. *Ueber die beziehungen zwischen finanz- und betriebs-buchführung im rahmen des industriellen rechnungswesens*. Nord. Tids. for Teknisk. økon., Dec., 1940. Pp. 21.
- HUSS, E. *Calculation of the yield on long-term investments*. Skandinaviska Banken, Oct., 1940. Pp. 4.
- KALDOR, N. *A note on tariffs and the terms of trade*. Economica, Nov., 1940. Pp. 4.
- KREPS, T. J. *Consumption: a vast underdeveloped economic frontier*. Am. Econ. Rev. Suppl., Feb., 1941. Pp. 23.
- LITTLE, W. D. *Measuring accounting results*. N.A.C.A. Bull., Feb. 15, 1941. Pp. 13.
- LOW, A. R. *Exchange control in New Zealand*. Econ. Record, Dec., 1940. Pp. 18.

- MALENBAUM, W. *The cost of distribution*. Quart. Jour. Econ., Feb., 1941. Pp. 16.
- MAY, G. O. *Accounting principles and regulatory expediency*. Jour. Accountancy, Feb., 1941, Pp. 3.
- MITCHELL, W. L., JR. *Occupancy expense and extent of tenancy in retailing*. Dun's Rev., Feb., 1941. Pp. 10.
- NIELSEN, B. *En sammenligning af to regnskabssystemer*. Nord. Tids. for Teknisk. Økon., Dec., 1940. Pp. 20.
- NOURSE, E. G. *The meaning of "price policy."* Quart. Jour. Econ., Feb., 1941. Pp. 35.
- PREINREICH, G. A. D. *Note on the theory of depreciation*. Econometrica, Jan., 1941. Pp. 9.
- PULTON, E. J. *Some foreign exchange control functions*. Canadian Banker, Jan., 1941. Pp. 10.
- QURESHI, A. I. *Some observations on the marketing of wheat*. Indian Jour. of Econ., Oct., 1940. Pp. 8.
- RANDALL, H. E. *Cost accounting in commercial banks*. N.A.C.A. Bull. Mar. 15, 1941. Pp. 23.
- RIEBESELL, P. *Die versicherungstechnischen rücklagen und ihre steuerliche behandlung*. Zeitschr. f. die Ges. Versicherungs-Wiss. June, 1940. Pp. 11.
- ROSSITER, L. E. *Unit functional analysis of distribution costs*. N.A.C.A. Bull. Jan. 15, 1941. Pp. 24.
- SCHNEIDER, E. *Budget og budgetkontrol i industrivirksomheder*. Nord. Tids. for Teknisk. Økon., Dec., 1940. Pp. 19.
- SPURRIER, L. *Common stocks and bonds as long-term investments*. Jour. Bus. Univ. Chicago, Jan., 1941. Part 2. Pp. 91.
- TEN DOESSCHATE, J. F. *Prijsonduiking en winstmarge bij den detailverkoop van merkartikelen*. De Econ., July/Aug., 1940. Pp. 10.
- TOTTEN, W. L. *Simplified payroll procedure and labor cost distribution*. N.A.C.A. Bull., Apr. 1, 1941. Pp. 14.
- UNWIN, R. S. *Land values in relation to planning and housing*. Jour. Land and Pub. Util. Econ., Feb., 1941. Pp. 9.
- Inventories. A tentative statement by the research department of the American Institute of Accountants*. Jour. Accountancy, Apr., 1941. Pp. 10.
- The investment company act of 1940*. Yale Law Jour., Jan., 1941. Pp. 18.
- Status of the pledgee in corporate reorganization*. Yale Law Jour., Jan., 1941. Pp. 20.

Capital and Capitalistic Organization

- ALLIEVI, L. *Prolegomeni dell'autarchia*. Riv. di Pol. Econ., Dec., 1940. Pp. 10.
- BACH, G. L. *Rearmament, recovery and monetary policy*. Am. Econ. Rev., Mar., 1941. Pp. 15.
- BACKMAN, J. and FISHMAN, L. *The British war-time control of copper, lead, and zinc*. Quart. Jour. Econ., Feb., 1941. Pp. 29.
- BÄGGLI, W. *Der politische faktor in der wirtschaft*. Zeitschr. f. Schweiz. Stat. und Volkswirtschaft, 76 Jhrg., 3 Heft, 1940. Pp. 9.
- BARUCH, B. M. *Priorities: the synchronizing force*. Harvard Bus. Rev., Spring, 1941. Pp. 10.
- BELLOTTI, R. *La condotta economica di guerra del Giappone*. Riv. di Pol. Econ., Nov., 1940. Pp. 12.
- BONBRIGHT, J. C. *Major controversies as to the criteria of reasonable public utility rates*. Am. Econ. Rev. Suppl., Feb., 1941. Pp. 11.
- BORAK, A. *Tax equivalents of municipal electric utilities*. Jour. Land and Pub. Util. Econ., Feb., 1941. Pp. 12.
- BROWN, T. H. *Business approaches to rearmament production control*. Jour. Am. Stat. Assoc., Mar., 1941. Pp. 9.
- CAVALCANTI, T. B. *Serviços de utilidade pública*. Rev. Serv. Púb., Mar., 1941. Pp. 4.
- COLE, G. D. H. *Britain's wartime economic structure*. Oriental Econ., Jan., 1941. Pp. 4.

- . *Munitions and manpower*. Fabian News, Mar., 1941. Pp. 2.
- DE LA PEÑA, M. T. *El comite regulador*. Rev. de Econ., Feb., 1941. Pp. 12.
- DENNIS, S. J. *Housing in relation to national defense*. Jour. Am. Stat. Assoc., Mar., 1941. Pp. 9.
- DOMERATZKY, L. *The industrial power of the Nazis*. Foreign Affairs, Apr., 1941. Pp. 14.
- DUDLEY, R. G. and EVANS, W. H. *Public utility financing: fourth quarter and year, 1940*. Jour. Land and Pub. Util. Econ., Feb., 1941. Pp. 7.
- ECCLES, M. S. *Economic preparedness for defense and post defense problems*. Fed. Res. Bull., Jan., 1941. Pp. 18.
- ELLSWORTH, P. T. *An economic foreign policy for America*. Am. Econ. Rev. Suppl., Feb., 1941. Pp. 19.
- FEILER, A. *Conscription of capital*. Soc. Research, Feb., 1941. Pp. 23.
- GIBSON, A. H. *The war and its aftermath*. Bankers Mag., Jan., 1941. Pp. 13.
- GUERRA, R. *La reglamentación de los precios*. Rev. de Econ., Mar., 1941. Pp. 10.
- HAMILTON, W. H. *Coal and the economy—a demurrer*. Yale Law Jour., Feb., 1941. Pp. 13.
- HANSEN, A. H. and UPGREN, A. R. *Some aspects, near-term and long-term, of the international position of the United States*. Am. Econ. Rev. Suppl., Feb., 1941. Pp. 7.
- HARRIS, S. E. *External aspects of a war and a defense economy: the British and American cases*. Rev. Econ. Stat., Feb., 1941. Pp. 16.
- HUTT, W. H. *Economic lessons of the allied war effort*. So. African Jour. Econ., Sept., 1940. Pp. 19.
- JENNINGS, W. I. *The rule of law in total war*. Yale Law Jour., Jan., 1941. Pp. 22.
- KENNEDY, W. F. I. *Achieving public utility servicing at cost*. Jour. Land and Pub. Util. Econ., Feb., 1941. Pp. 12.
- KESSLER, W. C. *A statistical study of the New York general incorporation act of 1811*. Jour. Pol. Econ., Dec., 1940. Pp. 6.
- KNOWLES, A. S. *Discussion*. Advanced Manag., Jan.-Mar., 1941. Pp. 3.
- LARA, H. C. *Price control in theory and practice*. Philippine Soc. Sci. Rev., Nov., 1940. Pp. 14.
- LINDEMAN, J. *The armaments program and national income*. Am. Econ. Rev., Mar., 1941. Pp. 5.
- LORWIN, L. L. *National defense and social economic policy*. Advanced Manag., Jan.-Mar., 1941. Pp. 5.
- LOWRY, R. E. *Municipal subsidies to industries in Tennessee*. So. Econ. Jour., Jan., 1941. Pp. 13.
- LUNDBERG, E. *Den Svenske prispolitik*. Nationalök. Tids., 78 Bind, 5-6 Hefte, 1940. Pp. 19.
- MARTIN, J. H. *Present status of priorities*. Harvard Bus. Rev., Spring, 1941. Pp. 15.
- MAURITZ, A. J. R. *Prijspolitiek en loonregeling in een geleide economie*. De Econ., July/Aug., 1940. Pp. 6.
- McKINNON, H. B. *Recent activities of wartime prices and trade board*. Lab. Gazette, Jan., 1941. Pp. 3.
- MUSGRAVE, R. A. *The planning approach in public economy. A reply*. Quart. Jour. Econ., Feb., 1941. Pp. 6.
- NIELSEN, A. *En københavnsk prisreguleringskommission I 1813*. Nationalök. Tids., 78 Bind, 3-4 Hefte, 1940. Pp. 19.
- NOURSE, E. G. *Government relations to business universal principles have been cast aside*. Vital Speeches, Feb. 15, 1941. Pp. 3.
- ORSINI, P. D'A. *L'economia scandinavia e l'attuale conflitto*. Riv. di Pol. Econ., Nov., 1940. Pp. 8.
- ORTEGA, R. *Malos consejos nos han dejado sin energia eléctrica*. Rev. de Econ., Mar., 1941. Pp. 6.
- PALACIOS, G. *Conveniencia de orientar la industria de nuestro país hacia el tipo de industrias estables*. Rev. de Ciencias Econ., Nov., 1940. Pp. 18.

- PALYI, M. *Economic foundations of the German totalitarian state*. Am. Jour. Soc., Jan., 1941. Pp. 18.
- PASVOLSKY, L. *Some aspects of our foreign economic policy*. Am. Econ. Rev. Suppl., Feb., 1941. Pp. 18.
- PATTERSON, E. M. *The United States in the world economy, 1940: a summary*. Am. Econ. Rev. Suppl., Feb., 1941. Pp. 6.
- POUND, R. *Government in time of war*. Vital Speeches. Apr. 1, 1941. Pp. 2.
- RICHTER, J. H. *Rationing in the United Kingdom*. Foreign Agric., Jan., 1941. Pp. 12.
- RITTERSHAUSEN, H. *Die staatliche preispolitik auf den deutschen hauptmärkten der gegenwart*. Weltwirtsch. Archiv, Nov., 1940. Pp. 27.
- ROSE, A. *Wars, innovations and long cycles: a brief comment*. Am. Econ. Rev., Mar., 1941. Pp. 2.
- ROSTOW, E. V. *The bituminous coal act, bituminous coal and the public interest*. Yale Law Jour., Feb., 1941. Pp. 52.
- . *Joinder in demurrer*. Yale Law Jour., Feb., 1941. Pp. 8.
- SIMON, H. A. *The planning approach in public economy. Further comment*. Quart. Jour. Econ., Feb., 1941. Pp. 6.
- SMITH, N. L. II. *The outlook in regulation*. Jour. Land and Pub. Util. Econ., Feb., 1941. Pp. 7.
- STEWART, S. *Government price control in the first World War*. Mo. Lab. Rev., Feb., 1941. Pp. 15.
- SUTCH, W. B. *New Zealand's first year of war*. Pacific Affairs, Mar., 1941. Pp. 16.
- . *New Zealand's war economy*. Econ. Record, Dec., 1940. Pp. 10.
- TAYLOR, W. H. and BRADY, R. A. *Policy centralization in Japan under the Kohutai principle*. Pacific Affairs, Jan., 1941. Pp. 27.
- THORP, W. L. and CROWDER, W. F. *Concentration and product characteristics as factors in price-quantity behavior*. Am. Econ. Rev. Suppl., Feb., 1941. Pp. 19.
- TINLEY, J. M. *Control of agriculture in South Africa*. So. African Jour. Econ., Sept., 1940. Pp. 21.
- TOBIN, H. J. *National organization for industrial preparedness*. Advanced Manag., Jan.-Mar., 1941. Pp. 2.
- VENTUROLI, A. *Appunti sulla ricostruzione economica europea*. Riv. di Pol. Econ., Dec., 1940. Pp. 6.
- VOLZ, E. J. *The international photo-engravers' union*. Lab. Inf. Bull., Feb., 1941. Pp. 4.
- WERNETTE, J. P. *Guns and butter?* Harvard Bus. Rev., Spring, 1941. Pp. 12.
- YNTEMA, T. O. *Some economic problems in the expansion of capacity to produce military goods*. Am. Econ. Rev. Suppl., Feb., 1941. Pp. 6.
- ZEUTHEN, F. *Statens beskaeftigelsesplaner*. Nationaløk. Tids., 78 Bind, 5-6 Hefte, 1940. Pp. 18.
- Arbitration and government contracts*. Yale Law Jour., Jan., 1941. Pp. 12.
- La comisión federal de electricidad y la electrificación del país*. Rev. de Econ., Mar., 1941. Pp. 5.
- Economic aspects of war involvement*. Am. Inst. Econ. Res. Weekly Bull., Apr. 14, 1941. P. 1.
- A re-examination of competition in gas and electric utilities*. Yale Law Jour., Mar., 1941. Pp. 17.
- National defense and the corner store*. Dun's Rev., Mar., 1941. Pp. 16.
- Wartime activities in Canada*. Mo. Lab. Rev., Mar., 1941. Pp. 5.
- Wartime policy in British colonial dependencies*. Internat. Lab. Rev., Mar., 1941. Pp. 10.

Labor and Labor Organizations

- ARENWALD, W. P. *Mediation, arbitration, and investigation of industrial disputes in New York State 1937-40*. Jour. Pol. Econ., Feb., 1941. Pp. 32.
- BAKKE, E. W. *Economists and unemployment*. Am. Econ. Rev. Suppl., Feb., 1941. Pp. 7.
- BARKIN, S. *Wage policies of industrial unions*. Harvard Bus. Rev., Spring, 1941. Pp. 10.

- CUTLER, A. T. *Labor legislation in thirteen southern states*. So. Econ. Jour., Jan., 1941. Pp. 20.
- DOOLEY, C. R. *Training within industry*. Advanced Manag., Jan.-Mar., 1941. Pp. 2.
- ENGBERG, G. B. *The rise of organized labor in Minnesota*. Minn. Hist., Dec., 1940. Pp. 23.
- FLORENCE, P. S. *A scientific labour policy for industrial plants*. Internat. Lab. Rev., Mar., 1941. Pp. 39.
- GAGLIARDO, D. *Strikes in a democracy*. Am. Econ. Rev., Mar., 1941. Pp. 9.
- GOLDEN, C. S. *What labor wants from management*. Advanced Manag., Jan.-Mar., 1941. Pp. 6.
- HARBISON, F. H. *Seniority in mass production industries*. Jour. Pol. Econ., Dec., 1940. Pp. 14.
- HILL, L. C. *What management wants from labor*. Advanced Manag., Jan.-Mar., 1941. Pp. 4.
- IRWIN, R. R. and KADUSHIN, J. *A case study in training*. Advanced Manag., Jan.-Mar., 1941. Pp. 4.
- JONES, M. V. *Wage-rate reductions as a stimulus to recovery*. Jour. Bus. Univ. Chicago, Jan., 1941. Pp. 15.
- KIDNER, F. I. *The variation in wage ratios: comment*. Quart. Jour. Econ., Feb., 1941. Pp. 5.
- KOOPERBERG, P. *De Amerikaansche arbeidsdienst*. De Econ., May, 1940. Pp. 5.
- LINDSAY, J. K. *Council and court: the handbill ordinances 1889-1939*. Michigan Law Rev., Feb., 1941. Pp.
- MATER, D. H. *The development and operation of the railroad seniority system*. Jour. Bus. Univ. Chicago, Jan., 1941. Pp. 32.
- MAYER, E. H. *The effect of the war on the organization and structure of the Canadian employment market*. Internat. Lab. Rev., Jan., 1941. Pp. 40.
- MILLER, F. S. *Industrial home work in the United States*. Internat. Lab. Rev., Jan., 1941. Pp. 50.
- MILLER, G. W. *Wages and hours in consumers' coöperatives in Great Britain and the United States*. Quart. Jour. Econ., Feb., 1941. Pp. 12.
- MORGENSTERN, O. *Unemployment: analysis of factors*. Am. Econ. Rev. Suppl., Feb., 1941. Pp. 21.
- PANTELIĆ, S. P. *Socijalni aspekti problema životne skupocje u odnosu na radničku nadnicu*. Ekonomist, Aug.-Oct., 1940. Pp. 8.
- PATTERSON, R. P. *Labor and the war department*. Lab. Inf. Bull., Jan., 1941. Pp. 3.
- POTTER, A. A. *Technical education and defense*. Advanced Manag., Jan.-Mar., 1941. Pp. 3.
- REEDE, A. H. *Adequacy of employment statistics*. Jour. Am. Stat. Assoc., Mar., 1941. Pp. 10.
- SMITH, F. G. *Handling labor grievances in the bituminous coal industry*. Harvard Bus. Rev., Spring, 1941. Pp. 12.
- SRIKANTAN, K. S. *Indebtedness of the mill worker*. Indian Jour. Econ., Oct., 1940. Pp. 9.
- WAGNER, A. *The international labor organization and the regulation of labor conditions in China*. Yenching Jour. Soc. Stud., July, 1939. Pp. 38.
- WEBBINK, P. *Unemployment in the United States, 1930-40*. Am. Econ. Rev. Suppl., Feb., 1941. Pp. 25.
- WHITE, R. C. *The seasonal worker and unemployment compensation benefits*. Social Forces, Mar., 1941. Pp. 10.
- WINANT, J. G. *The I.L.O. in wartime and after*. Foreign Affairs, Apr., 1941. Pp. 8.
- WITMER, T. R. *Civil liberties and the trade union*. Yale Law Jour., Feb., 1941. Pp. 15.
- Activities of National Mediation Board, 1939-40*. Mo. Lab. Rev., Mar., 1941. Pp. 3.
- Annual review of strikes and lockouts in Canada and other countries, 1940*. Lab. Gazette, Mar., 1941. Pp. 29.
- Recent proceedings under the Industrial Disputes Investigation Act*. Lab. Gazette, Mar., 1941. Pp. 27.
- Strike restrictions in union agreements*. Mo. Lab. Rev., Mar., 1941. Pp. 19.

Money, Prices, Credit, and Banking

- ÅKERMAN, G. *Produktivitetssäkring och inflationsrisk*. Ekon. Tids., Dec., 1940. Pp. 22.
- ATKINS, P. M. *The future trend of interest rates*. Bankers Mag., Jan., 1941. Pp. 6.
- BIRKHEAD, J. B. *Collection tactics of illegal lenders*. Law and Contemp. Problems, Winter, 1941. Pp. 10.
- BROUWER, S. *De sluiting en heropening van de effectenbeurs*. De Econ., July/Aug., 1940. Pp. 8.
- BROWN, W. A., JR. *Comments on gold and the monetary system*. Am. Econ. Rev. Suppl., Feb., 1941. Pp. 15.
- CASSEL, G. *Shortage of capital*. Skandinaviska Banken, Oct., 1940. Pp. 4.
- CATANACH, W. M. *Facilitating check collections*. Bull. Am. Inst. of Banking, Apr., 1941. Pp. 2.
- COLLINS, J. R. *Evasion and avoidance of usury laws*. Law and Contemp. Problems, Winter, 1941. Pp. 19.
- ECCLES, M. S. *Controlling monetary inflation*. Bankers Mag., Jan., 1941. Pp. 6.
- ELLIOTT, W. S. *Federal lending agencies*. Bankers Mag., Jan., 1941. Pp. 9.
- FELLNER, W. and SOMERS, H. M. *Alternative monetary approaches to interest theory*. Rev. Econ. Stat., Feb., 1941. Pp. 6.
- FIELD, E. R. *Injunction and receivership proceedings against illegal lenders*. Law and Contemp. Problems, Winter, 1941. Pp. 8.
- FOSTER, W. T. *The personal finance business under regulation*. Law and Contemp. Problems, Winter, 1941. Pp. 19.
- FRENCH, D. M. *The contest for a national system of home-mortgage finance*. Am. Pol. Sci. Rev., Feb., 1941. Pp. 16.
- FREUND, G. and DEWEY, H. *The Federal Reserve's monetary control plan*. Bankers Mag., Apr., 1941. Pp. 4.
- FULCHER, G. S. *Annual saving and underspending of individuals, 1926-1937*. Rev. Econ. Stat., Feb., 1941. Pp. 12.
- GAINSBROUGH, M. R. *National income and national defense*. Conf. Bd. Econ. Record, Feb., 1941. Pp. 6.
- . *State distribution of national income, 1919-1940*. Conf. Bd. Econ. Record, Mar. 24, 1941. Pp. 4.
- GARCIA, F. L. *Credit trends in a defense economy*. Bankers Mag., Feb., 1941. Pp. 8.
- GARFIELD, F. and GEHMAN, C. *Commodity prices*. Fed. Res. Bull., Mar., 1941. Pp. 11.
- GEORGE, E. C. *Credit policies in a defense economy*. Dun's Rev., Jan., 1941. Pp. 6.
- GISLER, G. L. *Organization of public opinion for effective measures against loan sharks*. Law and Contemp. Problems, Winter, 1941. Pp. 22.
- GLUD, T. *En vurdering af de danske bankers laane- og konsolideringspolitik gennem de sidste 10 aar*. Nationaløk. Tids., 78 Bind, 3-4 Hefte, 1940. Pp. 25.
- HAARELMO, T. *The effect of the rate of interest on investment: a note*. Rev. Econ. Stat., Feb., 1941. Pp. 2.
- HARDY, C. O. *The price level and the gold problem: retrospect and prospect*. Am. Econ. Rev. Suppl., Feb., 1941. Pp. 12.
- HOHLFELD, H. H. *Sterbende goldwährung*. Weltwirtsch. Archiv, Nov., 1940. Pp. 23.
- HORACK, B. S. *A survey of the general usury laws*. Law and Contemp. Problems, Winter, 1941. Pp. 18.
- HUBACHEK, F. B. *The development of regulatory small loan laws*. Law and Contemp. Problems, Winter, 1941. Pp. 38.
- HUSBAND, W. F. *Loan terms and rate of interest for home financing*. Jour. Land and Pub. Util. Econ., Feb., 1941. Pp. 9.
- JARVIS, G. Y. *Holding surplus farm products with government credit*. Agric. Fin. Rev., Nov., 1940. Pp. 14.
- KELLY, C. S. *Legal techniques for combating loan sharks*. Law and Contemp. Problems, Winter, 1941. Pp. 12.
- KELSO, R. W. *Social and economic background of the small loan problem*. Law and Contemp. Problems, Winter, 1941. Pp. 9.

- KILGORE, J. *Legislative tactics and unregulated lenders*. Law and Contemp. Problems, Winter, 1941. Pp. 10.
- KÜNG, E. *Zum problem der staatlichen arbeitsbeschaffung*. Zeitschr. f. Schweiz. Stat. und Volkswirtschaft, 76 Jhrg., 3 Heft, 1940. Pp. 29.
- LASSU, J. K. *The cost of borrowing money*. Banking, Jan., 1941. Pp. 2.
- LEAVENS, D. H. *Rupee circulation in India*. Am. Econ. Rev., Mar., 1941. Pp. 4.
- LUND, A. *Et stykke fransk dogmehistorie fra efterkrigstiden*. Nationaløk. Tids., 78 Bind, 5-6 Hefte, 1940. Pp. 15.
- MACHLUP, F. *Eight questions on gold: a review*. Am. Econ. Rev. Suppl., Feb., 1941. Pp. 8.
- MARSCHAK, J. *Lack of confidence*. Soc. Research, Feb., 1941. Pp. 22.
- MCGUIRE, C. E. *Algunas observaciones sobre los ciclos de las teorías económicas y sociales y sus efectos sobre la política*. Rev. de Ciencias Econ., Nov., 1940. Pp. 12.
- MICHIELSEN, A. *Die bedeutung von kaufkraft- und zinssatzveränderungen für die konjunkturpolitik*. Weltwirtsch. Archiv, Nov., 1940. Pp. 17.
- NEIFELD, M. R. *Institutional organization and consumer credit*. Law and Contemp. Problems, Winter, 1941. Pp. 13.
- NEISSER, H. P. *The price level and the gold problem*. Am. Econ. Rev. Suppl., Feb., 1941. Pp. 17.
- NELSON, S. and JOY, A. *Prices and the war*. Mo. Lab. Rev., Jan., 1941. Pp. 17.
- NIEMEYER, A. W. M. *Enkele beschouwingen over de ontwikkeling van het spaarbankwezen in Nederland*. De Econ., Dec., 1940. Pp. 18.
- NUGENT, R. *The loan-shark problem*. Law and Contemp. Problems, Winter, 1941. Pp. 11.
- ROBINSON, R. I. *The capital-deposit ratio in banking supervision*. Jour. Pol. Econ., Feb., 1941. Pp. 18.
- SIMPSON, W. H. *Cost of loans to borrowers under unregulated lending*. Law and Contemp. Problems, Winter, 1941. Pp. 5.
- STUART, C. A. V. *Het herleidingsstelsel*. De Econ., Jan., 1941. Pp. 3.
- SULLIVAN, J. M. *Administration of a regulatory small loan law*. Law and Contemp. Problems, Winter, 1941. Pp. 8.
- VAN DER VALK, H. M. H. A. *Kapitaalmarkt- en conjunctuurproblemen*. De Econ., Oct., 1940. Pp. 30.
- VAN ETTINGER, I. J. *Discontorente en beschikbaar metaalsaldo van de Nederlandsche bank*. De Econ., July/Aug., 1940. Pp. 19.
- VERBEEK, A. C. *Het jaarverslag van den Federal Reserve Board over 1939*. De Econ., Sept., 1940. Pp. 8.
- WIJNHOLDS, H. W. J. *Eenige beschouwingen over wezen, doel en mogelijkheden der open-marktpolitiek*. De Econ., May, 1940. Pp. 21.
- WILLIAMS, J. H. *Economic and monetary aspects of the defense program*. Fed. Res. Bull., Feb., 1941. Pp. 4.
- WOOLFSON, A. P. *The banks and defense financing*. Bankers Mag., Jan., 1941. Pp. 7.
- . *Defense economy monetary management*. Bankers Mag., Mar., 1941. Pp. 6.
- Banks and the defense program*. Fed. Res. Bull., Apr., 1941. Pp. 6.
- The banks and the war*. Bankers Mag., Mar., 1941. Pp. 13.
- Bericht über die massnahmen zur inflationsverhütung in der Schweiz, dem eidgenössischen volkswirtschaftsdepartement erstattet von der kommission für konjunkturbeobachtung und der preisbildungskommission*. Zeitschr. f. Schweiz. Stat. und Volkswirtschaft, 76 Jhr., 2 Heft, 1940. Pp. 98.

Public Finance, Taxation, and Tariff

- ABELARDE, R. E. *American tariff policy in the Philippines* (continuation). Philippine Soc. Sci. Rev., Nov., 1940. Pp. 36.
- AHUMADA, G. *Teoría de los gastos y de los recursos públicos en función de interdependencia*. Rev. de Econ. y Estat., No. 4., 1940. Pp. 30.
- ALLEN, J. E. *A fairer income tax*. Econ. Jour., Dec., 1940. Pp. 7.
- AMATO, A. *Prime linee di una "finanza di guerra"*. Riv. di Pol. Econ., Dec., 1940. Pp. 10.
- ATWOOD, A. W. *How not to pay for defense*. Banking, Apr., 1941. Pp. 3.

- BUEHLER, A. G. *Some methods of dealing with the overlapping of federal and state taxes.* Bull. Nat. Tax Assoc., Feb., 1941. Pp. 7.
- BURKHEAD, J. V. *Corporate taxes and utility assessment: a reply.* Jour. Land and Pub. Util. Econ., Feb., 1941. Pp. 2.
- Committee on Governmental Accounting of the American Institute of Accountants. *Recommendations for revision of the internal revenue code.* Jour. Accountancy, Feb., 1941. Pp. 24.
- DENI, A. *Imposizione straordinaria.* Riv. di Pol. Econ., Nov., 1940. Pp. 10.
- DEUTSCH, J. J. *War finance and the Canadian economy, 1914-20.* Canadian Jour. Econ. and Pol. Sci., Nov., 1940. Pp. 18.
- EDMISTON, H. and ANDERSON, G. *United States government corporations and credit agencies in 1940.* Fed. Res. Bull., Apr., 1941. Pp. 11.
- FAIRCHILD, F. R. *How can we best pay for defense?* Bull. Nat. Tax Assoc., Mar., 1941. Pp. 6.
- FILSON, J. D. *Amortization of emergency facilities.* Jour. Accountancy, Feb., 1941. Pp. 8.
- FRANKE, H. *As corporações governamentais nos Estados Unidos.* Rev. do Serv. Púb., Mar., 1941. Pp. 4.
- FUNK, H. W. *Equity invested capital at the beginning of the taxable year.* Jour. Accountancy, Mar., 1941. Pp. 16.
- GREEN, A. R. *The tax curve.* Econ. Jour., Dec., 1940. Pp. 6.
- HALEY, B. F. *Economic consequences of deficit financing.* Am. Econ. Rev. Suppl., Feb., 1941. Pp. 21.
- HANDY, A. *Some notes on taxable capacity.* Bull. Nat. Tax Assoc., Jan., 1941. Pp. 6.
- HANSEN, A. H. *Defense financing and inflation potentialities.* Rev. Econ. Stat., Feb., 1941. Pp. 7.
- INNIS, H. A. *The Rowell-Sirois report.* Canadian Jour. Econ. and Pol. Sci., Nov., 1940. Pp. 10.
- ISLEN, K. S. *Some aspects of war finance.* Econ. Record, Dec., 1941. Pp. 17.
- JACOBS, J. L. *Reassessment of property for tax equalization.* Jour. Land and Pub. Util. Econ., Feb., 1941. Pp. 11.
- KULL, E. *Beteiligung von bund, kantonen und gemeinden an den infolge des krieges erwachsenen finanziellen lasten; der standpunkt des bundes.* Zeitschr. f. Schweiz. Stat. und Volkswirtschaft, 76 Jhrg., 3 Heft, 1940. Pp. 17.
- LEVINE, D. D. *Tax exemption for public housing.* Jour. Land and Pub. Util. Econ., Feb., 1941. Pp. 4.
- LEWIS, R. A. *Corporate earnings and taxes 1940 and 1939.* Conf. Bd. Econ. Record, Feb., 1941. Pp. 3.
- LONG, H. F. *Among the state tax commissions.* Bull. Nat. Tax Assoc., Feb., 1941. Pp. 5.
- LUTZ, H. L. *The Canadian Royal Commission on Dominion-Provincial relations.* Jour. Pol. Econ., Feb., 1941. Pp. 6.
- . *Financing the defense program.* Bull. Nat. Tax Assoc., Feb., 1941. Pp. 9.
- MADGE, C. *The propensity to save in Blackburn and Bristol.* Econ. Jour., Dec., 1940. Pp. 39.
- MAGILL, R. *Tax program for defense.* Trusts and Estates, Dec., 1940. Pp. 5.
- MARTIN, J. W. *Corporate taxes and utility assessment: a rejoinder.* Jour. Land and Pub. Util. Econ., Feb., 1941. Pp. 1.
- MAURITZ, A. J. R. *Vraagstukken van herstel en opbouw.* De Econ., June, 1940. Pp. 6.
- NEUBAUER, J. *Das problem der kriegsfinanzierung und die fragen der vor- und nachkriegsfinanzierung.* Weltwirtsch. Archiv, Nov., 1940. Pp. 27.
- OTS, J. M. *El tributo en la epoca colonial.* Trimestre Econ., Jan.-Mar., 1941. Pp. 30.
- PALMER, P. F. *The abolition of the personal property tax.* Bull. Nat. Tax Assoc., Mar., 1941. Pp. 5.
- PHILLIPS, J. A. *Excess profits credit under the invested capital method.* Jour. Accountancy, Jan., 1941. Pp. 7.
- PIGOU, A. C. *War finance and inflation.* Econ. Jour., Dec., 1940. Pp. 8.
- PLUMPTRE, A. F. W. *An approach to war finance.* Canadian Jour. Econ. and Pol. Sci., Feb., 1941. Pp. 12.

- RUSSELL, D. W. *The Vinson act and amortization*. Jour. Accountancy, Jan., 1941. Pp. 9.
- SCHLESINGER, M. R. *Sales taxes, interstate trade barriers, and Congress: the Gulf Oil case*. Michigan Law Rev., Mar., 1941. Pp. 27.
- SEIDMAN, J. S. *Exchange provisions of the excess profits tax law*. Jour. Accountancy, Jan., 1941. Pp. 13.
- SELTZER, L. H. *Direct versus fiscal and institutional factors in deficit financing*. Am. Econ. Rev. Suppl., Feb., 1941. Pp. 9.
- SHOUP, C. *The taxation of excess profits, II*. Pol. Sci. Quart., Mar., 1941. Pp. 23.
- SINHA, B. C. *The basis of land tax: a problem in applied economics*. Indian Jour. Econ., Oct., 1940. Pp. 9.
- SMITH, D. T. *Economic consequences of deficit financing*. Am. Econ. Rev. Suppl., Feb., 1941. Pp. 11.
- SOMERS, H. M. *Adequacy of data in the field of public aid*. Jour. Am. Stat. Assoc., Mar., 1941. Pp. 10.
- SPENGLER, E. H. *The taxation of urban land-value increments*. Jour. Land and Pub. Util. Econ., Feb., 1941. Pp. 5.
- SUNDELSON, J. R. *Taxation of corporate income at progressive rates: the state and federal experience compared*. Bull. Nat. Tax Assoc., Mar., 1941. Pp. 5.
- TIBBETTS, F. C. *The accounting period in federal income taxation*. So. Econ. Jour., Jan., 1941. Pp. 18.
- TILLMAN, E. K. *The tax law and depreciation*. Bull. Nat. Tax Assoc., Dec., 1940. Pp. 14.
- TOKUNAGA, K. *Monetary and financial reorganization in North China*. Kyoto Univ. Econ. Rev., Apr., 1940. Pp. 30.
- TORRES, J. *Las deudas nacionales deben ser productivas*. Rev. de Econ., Feb., 1941. Pp. 6.
- TURNER, C. L. *Abnormalities in invested capital and income and the effect of specific relief provisions of the second revenue act of 1940*. Jour. Accountancy, Mar., 1941. Pp. 12.
- VIRGILII, F. *Le associazioni di mutua assicurazione*. Riv. di Pol. Econ., Sept.-Oct., 1940. Pp. 8.
- VON BRUCKEN-FOCK, H. J. *Financiering der staatssuitgaven, in het bijzonder in voorlogstijd*. De Econ., May, 1940. Pp. 19.
- WILLIAMS, J. H. *Economic consequences of deficit financing: deficit spending*. Am. Econ. Rev. Suppl., Feb., 1941. Pp. 15.
- El crédito exterior y la capitalización interior*. Rev. de Econ., Feb., 1941. Pp. 8.
- Financing the war—the next budget*. Bankers Mag., Mar., 1941. Pp. 8.
- Five years' operation of the WPA*. Mo. Lab. Rev., Mar., 1941. Pp. 7.
- Kriegsfinanzen Englands und Deutschlands*. Währ. und Wirtschaft, Nov., 1940. Pp. 2.
- NLRB use of back pay order to reimburse work relief agencies*. Yale Law Jour., Jan., 1941. Pp. 5.
- Public finance in war time*. Canterbury Chamber of Commerce, Feb., 1941. Bull. No. 194. Pp. 4.
- Publications relating to taxation or public finance. Reviews and notes*. Bull. Nat. Tax Assoc., Feb., 1941. P. 1.

Population and Migration

- CHENAULT, L. R. *The population problem of Puerto Rico*. Social Forces, Mar., 1941. Pp. 10.
- DE LA CERDA, R. *Los Zoque*. Rev. Mexicana de Soc., No. 4, 1941. Pp. 38.
- IRIGOYEN, U. *Política demográfica*. Rev. de Econ., Feb., 1941. Pp. 7.
- MORTARA, G. *Estudos sobre a utilização do censu demográfico para a reconstrução das estatísticas do movimento da população Brasileira*. Rev. Brasil. Estat., July-Sept., 1940. Pp. 30.
- NEUBAUER, J. *L'essence de la théorie du peuplement*. Jour. de la Soc. Hongroise de Stat., No. 2-3, 1940. Pp. 24.
- RUCHTI, W. *Zum problem der bevölkerungsentwicklung in der Schweiz*. Zeitschr. f. Schweiz. Stat. und Volkswirtschaft, 76 Jhrg., 3 Heft, 1940. Pp. 9.

- SPENGLER, J. J. *Population policy in the United States, the larger crisis in American culture*. Vital Speeches, Jan. 1, 1941. Pp. 4.
- THIRRING, L. *Die bevölkerung des vergrößerten ungarn insbesondere nach der rückgliederung der östlichen gebiete*. Jour. de la Soc. Hongroise de Stat., No. 2-3, 1940. Pp. 10.
- ZIMMERMAN, C. C. *Nuestro buen vecino "el tío Sam."* Rev. Mexicana de Soc., No. 4, 1940. Pp. 12.
- Baricentro de la pirámide de la población en provincias y territorios de la República a través de los censos generales*. Rev. de Econ. y Estat., No. 4, 1940. Pp. 33.
- Precio medio de la habitación ofrecida en la ciudad de Buenos Aires*. Rev. de Econ. y Estat., No. 4, 1940. Pp. 12.

Social Problems and Reforms

- ABELL, A. S. *Rural municipal difficulties in Alberta*. Canadian Jour. Econ. and Pol. Sci., Nov., 1940. Pp. 7.
- BICK, J. *Die ausländler im Kanton St. Gallen*. Zeitschr. f. Schweiz. Stat. und Volkswirtschaft, 76 Jhrg., 3 Heft, 1940. Pp. 21.
- BRITO, L. B. *Localização de serviços públicos na capital federal*. Rev. do Serv. Púb., Mar., 1941. Pp. 13.
- FERNÁNDEZ DE CASTRO, J. A. *Larra en el pensamiento político Argentino*. Trimestre Econ., Jan.-Mar., 1941. Pp. 28.
- FLANDERS, D. P. *Planning and low-rent housing*. Social Forces, Mar., 1941. Pp. 9.
- GUTHRIE, G. L. *Facing the unemployment problem*. New Mexico Bus. Rev., Oct., 1940. Pp. 8.
- HOLLENBERG, A. *De beteeckenis der jeugdregistratie*. De Econ., May, 1940. Pp. 6.
- HUTT, W. H. *Economic institutions and the new socialism*. Economica, Nov., 1940. Pp. 16.
- LENROOT, K. *Child labor today*. Am. Fed., Apr., 1941. Pp. 4.
- LÓPEZ, I. E. *El parcelamiento ejidal*. Rev. de Econ., Jan., 1941. Pp. 10.
- MEDINA, J. *Sobre le investigación social en nuestros días*. Rev. Mexicana de Soc., No. 4, 1940. Pp. 6.
- NYBØLLE, H. C. *Dødelighed og krig*. Nationaløk. Tids., 78 Bind, 5-6 Hefte, 1940. Pp. 15.
- PETTEE, G. S. *The failure of Marxism*. Jour. Soc. Philos., Jan., 1941. Pp. 36.
- PIPPING, H. E. *Ekonomiska anpassningsproblem i Finland*. Nationaløk. Tids., 78 Bind, 5-6 Hefte, 1940. Pp. 17.
- REZENDE, E. DA M. *As carreiras profissionais no serviço público*. Rev. do Serv. Púb., Jan., 1941. Pp. 26.
- RIBEIRO, A. M. *A remodelação da imprensa nacional*. Rev. do Serv. Púb., Feb., 1941. Pp. 35.
- SANVICTORES, J. G. *President Quezon's social regeneration program*. Philippine Soc. Sci. Rev., Nov., 1940. Pp. 8.
- VALLE, J. R. DO. *Racionalização*. Rev. Serv. Púb., Jan., 1941. Pp. 6.
- WHITE, R. C. *Ciencia social y administración social*. Rev. Mexicana de Soc., No. 4, 1940. Pp. 19.

Insurance and Pensions

- GAGLIARDO, D. *The first Kansas workmen's compensation law*. Kansas Hist. Quart., Nov., 1940. Pp. 14.
- JOHNSON, J. T. *The Iowa Department of Social Welfare*. Iowa Jour. Hist and Pol. Apr., 1941. Pp. 32.
- LOYO, G. *Seguros sociales para México*. Rev. de Econ., Jan., 1941. Pp. 16.
- . *Seguros sociales para México*. Rev. de Econ., Feb., 1941. Pp. 9.
- MANES, A. *Insurable hazards*. Jour. Bus. Univ. Chicago, Jan., 1941. Pp. 10.

- POSEY, T. E. *Unemployment compensation and the coal industry in West Virginia*. So. Econ. Jour., Jan., 1941. Pp. 15.
- RUBIO, J. *Seguro obligatorio de retiros obreros*. Rev. de Econ., Mar., 1941. Pp. 8.
- SCHÖNWIESE, R. *Witwenrentenversicherung nach direkter methode*. Blätter f. Versicherungs-Math., June, 1940. Pp. 12.
- TEN PAS, W. G. J. *Het nut van de volkstellingen voor het verzekeringswezen*. De Econ., June, 1940. Pp. 20.
- WITTE, E. E. *What's ahead in social security*. Harvard Bus. Rev., Spring, 1941. Pp. 15.
- Amendment to railroad unemployment insurance act*. Monthly Rev., R. R. Retirement Bd. Pp. 8.
- Life insurance among low-income families*. Mo. Lab. Rev., Dec., 1940. Pp. 17.

Pauperism, Charities, and Relief Measures

- BURNS, A. E. and KERR, P. *Recent changes in work-relief wage policy*. Am. Econ. Rev., Mar., 1941. Pp. 9.
- FETTERMANN, O. *Dos riscos profissionais*. Rev. Serv. Púb., Mar., 1941. Pp. 32.
- HERMAN, S. *The food stamp plan: a study in law and economics—cont.* Jour. Bus. Univ. Chicago, Jan., 1941. Pp. 25.
- Interstate migration of destitute citizens*. Mo. Lab. Rev., Feb., 1941. Pp. 5.
- Philanthropy: some conditions affecting organized giving*. Index, N. Y. Trust Co., Winter, 1940. Pp. 8.

Socialism and Coöperative Enterprises

- CROSSER, P. K. *Werner Sombart's philosophy of national socialism*. Jour. Soc. Philos., Apr., 1941. Pp. 8.
- FLORINSKY, M. T. *Stalin's new deal for labor*. Pol. Sci. Quart., Mar., 1941. Pp. 13.
- GUILLIBAND, C. W. *Hitler's new economic order for Europe*. Econ. Jour., Dec., 1940. Pp. 12.
- HAIGHT, F. A. *The nature and significance of Fascism*. So. African Jour. Econ., Sept., 1940. Pp. 19.
- STEVENSON, J. A. *The German economic position*. Canadian Banker, Jan., 1941. Pp. 11.
- TAYLER, J. B. *The theory of coöperation: a preface to social economy I*. Yenching Jour. Soc. Stud., Feb., 1940. Pp. 31.
- UTLEY, F. *The enigma of Soviet production*. Foreign Affairs, Jan., 1941. Pp. 17.
- WAELEBROECK, P. and BESSLING, I. *Some aspects of German social policy under national-socialist régime*. Internat. Lab. Rev., Feb., 1941. Pp. 46.
- YAGI, Y. *The coöperative movement under wartime economic control*. Kyoto Univ. Econ. Rev., July, 1940. Pp. 16.

Statistics and Its Methods

- BOWLEY, A. L. *Some constituents of the national income. The valedictory address of the president*. Jour. Royal Stat. Soc., Part IV, 1940. Pp. 33.
- . *Working class expenditure*. Econ. Jour., Dec., 1940. Pp. 7.
- DODD, E. L. *The problem of assigning a length to the cycle to be found in a simple moving average and in a double moving average of chance data*. Econometrica, Jan., 1941. Pp. 13.
- GHATE, B. G. *A scheme for survey of rural indebtedness in India*. Indian Jour. Econ., July, 1940. Pp. 17.
- GIBB, R. *The weight of consignments in transport*. Econ. Jour., Dec. 1940. Pp. 8.
- GORDON, R. A. *Period and velocity as statistical concepts*. Quart. Jour. Econ., Feb., 1941. Pp. 8.
- HAARELMO, T. *A note on the variate difference method*. Econometrica, Jan., 1941. Pp. 6.
- HADWIGER, H. *Über die wahrscheinlichkeit des ruins bei einer grossen zahl von geschäften*. Archiv f. Math. Wirt. und Sozialforschung, Band vi, Heft 3, 1940. Pp. 4.

- HARTLEY, H. O. *Recent advances in mathematical statistics. Bibliography of mathematical statistics (1939)*. Jour. Royal Stat. Soc., Part IV, 1940. Pp. 27.
- HAYFORD, F. L. *An inquiry into the nature and causes of statisticians*. Jour. Am. Stat. Assoc., Mar., 1941. Pp. 10.
- JÚNIOR, J. *O teste objetivo de área específica no recrutamento de pessoal para as carreiras técnicas e científicas*. Rev. Serv. Púb., Feb., 1941. Pp. 6.
- KALECKI, M. and TEW, B. *A new method of trend elimination: a correction*. Econometrica, Jan., 1941. P. 1.
- LANG, R. O. *Problems of statistical control—military aspects*. Jour. Am. Stat. Assoc., Mar., 1941. Pp. 7.
- LORENZ, P. *Planmäßige finanzgestaltung von gefolgschafts-fürsorgeeinrichtungen*. Zeitschr. f. die Ges. Versicherungs-Wiss., June, 1940. Pp. 27.
- MACGREGOR, D. C. *Gross end net investment in Canada—tentative estimates*. Canadian Jour. Econ. and Pol. Sci., Feb., 1941. Pp. 30.
- MARTINS, O. A. L. *Medidas de precisão e de validade dos testes*. Rev. Serv. Púb., Dec., 1940. Pp. 13.
- . *Sôbre uma questão de nomenclatura estatística*. Rev. Serv. Púb., Jan., 1941. Pp. 4.
- NATHAN, R. R. *Problems of statistical control—economic aspects*. Jour. Am. Stat. Assoc., Mar., 1941. Pp. 9.
- PALMER, G. L. *Some considerations involved in appraising the adequacy of occupational statistics*. Jour. Am. Stat. Assoc., Mar., 1941. Pp. 10.
- PETERSEN, O. S. *Nogle bemaerkninger om gennemsnit*. Nord. Tids. for Teknisk. Økon., Dec., 1940. Pp. 9.
- PIGOU, A. C. *Measurement of real income*. Econ. Jour., Dec., 1940. Pp. 1½.
- REIERSØL, O. *Confluence analysis by means of lag moments and other methods of confluence analysis*. Econometrica, Jan., 1941. Pp. 24.
- ROMBOUTS, A. L. G. M. *Statistische meting van Keynes' begrippen „Propensity to consume“ „Propensity to save“ en „Investment multiplier“ voor Nederland*. De Econ., Oct., 1940. Pp. 14.
- RUIZ, E. *La estadística de comercio exterior*. Rev. de Econ., Jan., 1941. Pp. 7.
- SILVEIRA, F. R. DA. *Coefficientes, índices e equações nas funções de ligação dos fenômenos*. Rev. Serv. Púb., Dec., 1940. Pp. 6.
- WOODBURY, R. M. *International comparisons of food costs*. Internat. Lab. Rev., Feb., 1941. Pp. 21.
- WOOLLEY, E. B. *The method of minimized areas as a basis for correlation analysis*. Econometrica, Jan., 1941. Pp. 25.

Editorial Note

More than a year ago, Professor Bell, secretary of the American Economic Association, initiated an attempt to set up a new classification of economic subject matters which would be equally useful for classifying publications in the *Review* and for classifying economists by fields of interest in the Handbook of the Association. Since last summer I have been working on the reclassification with the aid of members of the executive committee, the board of editors, and others. Tentatively, the following list of headings has been adopted to be put into use in the September number of the *Review*:

1. Economic Theory and General Works.
2. Economic History.
3. Economic Systems; National Economies.
4. Statistics; Economic Mathematics; Accounting.
5. Business Cycles and Fluctuations.
6. Money and Banking.
7. Business Finance; Insurance; Investments; Securities Markets.
8. International Trade, Finance and Economic Policy.
9. Public Finance.
10. Public Control of Business; Public Administration; National Defense and War.
11. Industrial Organization; Business Methods and Policies.
12. Domestic Trade and Marketing.
13. Mining, Manufacturing and Construction.
14. Public Utilities.
15. Agriculture, Forestry, and Fisheries.
16. Economic Geography; Land Economics; Regional Planning.
17. Labor and Industrial Relations.
18. Social Insurance; Relief; Pensions; Public Welfare.
19. Consumption; Income Distribution.
20. Population and Migration.
21. Unclassified Items.

The problems involved in drawing up the list were extremely perplexing. It was found impractical to use a more "logical" system of main heads and sub-heads because it exaggerated the number of headings under which any particular item might be classified. The present list does not wholly avoid this difficulty, but it reduces it to a minimum, and it is hoped that the bibliographical ambiguities can be largely eliminated by a simple system of cross-classification. The combination of topics is dictated by the effort to hold the headings to twenty; the content, by commonly recognized fields of specialization; and the order, by the desire so far as possible to keep closely related subjects as contiguous as possible. On the latter score, a good example of the problem is presented by accounting, which is at present located with the techniques of measurement, but might equally well be down among the business subjects. Another example is insurance, which might be put all together, but is now divided between 7 and 18.

Readers of the *Review* are requested to submit criticisms and suggest changes, and especially to present examples of titles which could find no appropriate place in the classification.

P. T. HOMAN

NOTES

The Fifty-fourth Annual Meeting of the American Economic Association will be held in New York City, beginning Saturday morning, December 27, and extending until Tuesday afternoon, December 30. Headquarters have not yet been determined, but will be either in Hotel Commodore, Biltmore, or Roosevelt.

The central theme of the program will be the problem of maintaining full employment when the defense program recedes. Sessions are planned on adjustments after previous wars, taxation, investment decisions, wage policies and other topics. An innovation will be a series of small conferences on specialized topics Sunday afternoon. The program committee consists of Sumner H. Slichter, chairman, Ernest M. Patterson, Royal E. Montgomery, Herbert Feis, Henry R. Trumbower, and Edwin G. Nourse.

An agreement has been made between the executive committee of the American Economic Association and The Blakiston Company of Philadelphia whereby the latter will publish annually at least one volume of articles reprinted from the various economic journals. The general field covered by each volume will be chosen by a special committee of the Association, at present consisting of Paul T. Homan, chairman, James Washington Bell, and J. Douglas Brown. This committee will appoint *ad hoc* committees to select the contents of each volume. All the principal journals in England and the United States have generously agreed to coöperate in the project. The agreement is intended to run for five years, but does not bind the Association contractually and involves it in no expense.

Some confusion has been caused in libraries by the fact that the Proceedings of the December, 1940, meetings of the Association were published as No. 5 of Volume XXX (1940), instead of Part 2 of No. 1 of the volume for 1941, as has been customary heretofore. The change was made to satisfy postal regulations in connection with earlier and separate publication of the Proceedings. For uniformity with past practice the Proceedings should be bound with Volume XXXI and recorded as a supplement thereto.

The following names have been added to the membership of the AMERICAN ECONOMIC ASSOCIATION since February 1:

Agnew, H. E., New York University, Washington Sq., E., New York City.
Ardizoni, C., College of Commerce, University of Maryland, College Park, Md.
Arwe, H. C., 3 Kenworth Ave., Keene, N.H.
Atkinson, L. J., University of Connecticut, Storrs, Conn.
Axelson, I., 2110 19th St., NW, Washington, D.C.
Bach, G. L., Department of Economics and Sociology, Iowa State College, Ames, Iowa.
Baude, W. A., College of Engineering & Commerce, University of Cincinnati, Cincinnati, Ohio.
Berger, A. H., 545 W. 111th St., Apt. 7BB, New York City.
Bernhard, Mrs. C., 1515 16th St., NW, Washington D.C.
Bestor, P., 436 Ridgewood Ave., Glen Ridge, N.J.
Biggs, R. M., Department of Economics, University of Michigan, Ann Arbor, Mich.
Blake, R. W., 932 N. Euclid Ave., Tucson, Ariz.
Boothe, V., Bureau of Business Research, Ohio State University, Columbus, Ohio.
Bouvier, Father E., St. Andrew Bobola House, 300 Newbury St., Boston, Mass.
Bradley, J. F., 128 N. Gill St., State College, Pa.

- Brown, W. M., 722 Jackson Pl., NW, Washington, D.C.
 Browne, E. W., Jr., 125 S. Fenwick St., Arlington, Va.
 Burnett, J. O., Northern Montana College, Havre, Mont.
 Burnside, M., Am. Tel. & Tel. Co., 195 Broadway, New York City.
 Butt, L. E., 1908 Florida Ave., NW, Washington, D.C.
 Byland, J. R., 7639 Cornell Ave., Chicago, Ill.
 Caine, W. E., c/o Federal Power Commission, Washington, D.C.
 Canfield, J. M., 3rd, 536 E. Washington Lane, Germantown, Philadelphia, Pa.
 Carney, J. J., Jr., Box 483, University of Miami, Coral Gables, Fla.
 Chen, S. Y. C., Anglo-Chinese College, Foochow, China (Yangkow).
 Clark, F. B., College Station, Tex.
 Clark, L. H., College of Commerce, University of Maryland, College Park, Md.
 Corrie, G. B., Apt. 24, Carolina Inn, Chapel Hill, N.C.
 Crawford, J., Rt. 2, Ithaca, N.Y.
 Crosby, L. G., 148-16 Neponset Ave., Neponset, L.I., N.Y.
 Croxton, F. E., Hamilton Hall, Columbia University, New York City.
 Curran, K. J., 11 Pelham St., Princeton, N.J.
 Darr, L. R., 222 W. Adams St., Chicago, Ill.
 Davis, J., 489 Ocean Ave., West Haven, Conn.
 Dein, R. C., 1815 University Ave., SE, Minneapolis, Minn.
 Deinzer, H. T., 801 E. Huron St., Ann Arbor, Mich.
 Denison, E. F., Department of Economics, Brown University, Providence, R.I.
 Dillard, D., Department of Economics, Political Science and Sociology, University of Colorado, Boulder, Colo.
 Donovans, Mrs. C. H., Box 2557, University Station, Gainesville, Fla.
 Dowell, A. A., University Farm, University of Minnesota, St. Paul, Minn.
 Dressler, B. G., 622 W. 141st St., New York City.
 Duggan, J. J., Jr., 65 Broadway, New York City.
 Durand, D., Hillside, Riverdale, N.Y.
 Eakens, R. H. S., 425 Riverside Dr., New York City.
 Eisenberg, G. G., 500 Riverside Dr., New York City.
 Evans, W. D., Bureau of Labor Statistics, U. S. Department of Labor, Washington, D.C.
 Farris, T. N., Baton Rouge, La.
 Fellner, W. J., 635 Santa Barbara Rd., Berkeley, Calif.
 Field, R. W., University of Oklahoma, Norman, Okla.
 Fischer, P. A., 6136 N. 22nd St., Arlington, Va.
 Frizol, S. M., 3435 W. 75th St., Los Angeles, Calif.
 Gadeholt, B., c/o Northwestern Electric Co., Public Service Bldg., Portland, Ore.
 Goldfield, E. D., 1606 17th St., NW, Washington, D.C.
 Goldstein, B., 1900 F St., NW, Washington, D.C.
 Goodman, H. J., 1-B St. Matthews Ct., NW, Washington, D.C.
 Gordon, W. C., Department of Economics, University of Texas, Austin, Tex.
 Gott, P. P., 224 S. Michigan Ave., Chicago, Ill.
 Gray, L. R., Department of Economics, University of Arizona, Tucson, Ariz.
 Haley, R. M., Geneva College, Beaver Falls, Pa.
 Hartley, E. F., 590 Madison Ave., New York City.
 Havlik, H. F., Department of Economics, Columbia University, New York City.
 Heiby, E. P., Ohio State University, 114 Townsend Hall, Columbus, Ohio.
 Heineman, H., Kidder, Peabody & Co., 17 Wall St., New York City.
 Heller, W. W., Sterling Hall, University of Wisconsin, Madison, Wis.
 Herz, H., New Providence, N.J.
 Heslip, M. F., 127 Mabery Rd., Santa Monica, Calif.
 Hickman, C. A., 802 E. Washington, Iowa City, Iowa.
 Higdon, E. T., 2203 Francis, St. Joseph, Mo.
 Higginson, H. H., 22 E. 11th St., New York City.
 Hillhouse, A. M., University of Cincinnati, 20 Hanna Hall, Cincinnati, Ohio.

- Hollingshead, E. A., 12 La Cintilla Ave., Orinda, Calif.
 Hotchkiss, G. B., New York University, Washington Sq., New York City.
 Howard, B. B., School of Commerce, Finance Dept., Northwestern University, Evanston, Ill.
 Huber, M. L., 251 E. Fifth St., Mt. Vernon, N.Y.
 Hutner, S., Graduate College, Princeton, N.J.
 James, K. V., 704 19th St., Knoxville, Tenn.
 Johnson, E. H., University of Michigan, 3 Tappan Hall, Ann Arbor, Mich.
 Johnson, T. V., Bureau of Agricultural Economics, 222 Mercantile Bldg., Berkeley, Calif.
 Jolley, E. O., Jr., School of Commerce, Northwestern University, Evanston, Ill.
 Jones, F. H., 4188 Park Blvd., Oakland, Calif.
 Jones, H., 4406 38th St., N., Arlington, Va.
 Kendrick, J. W., School of Commerce, University of Georgia, Athens, Ga.
 Kinzie, G. R., Battelle Memorial Institute, Columbus, Ohio.
 Kreider, C., Goshen College, Goshen, Ind.
 Lanhan, B. T., Jr., Alabama Polytechnic Institute, Auburn, Ala.
 Landry, R. S., Room 240, 1005 E. 60th St., Chicago, Ill.
 Larsen, H. C., 411 Fontaine St., Alexandria, Va.
 Leung, P. K., P.O. Box 344, Yuma, Ariz.
 Lindeman, J., 225 N. Glebe Rd., Arlington, Va.
 Linder, R. L., Graduate College, Princeton University, Princeton, N.J.
 Lusher, D. W., 226 Main St., Brunswick, Me.
 MacDougall, D. A., 422 N. Firestone Blvd., Akron, Ohio.
 Machell, J. V., Jr., 408 N. Mathews Ave., Urbana, Ill.
 Malone, C. C., Story City, Iowa.
 Malott, E. O., Jr., 1301 15th St., NW, Washington, D.C.
 Marcoux, D. C., Washburn College, Topeka, Kan.
 Martens, W. S., 1 S. State St., Chicago, Ill.
 Marx, D., Jr., Brookings Institution, 722 Jackson Pl., NW, Washington, D.C.
 Massel, Mrs. J. M., Clinton, Md.
 Mautz, W. H., 5006 11th St., N., Arlington, Va.
 Mayo, G. E., 48 Brattle St., Cambridge, Mass.
 McClarren, D., 3537 Kettner Blvd., San Diego, Calif.
 McConahey, J. M., University of Washington, 210 Commerce Hall, Seattle, Wash.
 Middleton, K. A., 1546 Massachusetts, Lawrence, Kan.
 Mills, J. A., 1019 13th St., Wilmette, Ill.
 Milroy, R. R., Bowling Green College of Commerce, Bowling Green, Ky.
 Mortara, G., Comissao Censitaria Nacional, Avenida Pasteur 404, Rio de Janeiro, Brazil, S.A.
 Mulvihill, D. F., Box 6, University, Ala.
 Musselman, R. M., Box 1211, University, Va.
 Myers, D. P., Goodard Hall, Medford, Mass.
 Naidel, S., 39 Quincy Pl., NE, Washington, D.C.
 Noble, J. H., Armour & Co., Union Stock Yards, Chicago, Ill.
 Norgren, P. H., 3 Neptune Rd., Worcester, Mass.
 Northrup, H. R., 71 Perkins Hall, Harvard University, Cambridge, Mass.
 Norton, J. R., College of Arts & Science, St. John's University, 96 Schermerhorn St., Brooklyn, N.Y.
 Obering, W. F., P.O. Box 1051, Albuquerque, N.M.
 Opstaele, C. R., c/o Mr. Francisco A. Mendieta, Superintendente de Bancos, Managua, D.N., Nicaragua.
 Palmer, J. B., Ginn & Co., Statler Bldg., Park Sq., Boston, Mass.
 Pearson, D. C., 258 S. Hudson Ave., Pasadena, Calif.
 Perrone, P. D., 1007 Palm Rd., Tucson, Ariz.
 Perry, R. H., 532 Plymouth Rd., San Marino, Pasadena, Calif.
 Petshek, K., 628 Central St., Evanston, Ill.
 Phillips, W. T., Department of Economics, University of New Hampshire, Durham, N.H.

- Porter, A. R., Jr., 337 Riverview Ave., Drexel Hill, Pa.
 Potter, A. N., 6301 Brookville Rd., Chevy Chase, Md.
 Read, W. H., 1905 Sherman Ave., Evanston, Ill.
 Robertson, S., Department of Economics, University of California, Berkeley, Calif.
 Robinson, A. H., Eastman Kodak Co., 343 State St., Rochester, N.Y.
 Rogers, B. A., Massachusetts Institute of Technology, 77 Massachusetts Ave., Cambridge, Mass.
 Rose, A., Department of Economics, University of Illinois, Urbana, Ill.
 Saucerman, R., 1003 13th Ave., Monroe, Wis.
 Scheider, C. F., III, 282 King Ave., Athens, Ga.
 Schumacher, A. C., 1907 Maple Ave., Evanston, Ill.
 Schwartz, D., Department of Economics, University of California, Berkeley, Calif.
 Schwartz, R. J., 736 Riverside Dr., New York City.
 Schwarz, O. A., c/o A. D. Juilliard & Co., Inc., 40 W. 40th St., New York City.
 Segal, S. A., 1285 Brentwood Rd., NE, Washington, D.C.
 Seybold, J. W., Swarthmore College, Swarthmore, Pa.
 Sheppard, R. C. S., 75-29 Kessel St., Forest Hills, L.I., N.Y.
 Sherman, J. H., Webber College, Babson Park, Fla.
 Siegel, I. H., 493 Lincoln Pl., Brooklyn, N.Y.
 Simonds, R. H., 2529 Jackson Ave., Evanston, Ill.
 Snyder, R. M., The Cliffs, Shipley Rd., Route 81, Wilmington, Del.
 Spaulding, C. B., Whittier College, Whittier, Calif.
 Spence, E. J., 1911 Sherman Ave., Evanston, Ill.
 Spottswood, A. D., 115 Westover Dr., Westwood, Knoxville, Tenn.
 Steinhoff, D., Jr., Department of Economics, University of Michigan, Ann Arbor, Mich.
 Stewart, S., Bureau of Labor Statistics, Washington, D.C.
 Strickler, G. W., Department of Economics, University of Arizona, Tucson, Ariz.
 Swan, E. J., Department of Economics, University of California, Berkeley, Calif.
 Sweezy, P. M., 10 Forest St., Cambridge, Mass.
 Symons, J. H., School of Commerce, New York University, New York City.
 Tennant, R. B., 220 Park St., New Haven, Conn.
 Terpenning, W. A., Albion College, Albion, Mich.
 Traywick, L. E., Commerce Bldg., University of Illinois, Urbana, Ill.
 Ulrey, I. W., Columbia Engineering Corp., 61 Broadway, New York City.
 von Mering, O. O., 15 Pine St., Winchester, Mass.
 Weinwurm, E. H., 88 Wadsworth Ave., New York City.
 West, R. R., Box 1554, University, Va.
 Williams, Mrs. J. H., 2124 Key Blvd., Arlington, Va.
 Wilson, D. S., 2221 Ridge Ave., Evanston, Ill.
 Winn, W. J., 3902 Spruce St., Philadelphia, Pa.
 Wood-Simons, Mrs. M., 2319 Sherman Ave., Evanston, Ill.

The eighth annual meeting of the Mid-West Economics Association was held at Des Moines, Iowa, April 17-19, The following officers were elected for the year 1941-42: President, Harry Gunnison Brown, University of Missouri; First Vice-President, M. M. Bober, Lawrence College; Second Vice-President, O. L. Nordstrom, Augustana College, Rock Island; Secretary-Treasurer, C. Woody Thompson, University of Iowa. These officers, together with the retiring president, J. E. Kirshman, University of Nebraska, constitute the Executive Committee for the ensuing year. Papers were presented as follows:

ECONOMIC THEORY—"The Relativity of Economics," by George R. Davies, University of Iowa.

WESTERN HEMISPHERE TRADE—"The Geographical Direction of the National Interests of the United States," by Arthur R. Upgren, University of Min-

nesota; "Financial Aspects of Hemisphere Economic Defense," by Eugene A. Gilmore, University of Nebraska.

STATISTICS—"Schumpeter and Tinbergen," by J. E. Morton, Knox College; "Estey and Haberler," by R. L. Kozelka, University of Minnesota; "The Measurement of Concentration in Industry," by Walter F. Crowder, Department of Commerce, Washington, D.C.

INFLATION AND AFTER—"Price Stabilization Efforts in Great Britain," by James S. Earley, University of Wisconsin and The Advisory Commission to the Council of National Defense; "The Inflation Prospect," by T. Bruce Robb, Federal Reserve Bank of Kansas City; "Preparation now for Post-war Adjustments," by Meno Lovenstein, Rockford College.

TEACHING OF ECONOMICS—"The Lecture System," by John Ise, University of Kansas; "Experimenting with Visual Aids in the Principles Course," by David Lynch, Drake University; "The Relation of Consumer Economics to Economic Principles," by H. John Stratton, Illinois College; "The Problem Approach to the Teaching of Elementary Economics," by Harry G. Brainard, Southern Illinois Normal University; "The On-the-Other-Hand Science," by Carl McGuire, DePauw University.

ACCOUNTING—"Accountants and Statisticians," by D. R. Scott, University of Missouri; "Some Aspects of Financial Statements," by Herbert E. Miller, University of Minnesota; "The College Trained Accountant in Professional Practice," by Keith W. Dunn, of McGladrey, Hansen, Dunn and Company.

ECONOMICS OF DEFENSE—"Economic Cost of Defense in the Unemployment Situation," by Howard R. Bowen, University of Iowa; "Financing the Defense Program," by Roy G. Blakey, University of Minnesota.

LABOR AND THE DEFENSE PROGRAM—"Labor Standards and the Defense Program," by E. B. McNatt, University of Illinois; "The Recruitment and Assignment of Labor in the Defense Program," by W. H. Stead, Washington University.

CAPITALISM—"Capitalism in American Economic and Political History," by Chester W. Wright, University of Chicago; "The Concept of Collective Democracy in American Labor History," by Selig Perlman, University of Wisconsin.

DINNER MEETING—"Wisdom in Nutshells," by J. E. LeRossignol, University of Nebraska; "The King of France," by John D. Clark, Economist, Cheyenne, Wyoming.

A conference on Research Problems of Defense Financing and National Fiscal Policy, sponsored by the Committee on Public Administration of the Social Science Research Council, was held in Washington, D.C., on January 25-26. The participants were Simeon E. Leland, chairman, University of Chicago; Dewey Anderson, Temporary National Economic Committee; Thomas Blaisdell, National Resources Planning Board; Roy G. Blakey, University of Minnesota; Roy Blough, Treasury Department; Gerhard Colm, Bureau of the Budget; Mordecai Ezekiel, Department of Agriculture; Raymond Goldsmith, National Advisory Defense Commission; Harold M. Groves, University of Wisconsin; Luther H. Gulick, Institute of Public Administration; Charles O. Hardy, The Brookings Institution; Joseph P. Harris, Northwestern University; Albert G. Hart, Iowa State University; Clarence Heer, University of North Carolina; J. Weldon Jones, Bureau of the Budget; Eric Kohler, Tennessee Valley Authority; Stacy May, National Advisory Defense Commission; Michael Meehan, Depart-

ment of Commerce; Gardiner Means, Bureau of the Budget; Eugene Oakes, Yale University; Carl Shoup, Columbia University; and William Sutherland, Esq., Atlanta.

The first conference of the newly formed Inter American Bar Association was held at Havana, Cuba, March 24-28, 1941, attended by over 600 delegates and guests. Plenary sessions, general meetings, and round table meetings were held. The round tables dealt with the following subjects, several of which should be of much interest to economists as well as lawyers: Comparative constitutional law; administrative law and procedure, immigration, naturalization, and nationality laws; the rôle of the lawyer in the defense of the Americas; comparison of civil and commercial laws; inter American legal documentation; protection of intellectual and industrial property; legal education; judicial power and judicial administration; criminology; penal law, procedure and administration; customs legislation and commercial agreements; communications, including air law, telecommunications, maritime and highway transportation; tax problems, including taxation and regulation of public utilities, international double taxation; and industrial, economic, and social legislation.

Information regarding the activities of the Inter American Bar Association or its first conference may be obtained from Lawrence Deems Egbert, Executive Secretary, Southern Building, Washington, D.C.

The Temporary Organizing Committee of the Inter American Statistical Institute, through its chairman, Stuart A. Rice, announces the election of officers of the Institute to compose its "Bureau" or governing body as follows: President, M. A. Teixeira de Freitas, Brazil; First Vice-President, Stuart A. Rice, United States; Second Vice-President, Carlos E. Dieulefait, Argentina; Third Vice-President, Ramón Beteta, Mexico; and Treasurer, Robert H. Coats, Canada. The new president is secretary general of the Brazilian Institute of Geography and Statistics and director of the Service of Education and Health Statistics in the Ministry of Education and Health.

Preliminary organization of the Inter American Statistical Institute was effected by 16 members of the International Statistical Institute from Argentina, Canada, Mexico, and the United States, meeting in Washington, D.C., in May, 1940, during the sessions of the Eighth American Scientific Congress. Membership requirements and statutes were patterned along the general lines of the international body.

The Temporary Organizing Committee, in Washington, is serving as a Provisional Secretariat for the Institute until conditions permit establishment of its permanent office. On this committee in addition to Dr. Rice are Halbert L. Dunn, E. Dana Durand and Walter F. Willcox.

The first annual Insurance Short Course sponsored jointly by the University of Tennessee and the Tennessee Association of Insurance Agents will be held at the University of Tennessee, June 2-5, 1941.

Four seminars will be conducted at the University of Arkansas during the summer: The accounting seminar under the direction of Professor W. B. Cole will be held June 18-20; the fire and casualty seminar is scheduled for August 4-8; the savings and loan school, August 10-15; and the Arkansas bankers' seminar will be in session August 18-22.

The Summer Institute for Social Progress at Wellesley College will hold a conference July 5 to 19 on "Strengthening America at Home and Abroad." The foreign policy of the United States and its chief domestic problems will be discussed under leading economists and teachers of political science from many colleges. For program apply to Dorothy P. Hill, Director, 22 Oakland Place, Buffalo, N.Y.

The seventeenth institute under the Norman Wait Harris Memorial Foundation at the University of Chicago will be held from July 7 to 16, and will be devoted to the subject: "The Political and Economic Implications of Inter-American Solidarity."

A sociological field course in southern conditions will be offered by Teachers College, Columbia University, from July 14 to August 16, 1941. The locale of the course is Greenville County, South Carolina.

A special program of work in land economics is planned in connection with the 1941 summer session at the University of Wisconsin. Courses in land planning, research and policy will be given by Professors George S. Wehrwein and Leonard A. Salter, Jr. Field trips to parts of the state where land programs are in progress and meetings with state and federal land planning officials will be conducted to supplement the classroom and seminar discussions.

Under the S. S. Huebner Foundation for Insurance Education at the University of Pennsylvania a fund of approximately \$25,000 per year is provided for (1) fellowships and scholarships at the graduate level to prepare students for insurance teaching and research; (2) building up and maintaining a central research library which will be available through circulating privileges to teachers in other colleges and universities; and (3) publishing research theses and other studies.

The Survey of American Listed Corporations, a Work Projects Administration project sponsored by the Securities and Exchange Commission, can supply as many as 30 copies of Volume II to any college or university wishing to use them in connection with courses in finance or investment. The volume contains reports on the following industries: Aircraft and aircraft equipment; non-ferrous metals and their products including smelting and refining—assets over \$20,000,000 each; oil refining and distributing with producing facilities—assets over \$50,000,000 each; chain grocery and food stores; chain variety stores; dairy products; department stores—annual sales over \$10,000,000 each; mail order houses; motion picture production and distribution. The supply of supplements for 1939 is somewhat more limited.

Mr. John Curry, appointed instructor in banking at Louisiana State University on February 1, 1941, died of pneumonia on March 20.

Dr. David Shaw Duncan, Chancellor of the University of Denver, died suddenly from a heart attack on March 7. He had held the positions of dean of the College of Liberal Arts, dean of the Graduate School, and chairman of the Department of Social Sciences, and finally, in 1934, Chancellor of the University. He was to have retired at the end of this school year. His successor will be Caleb Frank Gates, formerly assistant dean at Princeton University.

Professor Ray V. Leffler, for more than twenty years in charge of courses in money and banking at Dartmouth College, died Thursday, April 10, at the St. Vincent Hospital in Toledo, Ohio.

Appointments and Resignations

George L. Bach has resigned from Iowa State College to accept a position as special assistant with the Board of Governors of the Federal Reserve System, Washington, D.C.

George A. Baughman, recently of the trust department of the National Metropolitan Bank of Washington, D.C., has been appointed acting professor of economics and realty management at the University of Florida.

J. B. Bearns, associate professor of economics at the University of Utah, has been granted a sabbatical leave for 1941-42 to complete his work for the Ph.D. degree.

D. M. Beights, professor of accounting at the University of Florida, is teaching corporation finance at the University of Illinois in exchange with Dr. Paul M. Green.

M. L. Black, Jr., associate professor of accounting at Duke University, will be absent on leave in 1941-42.

Theodore H. Boggs, professor of economics at Stanford University, will serve as a member of the summer faculty at the University of British Columbia.

Richard Bohan has been appointed Civilian Instructor in the Armored Force Division of the Army, and will be stationed at Fort Knox, Kentucky. Doctor Bohan's duties will be confined to the Commercial and Clerical Division of the school. Saint Mary of the Woods College will grant Doctor Bohan temporary leave of absence for the duration of his service.

Moritz J. Bonn has been appointed a visiting professor of economics at Wharton School of Finance and Commerce, University of Pennsylvania, for the second term, 1940-41.

Edison L. Bowers has been appointed chairman of the department of economics, Ohio State University.

Royal J. Briggs, formerly of the economics department at Kemper Military School, will teach economics in the summer session of the University of Missouri.

George K. Brown, part-time instructor at Wharton School of Finance and Commerce, University of Pennsylvania, has joined the St. Lawrence University.

O. E. Burley of Ohio State University will teach courses in marketing during the first half of the summer session of the University of Tennessee.

Robert D. Calkins has resigned from the University of California to accept the deanship of the School of Business, Columbia University, New York City.

Benjamin Caplan of the department of economics, Ohio State University, is in the Statistical Division of the Office of Production Management, Washington, D.C.

James E. Chace, assistant professor of business administration at the University of Florida, is on leave of absence for one year to serve as technical consultant to the Florida Industrial Commission at Tallahassee.

Henry Chalmers, for many years Chief of the Division of Foreign Tariffs of the United States Department of Commerce, has recently been designated Adviser on Trade Controls in that Department.

N. H. Comish, professor of business administration in the University of Oregon, is teaching in the 1941 summer session at the University of Pittsburgh.

Joseph D. Coppock will be visiting professor of economics at the University of Oregon for the summer session. He will teach money and banking, public finance, and a seminar in economic theory.

H. W. Cordell of Ohio State University will teach courses in marketing and finance at the University of Tennessee during the second term of summer school.

Dudley J. Cowden of the University of North Carolina will teach statistics at Columbia University during the summer session.

V. D. Cover, assistant professor of public utilities and transportation at the University of Arkansas, has resigned to accept an appointment in the Department of Commerce.

W. Rex Crawford of Wharton School of Finance and Commerce, University of Pennsylvania, has been granted a leave of absence for the spring semester of 1940-41 and the fall semester of 1941-42. He has left for the University of Chile (Santiago) as exchange professor under the sponsorship of the Division of Cultural Relations of the United States Department of State.

W. Glenn Cunningham, instructor in the geography and industry department of Wharton School of Finance and Commerce, University of Pennsylvania, is assisting the National Resources Planning Board (Industrial Locations Section) as consultant.

O. J. Curry, associate professor of finance and accounting, has been named acting dean of the College of Business Administration, University of Arkansas.

James S. Earley, assistant professor of economics at the University of Wisconsin, was granted a continuance of leave of absence for the second semester to continue his research work with the Advisory Commission to the National Defense Council.

Elmer D. Fagan, professor of economics at Stanford University, will serve as a member of the summer faculty at Columbia University.

William J. Fellner has been appointed assistant professor of economics at the University of California.

C. C. Fichtner, dean of the College of Business Administration at the University of Arkansas, has been granted a leave to become Chief of the Division of Regional Economy, Department of Commerce, Washington, D.C.

L. Thomas Flatley, professor of economics at Mundelein College, will lecture on business organization and management in the summer session of the Loyola University School of Commerce.

Willard H. Froehlich, formerly part-time instructor in economics at National University, was appointed an examiner in the General Accounting Office, Washington, D.C., effective July last.

Walter W. Glaeser has been acting assistant professor of marketing at the University of Washington during the winter and spring quarters of 1941.

Paul M. Green, assistant professor of economics at the University of Illinois, is holding an exchange professorship in the accounting department of the University of Florida for the second semester of 1940-41.

R. M. Havens, instructor in accounting, has accepted an appointment as assistant professor of economics at Baldwin-Wallace College.

H. Gordon Hayes of Ohio State University is in Washington as Chief Economist of the Consumers' Section of the Bituminous Coal Commission.

W. Braddock Hickman of Johns Hopkins University has been made a member of the Institute for Advanced Study at Princeton for the academic year of 1941-42.

R. C. Hilliard, assistant professor of accounting, University of Akron, will teach at the summer session of the School of Commerce, University of Denver.

Mack H. Hornbeak has resigned his position as associate professor of banking at Louisiana State University to accept the vice-presidency of the Louisiana National Bank of Baton Rouge.

Willard E. Hotchkiss, Maurice Falk professor of social relations at Carnegie Institute of Technology, has been appointed director of a new division of humanistic and social studies at the Institute, effective May 1, 1941. The new division replaces a division of general studies which has been discontinued.

Howard T. Hovde, assistant professor at the Wharton School of Finance and Commerce, University of Pennsylvania, and president of the American Marketing Association, will teach two courses in marketing in the summer school and take part in the Institute of Public Affairs, scheduled during the week of July 7-11 at the University of Pennsylvania.

Emily H. Huntington, associate professor of economics and chairman of the Heller Committee for Research in Social Economics of the University of California, is revising the Heller Wage Earner Budget for the United States Bureau of Labor Statistics.

Harold A. Innis, chairman of the department of political economy at the University of Toronto, will serve as acting professor of economics at Stanford University during the summer session.

Ernest A. Johnson, head of the economics division, Lake Forest College, will teach at the summer session of the School of Commerce, University of Denver.

Hiram L. Jome of DePauw University is on leave of absence during the second semester of 1940-41 in order to do research in various university libraries.

Marshall D. Ketcham, assistant professor of economics in the College of Commerce of the University of Kentucky, will be professorial lecturer in the School of Business of the University of Chicago during the summer quarter of 1941.

R. A. Lester, assistant professor of economics at Duke University, has been granted a Social Science Research Fellowship for 1941-42.

Frank J. Lewand has been advanced to the rank of assistant professor of economics, effective February 1, 1941, at the Catholic University of America.

John A. Loftus, assistant professor of economics at Holy Cross College, will offer courses in the 1941 summer session of the Johns Hopkins University.

Clarence D. Long, Jr., assistant professor of economics at Wesleyan University, has a Guggenheim Fellowship to write the history of unemployment in America. In addition, he has been made a member of the Institute for Advanced Study, which is financing his study jointly with the Guggenheim Foundation.

A. N. Lorig has been advanced to the rank of associate professor of accounting in the College of Economics and Business of the University of Washington.

J. V. Machell was appointed teaching assistant in the department of economics, University of Illinois, for the second semester of 1941.

Raymond F. Mikesell has been promoted from instructor to assistant professor in the College of Economics and Business at the University of Washington.

Oskar Morgenstern, Class of 1913 Lecturer in Political Economy at Princeton University, has been promoted to the rank of associate professor.

Vernon A. Mund returned to regular duties at the University of Washington at the beginning of the spring quarter, 1941, after a year's absence spent in research upon price relationships and pricing problems.

Edward G. Nelson, assistant professor of economics at Stanford University, is to be on sabbatical leave during the year 1941-42 in order to continue his research in the field of corporations.

A. L. O'Toole, professor of statistics at Mundelein College, will lecture on business organization and management in the summer session of the Loyola University School of Commerce.

John Pagani has been appointed acting instructor in economics at Stanford University for the year 1941-42.

Ernest F. Penrose resigned from the University of California in December, 1940, to continue work with the International Labor Office, now situated at McGill University, Montreal.

Hobart S. Perry, assistant professor at the Wharton School of Finance and Commerce, University of Pennsylvania, is serving as Senior Transportation Economist of the United States Department of Agriculture on a part-time basis.

Shorey Peterson, associate professor of economics at the University of Michigan, will be on the 1941 summer session staff of Harvard University.

Spencer Pollard of the department of economics, Harvard University, has been appointed assistant professor of economics at the University of California.

Henry J. Rehn of Temple University will teach courses in accounting at the University of Tennessee during the second term of summer school.

R. B. Saylor was appointed teaching assistant in the department of economics, University of Illinois, for the second semester of 1941.

William K. Schmelzle has been appointed lecturer in economics at the University of California for the year 1941-42.

G. T. Schwenning of the University of North Carolina will teach in the summer session at Ohio State University.

Peter D. Shilland is instructor in economics at Ohio State University.

J. J. Spengler, professor of economics at Duke University, will be absent on leave through the first semester of 1941-42.

Lucy W. Stebbins, professor of social economics, has resigned from the University of California.

George W. Stocking, on leave from the University of Texas with the Antitrust Division of the Department of Justice, has been appointed by President Roosevelt as alternate to Dr. Clarence Dykstra on the National Defense Mediation Board.

Eliot Swan, recently of the department of economics, University of California, has been appointed to the research staff of the Federal Reserve Bank of San Francisco.

Allan Sweezy has been appointed associate professor of economics at Williams College.

Paul S. Taylor will be on sabbatical leave from the University of California for the fall semester of 1941-42.

Dean Charles S. Tippetts of the School of Business Administration of the University of Pittsburgh has resigned, effective July 1, to become headmaster of the Mercersburg Academy.

Lawrence L. Vance of the School of Business, University of Kansas, has been appointed lecturer in accounting at the University of California.

D. Rutledge Vining, Economist of the Federal Reserve Bank of Atlanta, has been named an assistant professor of public utilities and transportation at the University of Arkansas.

Frank B. Ward, professor of economics, will conduct a special graduate course at the University of Tennessee, July 7-August 9, devoted to study of social and economic problems of the Tennessee Valley area. Two weeks will be spent in field trips to Tennessee Valley Authority dams, and experimental areas.

A. C. White was appointed teaching assistant in the department of economics, University of Illinois, for the second semester of 1941.

Edmund Whittaker, professor in the department of economics of the University of Illinois, was granted leave of absence for the second semester of 1941.

G. Lloyd Wilson, professor at the Wharton School of Finance and Commerce, University of Pennsylvania, is serving as Head Economist, Transportation, with the National Resources Planning Board and as Consultant, United States Department of Commerce, on a part-time basis.

H. D. Wolf of the University of North Carolina is a member of the Second Textile Industries Committee established under the Wages and Hours act.

David McCord Wright, assistant professor of commerce at the University of Virginia, has received the David A. Wells prize at Harvard University for the year 1940-41, on his doctor's dissertation, "The Creation of Purchasing Power."

E. W. Zimmermann of the University of North Carolina will teach in the summer session at the University of Texas. During the past year, he was author of the Staff Report to the Interdepartmental Committee on Puerto Rico.

Business Finance; Insurance; Investments; Securities Markets

Book Reviews

MACK, <i>Flow of Business Funds and Consumer Purchasing Power</i> , by R. W. Goldsmith	643
LAGERQUIST, <i>Balancing and Hedging an Investment Plan</i> ; SPURRIER, <i>Common Stocks and Bonds as Long-Term Investments</i> ; SMITH, <i>Management Trading, Stock Market Prices and Profits</i> , by C. C. Bosland	645
MEAD, JEREMIAH and WARRINGTON, <i>Business Corporation</i> , by W. J. Eiteman	648
Titles of New Books	648

Public Control of Business; Public Administration; National Defense and War

Book Reviews

ROBBINS, <i>Economic Causes of War</i> , by P. T. Ellsworth	649
SIMPSON, <i>Big Business, Efficiency and Fascism</i> , by R. A. Gordon	650
Titles of New Books	651

Industrial Organization; Business Methods and Practices

Titles of New Books	654
----------------------------	-----

Marketing; Domestic Trade

Titles of New Books	654
----------------------------	-----

Mining; Manufacturing; Construction

Titles of New Books	655
----------------------------	-----

Transportation; Communication; Public Utilities

Book Reviews

ABRAMS, <i>Power in Transition</i> , by H. F. Havlik	656
THOMPSON and SMITH, <i>Public Utility Economics</i> , by E. Jones	657
BEARD, <i>Regulation of Pipe Lines as Common Carriers</i> , by R. A. Prewitt	658
Titles of New Books	659

Agriculture; Forestry; Fisheries

Titles of New Books	661
----------------------------	-----

Economic Geography; Regional Planning; Urban Land; Housing

Book Reviews

KLEINSORGE, <i>Boulder Canyon Project</i> , by C. E. McNeill	662
WICKENS, <i>Residential Real Estate</i> , by H. E. Hoagland	663
Titles of New Books	664

Labor and Industrial Relations

Book Reviews

REYNOLDS, <i>Labor and National Defense</i> , by J. P. Wernette	665
Titles of New Books	667

Social Insurance; Relief; Pensions; Public Welfare

Book Reviews

ATKINSON, <i>Federal Rôle in Unemployment Compensation Administration</i> , by B. Stewart	669
DODD and PENROSE, <i>Economic Aspects of Medical Service</i> , by L. S. Reed	671
Titles of New Books	672

Consumption; Income Distribution; Coöperation

Book Reviews

SORENSEN, <i>Consumer Movement</i> , by E. E. Hoyt	673
CAMPBELL, <i>Consumer Representation in the New Deal</i> , by D. M. Keezer	675
KRESS, <i>Introduction to the Coöperative Movement</i> , by F. T. de Vyver	676
Titles of New Books	677

Population; Migration; Vital Statistics

Titles of New Books	678
----------------------------------	-----

Unclassified Items

Titles of New Books	678
----------------------------------	-----

Officers of the American Economic Association

<i>President</i>	SUMNER H. SLICHTER, Harvard University
<i>Vice-Presidents</i>	{ JAMES C. BONBRIGHT, Columbia University
<i>Secretary-Treasurer</i>	{ WALTON H. HAMILTON, Yale University
<i>Counsel</i>	{ JAMES W. BELL, Northwestern University
	{ JOHN E. WALKER, Washington, D.C.
	{ N. S. B. GRAS, Harvard University
	{ RAY B. WESTERFIELD, Yale University
	{ J. DOUGLAS BROWN, Princeton University
	{ GEORGE W. STOCKING, University of Texas
	{ STACY MAY, Rockefeller Foundation
<i>Executive Committee</i>	{ EDWIN E. WITTE, University of Wisconsin
	<i>Ex-Officio</i>
	The President, Vice-Presidents, Secretary-Treasurer, Managing Editor, and three ex-Presidents who have last held office (Alvin H. Hansen, Jacob Viner, Frederick C. Mills)

THE AMERICAN ECONOMIC REVIEW is published five times a year, in February, March, June, September, and December, at 450 Ahnaip St., Menasha, Wisconsin.

Leading articles, book reviews and general correspondence should be sent to the Managing Editor, Professor Paul T. Homan, at the temporary office of the REVIEW, The Brookings Institution, 722 Jackson Place N.W., Washington, D.C.; or to members of the Board of Editors.

Books for review and periodicals should be sent to the Managing Editor at the permanent office of the REVIEW, McGraw Hall, Ithaca, N.Y.

Publication offices of the AMERICAN ECONOMIC REVIEW, 450 Ahnaip St., Menasha, Wisconsin, and Evanston, Illinois. Correspondence relating to subscriptions and other business matters should be addressed to the office of the Secretary of the American Economic Association, Northwestern University, Evanston, Illinois.

THE AMERICAN ECONOMIC REVIEW is sent to all members of the American Economic Association as one of the privileges of membership; single copies are \$1.25 a copy. Membership dues are \$5.00 a year; life membership, \$200.

CHARLES FRANKLIN DUNBAR

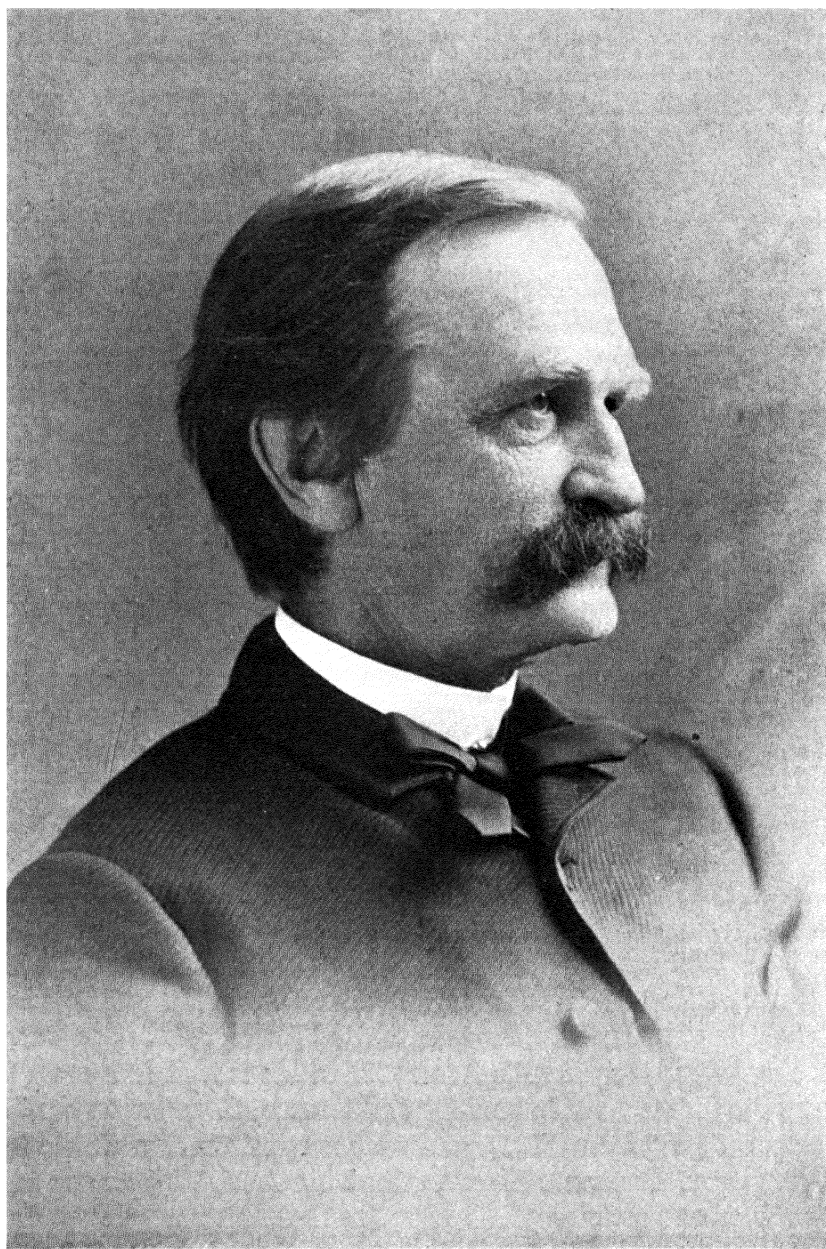
Second President of the American Economic Association, 1893

Born in Abington, Massachusetts, July 28, 1830; died January 29, 1900. Educated at Phillips Exeter Academy and at Harvard (A.B., 1851). After a brief period of employment in business and of recuperation from ill health, he entered the Harvard Law School in 1857 and was admitted to the bar the following year. From 1856 to 1869 he was associated as contributor and editor (and part owner) of the *Boston Daily Advertiser*. His editorials were vigorous and commanded wide recognition.

At the very beginning of President Eliot's administration at Harvard University, Dunbar was invited to become professor of political economy, probably the first professorship established in the United States devoted *eo nomine* to the subject. After two years of European travel, he accepted this appointment (1871). For thirty years he was the head of the department and did much to stimulate interest in economics as a science. He gathered about him a staff of younger scholars which brought prestige to the University. Although his special interest was in practical problems in banking and finance, he avoided propaganda in the interest of any particular group. He took an active part in educational administration, serving as dean of the Harvard College faculty, 1876-82, and as the first dean of the faculty of arts and sciences, 1890-95. He was a member and later president of the Board of Trustees of Exeter Academy, 1885-98. In 1886 he assumed the editorship of the *Quarterly Journal of Economics*, the first journal published in the United States addressed to scholars, a journal which served as a model for the British *Economic Journal*, founded in 1890. To the *Quarterly* he gave devoted service until 1896.

Owing to his numerous administrative duties and to his frail health, Dunbar did not leave a large legacy of written work. His published works include a compilation of *Laws of the United States, relating to Currency, Finance and Banking from 1789 to 1891*, which served as a most useful compendium for students in banking and finance; *Chapters on the Theory and History of Banking* (1891), generally recognized as a classic in economic literature. *Economic Essays*, edited by O. M. W. Sprague in 1904, contains Dunbar's articles which were for the most part previously published in the *Quarterly Journal of Economics* and *North American Review*.

Professor Dunbar was also a member of the Massachusetts Historical Society and a Fellow of the American Academy of Arts and Sciences.



Chas. F. Dunbar.

The American Economic Review

VOL. XXXI

SEPTEMBER, 1941

No. 3

CERTAIN PROBLEMS IN THE EMPIRICAL STUDY OF COSTS¹

I

The current and growing interest in extending the application of empirical methods to the field of economic costs seems to the writer wholly laudable. Only in this way can adequate tests be made of the generalizations—the theory of costs—that have been arrived at by more theoretical analysis; or only in this way can new generalizations of value be derived directly from the data. If, however, we mean by empiricism in economics the reduction of the data of economic life to measurable entities and then the measurement of these entities and of their relations, certain problems inevitably arise and must be dealt with before the results can become meaningful. Those problems are due chiefly to the fact that the categories of cost accounting, where the data are found, do not conform closely to those of theory, and that neither set can be made adequately to serve the purpose of scientific analysis.² The following discussion is an attempt to present some of these problems for consideration, without undertaking to solve them; and it deals with one specific sector only—that of problems which arise in studying the relation of costs to output in the “short run” (*i. e.*, fixed capacity).

II

The first problem is the scientific delimitation of costs. That is a problem in classification, pure and simple. But classification of what? What is the nature of a cost? Is it a concept; is it a calculation; or is it a kind of event which occurs in economic life? I am inclined to think that a realistic economics (empirical) must deal only with objective events—acts and

¹ EDITOR'S NOTE—This paper was written at the request of the Director of Research of the National Bureau of Economic Research as a result of discussion of the Bureau's project for empirical cost studies. It is to be published shortly in the form of Director's comment to a field study by Dr. Joel Dean, in the Bureau's new series of *Technical Papers*. Because of the importance of the subject, it seems desirable to make the paper available to a wider body of readers. The author is the representative of the American Economic Association on the board of directors of the Bureau.

² In the field of national income, Kuznets, like his predecessors, was faced with similar problems. There the data are made available in certain classifications. It was necessary to construe, to modify and to complete these classifications before the figures represented the actual economy. Then it was necessary to “reconcile” these classifications with those of theory. His forthcoming work (*National Income and Its Composition, 1918-1938*) proves that it is possible to bring comparative order out of such chaos, with most important results; but it is far from an easy task.

relations. If this is the nature of a cost, then, for the purpose of classification, a criterion must be agreed upon according to which there is to be selected from all economic events those which are to be classified as costs; for the classification does not exist in nature. The criterion is a matter of choice—of scientific utility—and there is no “right” and “wrong” about it. But, once the class is defined, then scientific precision requires that all events of that kind, without exception, must be included and all others excluded. At the border line that becomes a difficult, if not arbitrary, decision, as is true of all other scientific classifications. Nevertheless, away from the disputable border line cases, once the criterion is adopted, the question of inclusion or exclusion of individual events does become a question of “right” and “wrong” (in the sense of correct and incorrect). The first step, then, is to achieve a consensus of scientific opinion as to the nature of a cost? Then we come to the question of the boundaries to be set to the classification—its criterion. If they are events, are costs to be limited to those events which occur in connection with factors of production; if so, exactly what are the factors of production which give rise to costs; when or under what conditions do they do so; if not so limited, what events or other entities besides such factors are to be included? The mere fact that these questions have been answered in a certain way by theoretical economics, or are naturally answered in a certain way under a particular institutional set-up or are conventionally answered in a certain way by business accounting, proves nothing. For an empirical science an attack on this problem *de novo* is a prerequisite.

If costs are to be limited to those events which occur in connection with factors of production, it is necessary at the start to establish a distinction between (1) the factors of production themselves, as the physical materials and activities, or the mental activities, from the *use* (application) of which product actually results, (2) the human efforts and sacrifices which are involved not only in putting factors to use but often, as well, in merely making them available for use (real costs in the usual sense), and (3) the compensation in money or its equivalent which is paid in order to induce the making available or the putting to use of such factors, plus other institutional charges (money costs). These three aspects of the process of production—the technical, the real and the institutional (or accounting)—or these several disparate sets of entities, must be sharply differentiated and treated separately, for they do not necessarily or usually conform to each other either in scope, in magnitude or in timing. In the first aspect, we view the process of production at a purely technical level; the factors are agencies from which product results; when no product is resulting the factors are inactive—not producing.³ Thus, if costs are to be delimited to occurrences at

³ This is the aspect in which the “law of the proportioning of factors,” or of diminishing (etc.) returns, treats the process. It is also the aspect in which we speak of “productivity.”

this level, they only arise when the factors are active—in other words, as the costs of specific current product. In the second aspect, efforts and sacrifices seem to be real costs when and as they are made. Therefore, in the case of plant and machinery, for instance,⁴ since the efforts and sacrifices which constitute the costs may begin to be made long before the factors are used or even when they never will be used, the costs are regarded as accumulating until the factors occasioning them come to be used. Then they, too, become costs of specific current product; but since they cannot become actual costs of product unless product results, they must, if no product results, be treated as what we call losses (*i.e.*, economic waste). In the third aspect costs, strictly speaking, arise (are incurred) under our institutional set-up only when a contractual or imposed liability becomes “fixed and absolutely owing.” As we shall see, this may never occur as to some factors; it may occur as to others before or after the factors are used or even without their ever being used; it may occur in other cases without the existence of a true factor at all; finally it may occur as to some factors because one sets up a purely nominal liability to oneself with regard to them, with or without reference to their use. It is true also of the third aspect that costs may have to be accumulated for the reason that they cannot be treated as costs of product, until or unless product results, and that they must be converted into losses, if no product results.

The discrepancies between these three aspects create the chief part of the problem of delimitation of costs, if costs are confined to factors. They preclude the possibility of effective results if, in one place, cost studies treat the subject in terms of factors *used*, in another in terms of factors *made available*, and in a third in terms of contractual and imposed liabilities.⁵ They require that we make up our minds in advance either to choose one aspect and stick to that throughout, or that we combine all three of them, by a process of “reconciliation” or adjustment of their discrepancies, into a scientific model which, being a combination of all, differs from each. If we choose to do the latter, the adjustments and reconciliations must be defined in detail. As has been suggested above, the discrepancies in timing between these three aspects may be adjusted by accumulation when the factor is not active. But that, of course, changes the magnitude as well.⁶ The other

⁴ Or even, under certain conditions, labor and materials made available but not employed (see below).

⁵ As an example of the universal exigencies of scientific method, though in a totally different connection (the definition of functional localization in the cerebral cortex), I quote the following from a leading scientist: “If these two terms do not embody precise and consistently employed conceptions, no hypotheses based upon them are likely to be valid.”

⁶ For example, a machine in use one-third of the time is, in the first aspect, only a cost during that part of the time. The rest of the time it is inactive and therefore not a causative agent. But in the second, and frequently in the third, aspect it is a cost all the time. As a cost, it must be accumulated during the two-thirds of the time it is idle. Then that cost must be applied during the time it is producing—the only time there is

discrepancies, scope and resulting magnitudes, are not to be adjusted so easily.

Examination, first, of the possibility of using the third aspect—in effect, the books of account—as the sole basis of classification, will not only demonstrate how inadequate it is, but will also serve to suggest some of the detailed discrepancies which, if the alternative of a combination were to be adopted, would require to be resolved. Starting with the initiation of a productive enterprise the first step is the financing of the plant and equipment. To the extent that this is done with borrowed money (bonds and notes) or to the extent that the land, or the land and buildings, or even the machinery, is leased, a contractual cost is incurred which is usually a recurrent liability without regard to the use of the factors and even if they are never used.⁷ On the other hand, to the extent that this is done by equity financing (capital and surplus) no contractual cost is incurred. Yet the factors are made available to the same extent by either means; the real cost involved is presumably the same; and when the plant is used there is no difference in the effect on product. Is this discrepancy to be corrected for at all? If so, should it be corrected for by imputing as a cost an amount equal to pure interest plus risk premium on the capital and surplus? Then what should that rate be? On that basis the cost will be quasi-contractual and therefore regardless of use. Or should the actual net earnings on the equity (profit), if any, be treated as this cost? If there are no net earnings should such financing be regarded as costless? If these earnings are large, should only a part of them be treated as cost and the balance be regarded as “differential profit”? Without imputation, since the cost must then be based on earnings in some respect, it will arise only if the plant and equipment are used and will probably be somewhat proportional to the extent of that use.

Taxes are imposed liabilities and therefore money costs as to which, strictly speaking, no factor is involved. Or, if you prefer to regard the services of government as a factor, it will at least be agreed that the taxes are not levied in proportion to such services rendered. They will either exceed or fall short of the active factors supplied. Are all taxes, nevertheless, costs? Corporation income and excess profits taxes are levied entirely on the net earnings (profits) and therefore on the equity only. Are they costs, if no cost is imputed to the equity? If such cost is imputed, are these taxes additional costs or only an abstraction from the imputed cost? Property taxes, as costs, are, like interest on borrowed money or rent, payable regardless of use. On the other hand, income taxes, as costs, can only arise if there is net

product of which it can be a cost. As a result the cost in the last two aspects is three times that in the first.

⁷When machinery is leased, the cost to the hirer sometimes takes the form of a royalty on output. On the strictly institutional basis (third aspect) that would be all that it would be necessary to consider.

income to the equity and will therefore be somewhat proportionate to use of plant and equipment. Excise taxes, as costs, will be strictly proportionate to use of plant—that is, to output.

In America, depreciation on owned plant or equipment, like all other reserves, takes the form of a liability assumed to oneself. In France it frequently takes the form of a contractual, though contingent, liability for the return of capital to the *actionnaire*. On the first basis replacements can be made without refinancing; on the second they cannot. If it is set up on the first basis, depreciation is treated as a cost; if on the second, since it is only a charge against profits, whether or not it is a cost depends on whether or not profits are treated as a cost. In America, "straight line" depreciation becomes a cost without regard to use. Yet the intensity of use is an important determinant of the time for replacement. Certainly the operation of a plant on three shifts uses it up much faster than when it is operated on one shift. Should a correction be made to cover this, so that a part, at least, of this cost is proportionate to use? If so, what is to be done about depreciation included in the rental or hire of plant and equipment which is usually a contractual liability without regard to use?

In all these cases we note that the strictly contractual costs, and also those which are imposed or assumed, or which may be imputed, in fixed amounts by reason of the existence of the plant, go on regardless of use. If we look beneath the institutional basis, most of them seem to rest on the fact that the real costs involved are occasioned in making the factor or factors available for use rather than merely in putting them to use. That suggests the possibility of adopting the second aspect—the real—as the sole basis of our criterion. How well will that serve; or what discrepancies does that show up, if it is to be combined with the others? It is clear, at once, that we would not be applying this criterion to equity financing unless we accepted imputed interest upon it regardless of use; nor could we apply it at all to corporation income taxes or to strict use depreciation, neither of which can occur when there is no use. Moreover adoption of that criterion would raise the question whether labor and materials, available but unused (unemployed and unbought) are not, under certain conditions, also costs. This point of view as to labor, at least, was suggested years ago by J. M. Clark.⁸ It is true that the real costs of the plant are irrevocably incurred when it is made available. Machines, when idle, cannot be taken home by the creditors or owners, enjoyed as consumers' goods during idle hours, and then brought back to work in the morning. But is that not sometimes true of labor as well? Short time employment usually ties up the whole of the worker's time. He cannot secure other employment for the rest of his available time. And the local reserve of labor which makes itself available always, and which is required at high rates of operation but not required at low rate operation, comes

⁸ *Economics of Overhead Costs*.

rather close to being on the same basis as the portions of the plant which may remain idle except when things are going full blast. If we were to adopt the "real" criterion, the merely institutional fact that, at present, this loss falls on the worker while that of the machinery furnished by creditors falls upon the productive enterprise would be beside the mark.

This possible criterion for the delimitation of costs encounters another difficulty as well. A certain part of the capacity of a plant may represent surplus capacity, in the sense that the rate of operations never, or almost never, rises to the point at which it is put to use. It may be "socially unnecessary," as the theorists say, or nearly so. The same may be true of local labor waiting for employment at a coal mine which will never again be operated. Where is the line to be drawn between plant capacity which is needed, if only for peak loads, and that which represents economic waste? Where is the line to be drawn between economically needed local reserves of labor and obstinate immobility?

From the foregoing it is evident that not much attention needs to be given to the questions that would arise if the first aspect—the technical one—were chosen as the sole criterion. Too much would have to be ignored to make that possible. Nevertheless, it will be equally evident that its relation to the other aspects, in connection with the second problem to be considered, has a vital bearing on the whole subject.

If costs are not to be limited to factors of production in use, or available for use, for the production of specific product, at what boundary shall we set the limit? The question has already been raised with reference to some non-factor elements which are institutionally imposed upon the individual productive enterprise, such as those in the form of taxes in excess of the value of government services rendered. We might have included those in the form of "damages" for injury to others. But why stop there? Why not include all so-called social costs, all "disservices" and "discommodities," even those whose incidence is upon other individuals or enterprises?⁹ If the latter, then the corporation without net income should be charged, upon our scientific books, for its share of those government services of which it receives the benefit but for which it is hardly taxed at all, and the overburden of the rest should be lightened. In addition, all "damages" to other producers, or to consumers, should be assessed and included in our estimates. Something like this ambitious program is called for if we are to test the validity of the more ingenious branches of the theory of costs.

On the other hand, it may prove to be more conducive to effective economic analysis to draw some line between those costs which may be defined as *costs of production*, because they are unalterably enforced by the environment and the available techniques—the factor-costs—and all other costs. It

⁹ The incidence of "social costs" must, of course, ultimately rest upon some individual or individuals. They cannot alight upon a Germanic superentity.

might be convenient to divide these other costs into two sub-classes. The first might be called "social charges" and would include all items not technically essential to—not strictly causative of—production, but with which it is determined, nevertheless, to make production chargeable, either because they institutionally are, or analytically should be, so charged. An example of such a class is unemployment insurance.¹⁰ The second might include all those costs which may be incident to (consequences of) production and yet not causative of, or necessary to, product and which are neither institutionally nor analytically charged to production but fall elsewhere. Such are, for instance, failing efforts to discover new natural resources, abortive experiments, etc. Personally I should regard all this sub-class as costs converted into losses. For this reason they might be called "social losses."¹¹ Such a discrimination would make the empirical problem far more manageable; for to these non-productive costs there literally is no logical limit. The criterion adopted for them could then be independent of that for the true costs of production. And they could be studied separately.

Whatever criterion of costs—or of the three subdivisions of costs—is chosen, after careful consideration of the scientific utility of the system of classification, then, so long as that criterion remains scientific usage, all events (or other entities) included in the definition must be treated as costs. I know of no science whose fundamental classifications are "different for different purposes" (see below). That kind of impressionistic methodology strikes me as a-scientific. However tentative and subject to improvement the classification may be, it remains, as long as it is in use, fixed and absolute by definition.

III

The second problem which, it seems to me, has to be squarely faced before empirical cost studies can be more than reproductions of current cost accounting methods, or reflections of the concepts of a somewhat unrealistic theory, is the problem of the allocation of costs. Having determined what events (or other entities) are to be included under the rubric, costs, and whether these are limited to what I have called strict costs of production, or

¹⁰ Some of these "social costs" are relics of an English classical point of view, imported into American theory but never indigenous here—the idea that the sustenance of labor is a cost of production. That is true only if labor is "an instrument of production." Such a view is foreign to the American atmosphere. Here the sustenance of labor, like that of all of us, is an expenditure of income. It may take the form of a diversion (redistribution) of the income of others. But it is not a cost of production.

It should be noted that unemployment insurance abuts on and may be partly used for that real cost of labor held available for use which was mentioned above. Which part is a cost of production and which a "social charge"?

¹¹ Perhaps we should enlarge this category to cover the ground outlined by Pigou (*Economics of Welfare*, II, chap. 9). Thus we would have in this category the algebraic sum of uncompensated services and of undischarged disservices, both ways, in so far as the net fell on others.

are to include more or less of "social charges" and "social losses," there remains to be determined precisely what specific batches of product are to be charged with these costs, or how these costs are to be distributed over the actual product. Again the fact that these questions are treated in a certain way in accounting practice or in the theory of costs is not sufficient to settle the procedure for scientific purposes. But, unlike the first problem, this one is not a matter of classification; nor is it subject to any arbitrary rule in border-line cases. Instead, at least so far as strict costs of production are concerned, any scientific solution must rest upon an effort to determine in detail the actual facts of economic causation in the production process—what it is that produces—in terms of the relation between specific individual factors and specific batches of product—that is, the facts of the technical aspect already alluded to. For this purpose it seems to me that it is necessary to recognize more clearly, as the basis for views about production, that the technological process, in its widest sense,¹² is the medium through which product comes into being as the real consequence of its real causes. There is no product without sufficient cause. We have, then, to attribute it to its real causes. That attribution incidentally determines what items are to be included in its costs of production. Such a task is as difficult as is the explication of all other phenomena. Nevertheless it is a problem that exists in real terms only at the technical level. Its solution, or approximate solution, at that level is final for economics. On that basis the particular costs of production of a particular batch of product must be accepted as technical data. They cannot be assorted to taste; they cannot be ruled in or out on institutional grounds; they cannot be treated as relative to the points of view of various schools of thought. They are facts which are "given" and which can only be revealed by observation and inference.

IV

If, now, the most fundamental characteristic of this technical aspect of costs—the fact that factors are not producing when they are not actually in use—is to be envisaged in the empirical attack on costs, there will be required, I think, a reëxamination of the notion of capacity, the various degrees to which it is *used* (rate of operation) and its potential limit (capacity, in the strict sense). And this for the reason that these categories have not been envisaged (in theory) in the technical aspect—"productivity"—but rather in the real or the money cost aspects. Since this question lies at the root of the relation of costs to output in the short run, it will be appropriate to consider it briefly before taking up the general problem of allocation of costs. The concept of capacity usually refers only to plant and

¹² That is, including every step to the point where consumption begins. Since this includes the process of distributing the product, it is a somewhat larger category than the technical process of fabrication alone.

equipment (machinery), not to labor, materials, etc. That is, plant and equipment are treated as the strategic factor in capacity. And this, presumably, because this factor usually has to be made available in advance—sometimes long in advance—whereas it is somewhat naïvely taken for granted that other factors will be provided as wanted. Since capacity, then, relates chiefly to size of plant and size and number of machines, in terms of their output, it is primarily a physical, or technical, and not a financial, or accounting, magnitude. We do not speak of a plant with a million dollar capacity, but of one with the capacity of a million units of product. Furthermore, capacity and rate of operation both have to do with the production process in its technical aspect only. They are quantitative categories expressing the potential (capacity) or actual (rate of operation) *use* in production of a single factor—or, if you prefer, an unchanged complex of factors (plant). It follows that neither is capable of being used, in its raw state, as a magnitude in cost analysis.

Having identified the actualities represented by these terms, we may look around us at existing (unchanged) physical plants (buildings and machinery). We see that most of these are capable of operating all the way between an absolute minimum (shut down) and some maximum (capacity), yet to be defined. As the rate of operation is increased from the minimum it may change in any one, or any combination, of at least four dimensions: (1) the number of parallel production lines or duplicate machines actually in *use*; (2) the number of days per week the plant is operated; (3) the number of hours per day it is operated; (4) the speed, within their possible limits, at which each machine is run. When any single machine is not operating, it is idle. So is the plant space which houses it. But all equipment requires to be shut down for rehabilitation of one sort or another (cleaning, refilling, repairing, headway between trains, etc.). This part of idle time may not represent the same ratio to operating time at different proportions of full time operation or even along the several different dimensions of increase. But for each machine, independently of each other, there is operating and repair time, which are essential to production, and idle time (strictly) which is non-productive. When a machine (and its plant space) is strictly idle it is not a factor of production in *use*.

As the rate of operations is increased along any of the first three dimensions mentioned above, the initiation of the process constitutes the application of idle labor (more men, more hours or more shifts) to idle machines (and plant space). Plant is no more a factor in *use* when it is shut down at night than is the workman when he is asleep; nor when it is shut down several days in the week; nor when a "segment" of it is not needed for the current rate of operation. Although, when the increase is along the third dimension above, the addition of a second or a third shift of labor brings in *different* men, whereas the operations are on the *same* machines,

the actual use of the machines remains exactly proportionate to the actual use of labor, just as it does in the first or second cases. For instance:

- 1 Shift Men working 8 hours Machines operating $\frac{1}{3}$ time—idle $\frac{2}{3}$ time
- 2 Shifts Men working 16 hours Machines operating $\frac{2}{3}$ time—idle $\frac{1}{3}$ time
- 3 Shifts Men working 24 hours Machines operating full time—idle 0 time

There is not inherent in these ways of increasing the rate of operations any change in the proportioning of factors used. That is true also of the fourth dimension, speed-up. Then the time of use of neither machines nor men is changed. Therefore, in all cases, the ratio of man-hours to machine hours may remain the same. Generally speaking, I believe it will be found that, in modern industry, once the plant is built and equipped, its techniques are fixed and thereafter, without change in plant, there is no inherent¹³ change in the proportion between the labor and the machinery actually *used*. True, techniques of different scale (and therefore different proportioning) may exist in the same plant to care for orders of different size (*e.g.*, job and rotary presses); or a part of the plant may still retain an obsolete technique (and therefore different proportioning) to care for occasional surplus demand (*e.g.*, beehive and by-product coke ovens). But no general change of proportioning with increased rate of operation can be deduced from exceptional and varying conditions such as these. It appears likely, that, in modern technology, any law of proportioning of factors or its underlying law of diminishing productivity ceases to operate once the plant is built and equipped. Thereafter the general case seems to be that rate of operation determines the quantity of a uniform compound of factors which is actually *used*, and the absolute limit of capacity is reached when all of the strategic factor (plant and machinery) is operated at maximum speed and none is strictly idle for any of the 168 hours in a week.¹⁴

While casual observation suggests that this view of rate of operation and of capacity covers a good deal of the ground,¹⁵ only wide-ranging empirical studies of the way factors are actually combined in use and full exploration of the possibility that there are other dimensions in which rate of operations can increase will adequately determine the actual technical facts. Casual observation is not scientific evidence. It merely suggests a lead to follow up. Nevertheless, it does warrant the suspicion that, in dealing with these entities, the theory of costs has been fundamentally defective.

V

To resume consideration of the second problem, that of allocation of

¹³ That is, no other than casual or fortuitous changes.

¹⁴ This definition of capacity contains the implication that the rate of operation rarely reaches capacity anywhere. That is a fact, but it is hardly recognized in theory, particularly in the theories of competition. The shorter the period taken, the more often would capacity be reached; the longer, the less often.

¹⁵ Certain exceptions will be noted later.

costs, we may note first that, however difficult an adequate scientific attack on the problem of allocation may prove, there is one point with reference to it which is perfectly clear and free from quandary. No costs, however delimited, can be allocated at all—can become costs of product, as we put it above—unless there is product to which to allocate them.¹⁶ That has two corollaries. The first is that any costs which do not lead to product must be charged off as *losses* (economic waste). The second is this: If it is decided to include in the class, costs, any which run regardless of use of the factor—by reason solely of making it available—then, during the time these factors are not in use, the costs must be accumulated as long as there is a justifiable expectation that the factors will lead to product, and they must be charged to the product when there is product. There is, of course, no other way to allocate them. But, if there is no such expectation or if the expectation eventually proves false, then the original and the accumulated costs, if any, must also be charged off as losses (economic waste).¹⁷ Thus, immediately or ultimately, the destination of costs which are not allocated is into the category of losses. It seems to me that this is an issue upon which economic theory, or at least the theory of costs, has reneged.

Among the contractual and imposed costs to which business accounting has limited itself, it distinguishes those which are incurred for general operation (which it supposes are only to be allocated to specific product upon some more or less rational but arbitrary plan) and those which are incurred directly for specific batches of product. On the other hand, economic theory (cost theory) has generally used the purely mathematical distinction between fixed and variable costs—between those which are unaffected by changes in the rate of operation within a fixed capacity and those that vary directly with that rate. These two pairs of classifications do not fully conform to each other. Most overhead accounts are only in part fixed and contain to a greater or less extent a variable element. However, the mathematical distinction seems to conform more closely than the accounting one to ours between costs, however delimited, which run regardless of use of the factors—or in so far as they do so—and costs which arise only as and when the factors are used. If it is decided to include within the delimitation of costs any which run regardless of use of the factors, these seem necessarily to belong to that extent in the category of fixed costs. As a result, it would follow from our corollary that, when there is no product (plant shut down), these fixed costs must be accumulated. If they are ever to become costs of

¹⁶ This is the obverse of the technical axiom given at the beginning of the previous section—that factors of production are not producing when they are not actually in use.

¹⁷ And there they end up in the company of the aforementioned "social losses." Or, if it were decided to include these "social losses" among the costs, they would then have to be allocated to definite product. If that process did not make the money value of the costs exceed the price, then these "social losses" would be covered. If it did exceed the price, the excess would go over into the loss category in the way described below.

product, they can only become so when and if there is product. When the plant opens up, we have seen that its rate of operation may increase along any one, or any combination, of at least four different dimensions. As the rate is stepped up, increments of output are added, per period. The question then arises whether these fixed costs—those accumulated from the past and those current for the period—should become costs of product for the whole output at each stage in the increasing rate of operation or only for certain of the increments. In other words, it appears that their classification as fixed costs does not automatically determine their allocation.

The theory of costs has dealt with this question, though from a somewhat different angle. Taking as the marginal costs of an increment of output only the so-called variable costs—that is, those which are only incurred as the factors are used (including, of course, increases of overhead)—which the increased rate of operation necessitates, it has treated these as if they constituted the whole cost of the increment. Now, by definition, it is necessarily true that the marginal (or incremental) cost of each increment is the whole *extra* cost involved. But is it the whole cost? If so, is the marginal cost the whole cost of each increment starting from zero output? Then fixed costs could never become costs of product. If not, then at what point, working backward in the stripping off of successive increments, is one (or more) of the earlier ones to be found as to which fixed costs become part of the cost of product? Shall this or these bear the entire fixed costs? What if they fail to cover them? Or, on the other hand, are marginal costs to be considered the whole cost only of those increments beyond that rate of operation at which fixed costs have been fully covered? If so, that rate of operation can only be determined after it is decided what costs are to be treated as running regardless of use—that is, after the question of delimiting costs has been settled. In the extreme case in which all earnings on capital might be treated as costs, such a rate of operation would have to be at capacity. I have never seen these several questions examined. But, until the logical contradictions they point to are resolved, this theoretical treatment of fixed costs seems to reduce itself to an absurdity. Furthermore, the whole point of view is incompatible with the fundamental technical facts of economic causation. If economic factors are used, they cannot be treated as if they were unused—as if they resulted in no product. They contribute toward product and are therefore costs. Recognizing the facts of economic causation, if we are to limit the application of fixed costs to any particular early increments of product or to those of which the difference between total extra cost and total price is sufficient to cover the fixed costs, the rule resolves itself into this: For any given rate of operation less than capacity, the cost of providing that part, or time, of the plant, etc., which is not then needed *is* to be charged against the product upon which it *is not* used; and, conversely, it *is not* to be charged against the product upon which it *is* used, when and if an increas-

ing rate of operation requires it. Finally, if under this method of allocation fixed costs are not covered, a loss results. But, since scientific allocation must recognize the contribution of all factors actually used, there is no reason whatever to concentrate this loss upon the fixed costs. Rather the loss consists of a proportionate part of all the constituent categories of cost which were properly allocable; for all such costs are costs of product whether or not the price of the product covers the aggregate of them.

A modification of this viewpoint of cost theory sometimes crops up in a different form. It is said that there are "different costs for different purposes."¹⁸ The implication is that the allocation of costs of production is not a matter of fact but a matter of discretion. But, though this leads to certain oddities and aberrations in allocation, it has really no bearing upon our subject. It is chiefly loose language or loose thinking; for what is meant is that, under various contingencies which may arise in connection with the processes of production, decisions by those responsible may be made without taking account of all costs or even with references to one or two categories only. That does not alter the facts of costs. It does not make the items ignored or forgotten any the less costs. It is merely a way of concentrating attention on the strategic factor in the case. If I have a machine which is demonstrably responsible for an abnormal quantity of rejects, the only costs I compare are the rejects per period against the costs of a new machine per period. In doing so I do not eliminate or even disregard all other costs. I merely limit the number of those to be considered with reference to—because they may be changed by—that particular decision.¹⁹

¹⁸ Because J. M. Clark has been quoted at me in the discussion of the first draft of this paper I use here the heading of the ninth chapter of his *Overhead Costs*. But what he actually says in that chapter, particularly on pp. 175-176, seems to be approximately what I am saying. He has his "total economic cost." If his chapter heading had read, "Differently assorted and partial aggregates of costs to be considered for the purpose of different decisions," it would have better represented what he seems to be driving at. It would have been more precise, but it would also have been precious. Therefore we can hardly criticize his phraseology.

¹⁹ Clark's examples are of much wider scope and include *ex ante* with *ex post* more obviously than does mine. Of his, some (1, 2 and 3) are decisions as to what costs to incur; some (6 and 7) as to what costs to discontinue; some (3, again, and 9) as to what costs already incurred are to be charged off as losses; and some (5 and 8, and 6 and 7 again) as to what costs are to be accumulated with the possibility (as always with accumulation) that they may ultimately have to be charged off as losses. His number 4 is the only one which concerns delimitation of costs. But that is for all purposes, not merely for some.

In making a decision between two alternatives (say, shutting down *vs.* running) the costs may differ. There are occasions in economic life, as indicated below, when only the difference need be considered. The concept of opportunity cost has treated these occasions as if they were universal; it has led, in effect, to the consideration of that difference only. It has blindly ruled out all costs common to both alternatives. But this makes a general rule out of an exception; and it assumes a free supply of economic energy of which only the direction of the application is supposed to be of concern to economics. In algebra one can cross out elements which appear identically on the two sides of an equation. But one cannot derive the equation without them, nor deny that they are elements. The notion that

As a matter of fact marginal, or variable, costs constitute a particular assorted and partial aggregate of costs which may, upon certain occasions, be the only costs to be considered in arriving at a particular decision. Such occasions constitute, therefore, special cases of the foregoing. So far as I have observed, marginal costs may constitute the strategic factor to bankrupts, in process of being discharged from fixed costs; to "entrepreneurs," owning their own plant, who have given up all idea of recovery on their investment and who therefore disregard fixed costs;²⁰ to the management, if they want to know how much they can earn to apply upon uncovered fixed costs, or as increased profit, by incurring a little extra (marginal) cost;²¹ or to economists afflicted with diagrammitis.²² But since marginal cost represents the whole cost only when the non-earning investment is, or is treated as, lost (no longer "socially necessary"), it is of little general interest either to empirical or to theoretical economics.

VI

It would appear that, if fixed costs, accumulated and current, are ever to become costs of product, and are never to be treated as not costs of the product upon which the corresponding factors are actually used, they must either be averaged over all product, whatever the rate of operation, or some more refined method of allocation must be devised by which those arising from each specific part or time of the plant are applied only to the specific lots of product upon which that part or time is actually used. Adoption of the first method, which is used almost universally in business accounting, would result in the usual so-called average-cost method of allocation. That, then, would be the only cost per unit to be considered or determined. At least in those cases in which fixed costs are a large part of total costs, cost

there is a difference between "short-run" and "long-run" costs, in any other sense than that the quantities of factors actually used may vary with the rate of operation, and with different techniques (capacity), seems to me almost as bad scientific thinking. A true cost of production, when it occurs, is an absolute and inescapable fact which economics should not gloze over.

²⁰ On the basis of this special institutional set-up, which was common at his time, Marshall (and his school) established a generalization which never applied to reality as a whole and now hardly applies at all.

²¹ Probably the commonest form of pressure to increase production arises from the need to do so in order to cover contractual costs. Then only the difference between price and extra costs is considered. In other words there is no incentive to increased production, if it is foreseen that only extra costs will be covered.

²² Diagrammitis is a neurosis which causes the patient to suffer illusions as to the meaning of diagrams. In this case the representation of the average and marginal cost curves is on a plane which is a cross section of time. The illusion consists in regarding the representation as historical, or as also historical, which it is not. All the costs contained within (subtended by) any part of the average curve are recurrent (continuous) costs for that rate of operation. If tomorrow one is to increase the rate, and thereby the area subtended, that does not mean that the recurrent (continuous) fixed costs of tomorrow have already been covered by the output of yesterday.

per unit would then probably always decline as rate of operation was increased up to capacity.

A possible alternative and more refined method is available and has been adopted in part by the public utility companies. This, too, was mentioned by J. M. Clark. It is based on the facts as to increasing rate of operation within the limit of capacity that were discussed earlier in this paper. The way it works out is more easily demonstrated when the increased rate of operation is accomplished along the first of the four dimensions mentioned—namely, duplicate lines of production or machines. Under this method the plant is divided into successive "segments" depending on the rate of operation that is necessary to bring each into use. The whole of the fixed cost arising from each "segment" over a year, or even a cycle, is then spread over its own output only, during the year or cycle. Thus in the daily, seasonal, and cyclical fluctuations of output the fixed costs of these "segments" of the plant which are used always, even at the minimum rate of operation, are distributed over the largest output; those of the "segments" used less often over less output; those of the "segments" used only at the peaks are concentrated on a small occasional output; and the cost of any "segment" never used cannot become costs of production at all. The last automatically become losses. As a result, each of these "segments" of the total capacity, which is only added in turn as the rate of operation is increased, necessarily shows a higher fixed cost per unit of product than its predecessor. And this because, during the day or year or cycle, its fixed cost is spread over a smaller output. Such a method of allocation would work out in the opposite way from the average cost curve. Instead of a declining element of fixed cost per unit, as output increases, which the average curve inevitably shows, this method of allocation would show a rising element of fixed cost per unit from increment to increment, probably curving upward very steeply as capacity is neared.

This method would probably require an imputation of fixed cost to the whole plant and equipment regardless of how it was financed. To treat each "segment" as giving rise partly to fixed (contractual) and partly to variable (if earned) cost would be too complicated; and to treat the most used "segments" as giving rise to fixed and the less used ones to variable costs would be an unjustifiable discrimination. One cannot identify the kind of general financing with particular portions of the plant and equipment financed. Since this method would be applied, at least in part, to costs which are contractual or imputed liabilities whether the factors are used or not, but would not treat them as costs of product until or unless the factors were used, the costs of most "segments" would have to be accumulated, some of them over a long period. As such, while actually fixed, they would be treated as variable costs in their allocation. So far as allocation was concerned there might be no fixed costs. Even those which

run regardless of use and have to be accumulated would be regarded as, what they really are, the costs of making available, at all times, factors which are only needed for the higher rates of operation. This is the justification of the method that the several successive "segments" composing the whole capacity are only put to use—and therefore the costs of each only become costs of product—when the rate of operation includes each one in turn.

It is a little more difficult to make clear how this method would work in cases of changes of rate of operation along either of the time dimensions only. In practice, it is perhaps inapplicable in such cases. But for purposes of scientific analysis it might be useful there as well. When a plant operates only one shift a day, then two-thirds of its costs which run regardless of use would be accumulated. If the rate of operation were stepped up to two shifts, then one-half the then accumulated fixed costs plus one-third of the current fixed costs would be charged to the product of the second shift. A third shift would be similar and would bear the balance of the accumulated, plus one-third of the current, fixed costs. The same system could be applied as the rate of operations increased in number of days a week. The point that is confusing here is the difficulty of conceiving the analogue of "segmentation" along the time dimensions. When the rate of operation is low, the surplus capacity may be left wholly unused. That takes the form of "segmentation." But when the changes take place only along the time dimensions, the result of low operation may be that the whole plant is used for a smaller part of the time. In the first case, during reduced operations, some of the plant is idle all of the time—the idleness being concentrated. In the second case, during reduced operations, all of the plant is idle part of the time—the idleness being distributed throughout. The existence of surplus capacity is obvious to the naked eye in the first case, and its costs are readily isolated from the rest. The existence of surplus capacity is not so obvious in the second case, and its costs can only be calculated. Nevertheless, so far as rate of operation in proportion to capacity is concerned, the two are exactly analogous. It is precisely as justifiable, in the usual situation, to allocate the accumulated costs of the unused time of the whole plant to that increment of output only which appears when the rate of operations requires full time operation, as it is to do so with a "segment" which is not used at all except when the rate of operations approaches capacity. In fact, normally unneeded capacity along the time dimensions has no more warrant than that in the space dimension ("segmentation"), unless there are actual outputs the increments of which will entirely support the costs of making it available.

There are at least two situations in which the application of this method would be impossible or incorrect. Examination of them also permits a qualification of my rough generalization in regard to capacity and rate of

operation—a qualification postponed to this point in order to kill two birds with one stone. But neither exception covers as wide a range as might at first appear. The first exception is this: In a *few* types of production certain of the conglomerate of factors required have to be provided in a fixed quantity regardless of the scale of output. Such, for instance, is the right of way and the single track of a railroad. That is not true, however, of any of the other major items of a railroad's plant. The number of other tracks, the size of yards, the size of stations, the amount and size of equipment are all determined by the capacity desired. Nor are there many other examples of the fixed quantity type. The length of a hydro-electric dam is fixed; but not its height or its flowage rights or the number and size of turbines. The second exception is this: In numerous instances plant and equipment must always remain idle a part of the time, not because they represent true excess capacity at a particular rate of operation, but because at certain times of the day, or of the week, or of the year there is no demand for the product and the product cannot be stored. This is true chiefly of service industries—retail stores, theatres, restaurants, hotels, skating rinks, "bowls," etc. To a certain degree strictly specialized seasonal labor (*e.g.*, baseball professionals) comes in this category. Since by reason of their nature these factors have to be provided all of the time but by reason of the nature of the product they can only be used part of the time, the costs of idle time must be accumulated and allocated to the product produced when in use. Strictly speaking there is excess capacity here, too. But it is unusable. Therefore, it is an inescapable burden upon intermittent demand.

I am not necessarily recommending this method of allocating fixed costs, but am merely using it to demonstrate that there is more than one possible and plausible way of doing so—among which this way, at least, treats them as variable (or marginal). At any rate it appears that before one attempts to measure the relation of costs to output in the "short run," one must settle the question of the allocation of fixed costs. The assumptions either that they do not exist, or that they have somehow already been covered, or that they represent a total or partial loss, are neither safe nor sensible bases from which to start empirical analysis. In many cases, whether one finds declining or rising unit cost, as the rate of operations is increased, will depend entirely on how this question is settled; for, in modern industries, these fixed costs, if admitted, constitute so large an element of costs that their allocation one or the other way would blot out the effect of any changes in costs which are incurred only as factors are used—variable or marginal costs, in the usual sense.

It is necessary to note, however, that the problem of allocation is not limited to that of fixed costs. It extends as far as one makes it extend by the decision as to the delimitation of costs. Once admitted to that classification no cost can be ignored. If one follows the technical criterion, either a cost

is allocated to product of which it seems to be a contributing cause, or it is charged off as a loss because it has not contributed to product—and this regardless of whether industrial managers have included or excluded it. That might suffice as a basis for the allocation of costs of production, strictly speaking. But it would not suffice for what we have called “social charges” and “social losses.” There the problem is not one of causation; for “social charges” are arbitrarily imposed and consist, by definition, of the portion of such imposed costs which does not correspond to factors of production and therefore is not causative of product. And “social losses” are, also by definition, consequences, not causes, of production. They are incidents—deductions from the value of product by reason of “disservices” and “discommodities”—and they fall elsewhere.²³ The question as to which specific batches of product should be chargeable with the individual costs in these categories is a most complex one. Nevertheless if they are included in the class, costs, this question is, at the same time, included in the problem.

VII

The study of the behavior of costs which are conceived to run only as the factors are used—the marginal or variable costs, in the usual sense—is also of interest for itself. In numerous instances they still represent the preponderant element. It would be worth while to determine whether, and if so when, there is any change in the proportioning of factors with increasing rate of operation within a given capacity. But this could only be discovered by studies of operation in terms of quantities of factors used per unit of product, not in terms of money costs, even deflated ones. It would also be worth while to determine, also in terms of quantities of factors used per unit of product, whether, for any other reason, there is anything in such a supposition as Mrs. Robinson's: “that in the short period marginal costs begin to rise at a fairly low level of output, as a result of the limitation [*sic*] of plant and organization, and in any case there must always be some level of output at which they begin to rise.”²⁴ Finally, it would be worth while to learn, by comparing money costs with quantities of factors used as the rate of operation is increased, whether and why this ratio increases or decreases. It might be found that such changes, if they occur, occur differently according as the rate of operation is increased along one or another of the dimensions described. Perhaps such changes would all be found to depend on special conditions or circumstances and to be subject to no generalization. When reducing operations one plant may retain men according to seniority while another retains the most efficient.

²³ But where is often the question. Is a “bad debt” a cost or a loss? If it is a cost, of what product is it a cost?

²⁴ *Economics of Imperfect Competition*, p. 50.

Thus when the first increases operations it may reemploy more efficient workers, while the second employs less efficient. If a small increase of rate of operations is wanted, overtime pay may be required, while a larger increase may justify a night shift at regular (lower) pay. On the other hand, the money costs of night shifts may be higher on account of increased light and heat as well as from lower efficiency caused by dislike of night work. Floating labor, least often employed, is probably the least efficient. Yet it is usually the source of supply for labor when the rate of operation is stepped up to its higher ranges. Fear of the loss of jobs may increase efficiency; an active demand for labor may decrease it. For this and other reasons the pattern may be different in the several different phases of the business cycle.²⁵ Speeding up of operations, or the carelessness of prosperity, may increase the wastage of material; but full operation may make possible its more economical use. And so on.

However, if those costs which are institutionally incurred only as the factor is used are to be studied by themselves, all of them must be included, whether the study is in terms of factors used or in terms of money. If earnings on capital stock and surplus are not imputed as a fixed cost, then they must be included on some basis as a variable one. Variable taxes (income and excise) and variable depreciation (if any) must appear. Account must be taken of the increased working capital required to carry larger inventories and accounts receivable when output increases. This may be provided by short-term borrowed money and therefore form a contractual, though not a fixed, cost. Increased inventory requires increased insurance. Increased operations require more heat, light, and power. Perhaps the overhead salaries include contractual bonuses for larger sales and output. Perhaps, with increased output, more salaried employees are required.

The exploration of all these variations is well worth while, and it is quite within the possibilities that there might be disclosed thereby regularities in the behavior of this portion of costs which neither the practicers nor the preachers have suspected. But the subject cannot be explored by studies of gross costs taken from the books of account; for these do not distinguish between (1) higher or lower prices of factors (incapable of being deflated); (2) differences in efficiency of factors not due to change in rate of operation; and (3) differences, if any, in quantity (or efficiency) of factors used which are regularly associated with changes in rate of operation. And only the last are of interest in this connection. Furthermore, the gross money costs may conceal more variations (rising or falling elements) than they expose. Variations in one direction at the price of factor level may offset variations in the opposite direction at the quantity of factor level, etc. Only intensive field work with a most refined technique

²⁵ Some cyclical regularities of this kind were suggested in W. C. Mitchell's earlier work on business cycles (1913).

of measurement is likely to yield results of sufficient solidity to establish new or amend old generalizations as to the relation of this particular, and sometimes minor, type of costs to output.

In these remarks it is far from my purpose to discourage efforts to establish by empirical studies truly scientific generalizations as to the relations of costs to output, or, for that matter, as to the other relations of costs—to prices, to technique, and to the available natural resources. On the contrary, I consider this subject of costs to be one of the most, if not the most, potentially fruitful field that offers itself to real economic tillers of the soil. My only object is to call attention to the arduous job of clearing, draining, ploughing, harrowing, and sowing that must be done before it is going to be worth while to bring out the reaper.

C. REINOLD NOYES

WERNER SOMBART AND THE USES OF TRANSCENDENTALISM

I

It is most unfortunate that toward the end of his days Werner Sombart, the distinguished social scientist who recently died at the age of 78, left his chosen life work of interpreting modern capitalism to write a volume in defense of National Socialism. We refer to his *Deutscher Sozialismus*,¹ published about a year and a half after Hitler's advent to power and made available to the English-reading public several years later under the innocent title, *A New Social Philosophy*.² There is some danger that in the heat of our conflict with German fascism, a conflict which will endure for some time, whatever precise form it may take, Sombart's notable contributions will be obscured and repudiated. Particularly will this be so if we assume that in a spirit of moral abnegation he surrendered to the newly risen power in his country.

It is not the primary purpose of this paper to investigate the subjective premises behind his apparent surrender to fascism. It is necessary, nevertheless, to examine briefly the hypothesis that Sombart "sold out," partly that no unjust stigma may be attached to an important figure, but more particularly in order to justify our examination of his work as a social scientist. With respect to the latter, it is clear that the work of a man lacking in courage and integrity contains no significant continuity, except the continuity of opportunism; and that is hardly the premise for interesting implications, unless it be the repudiation of opportunism.

It is my belief that Sombart did not so much surrender to National Socialism as espouse it. This judgment is premised upon the following considerations: (1) the courage and independence manifested by Sombart through a large part of his career; (2) his allegiance to certain vital aspects of his plan of a National Socialist constitution of society for a number of years prior to Hitler's advent to power; (3) certain fundamental social outlooks and qualities of temperament which characterized the man throughout his life.

For a period of at least two decades Sombart avowed himself a Marxian, in the face of obviously great hindrance to his academic advancement. Despite spectacular success as a lecturer and notable scholarly achievements, Sombart was confined for fifteen years to the lowest professorial rank at the provincial university of Breslau. In 1905, several years after the appearance of the first edition of *Der Moderne Kapitalismus*, he was called to a professorship in Berlin, not to the University of Berlin, but to the College of Commerce (*Handelshochschule*). It was in *Der Proletarische Sozialismus*, published in 1924, that his first violent attack on Marx and Marxism

¹ Berlin, 1934.

² Princeton Univ. Press, 1937.

appeared. While the nature of his criticism of Marx was not necessarily offensive to the revisionist outlook of the German socialists who headed the government shortly prior to the publication of the volume, it is not reasonable to assume that he was motivated by self-interest.

Moreover, the last volume left by Sombart, an anthropological and sociological treatise, *Vom Menschen*, published in 1938, is devoid of the mystical nonsense which abounds in fascist writings on the subjects of nation, people and race. His only reference to fascism in this volume interprets it as a manifestation of late capitalism. In this period, says Sombart, the governments, with the exception of Russia, are oriented to the interests of the lower middle class, as distinguished from the epoch of *Hochkapitalismus* when the state tended to serve the interests of the large capitalists.³ This hardly indicates an attitude of servility to the nazi regime.

Sombart's slim little work *Weltanschauung, Science and Economy*,⁴ published the same year as his *Vom Menschen*, is in the main a digest of his methodological position with respect to the social sciences in general and economics in particular, which had been worked out "systematically and in detail" in his *Drei Nationalökonomien*,⁵ published in 1930. Although it emphasizes sharply, in a manner characteristic of his more recent development, the antithesis between the liberal and the anti-liberal *Weltanschauung*, it is devoid of the chauvinism which occurs all too frequently in his *New Social Philosophy*.

In regard to the latter work, it may be urged that it has no significant continuity with his earlier writings, notably his monumental *Der Moderne Kapitalismus*, since it merely reflects the aberrations of an accentuated nationalism provoked by the career of Germany since the advent of the first World War. While this thesis is not acceptable in its entirety, there is no doubt that the events since 1914 impressed themselves most unfortunately on Sombart. The year 1915 witnessed the appearance of his *Händler und Helden*, with the British and the Germans in rôles of traders and heroes, respectively. His emotional outburst nine years later, in his paper on the "Class War" before the meetings of the Verein für Sozialpolitik, indicates that he was already ripe for the plucking by a Führer. We shall quote but a few lines: "The spirit of our great dead hovers about us. . . . I see no other way out than faith in God. . . . Strong personalities must develop this faith and imprint it in the nursery." It is no wonder, therefore, that ten years later, in his *New Social Philosophy*, he exclaims, "Right or wrong—my country!" What is of more interest as indicative of the emotional

³ *Vom Menschen*, p. 186.

⁴ *Weltanschauung, Wissenschaft und Wirtschaft*. From a testimonial volume in honor of the sixtieth birthday of Hjalmar Schacht. English translation, New York, Veritas Press, 1939.

⁵ The present writer took Sombart's methodology much too seriously in a review article of this volume, "Werner Sombart and the Natural Science Method in Economics," *Jour. Pol. Econ.*, April, 1933.

complexion of his attitude is that he adds, "Even—and just because—that country is hated, despised and trampled upon by the whole world."⁶ Earlier in the same volume he observes that Germany, "surrounded by enemies," is possessed of "boundaries—the worst possible."⁷

It is very likely that patriotic sentiments and practical nationalistic considerations constitute the *real* reasons behind Sombart's nazi political theory as distinguished from the *good* reasons based on metaphysical postulates. This fascist political theory, with its unqualified acceptance and glorification of the Führer principle, is the distinctly novel element in the Sombart of the *New Social Philosophy*. In Sombart's attitude from the very first, however, there were aspects in the realm of sentiment and social values which, under the pressure of grave historical events, received a most unfortunate consummation. What is of more interest for the purpose of the present paper is that, throughout his career as a social scientist, he operated with certain methodological postulates which later helped to implement his advocacy of the contemporary fashion in political absolutism, as well as his brutal negation of the whole epoch of modern Western culture. To be sure, Sombart's social outlook, as well as his method of approach to social phenomena, underwent considerable change and development throughout his long and active career. There were, nevertheless, certain abiding elements in both. Let us proceed first to a brief investigation of Sombart, the citizen, as distinguished from Sombart, the social scientist.

II

The title of the work in which Sombart for the first time cast scientific discretion to the winds and embarked upon a political polemic of a highly questionable character is symptomatic of a dichotomy which from the very first invested his outlook upon personality and society. We refer to his *Händler und Helden*. There is no doubt, moreover, as to the rôle in which Sombart cast himself. "His writing," says a former student of his, is the "work of a scholar" whose nature "is a seignorial one."⁸ Sombart employs the term *seignorial* as synonymous with heroic and aristocratic. The polar concepts, hero and trader, occur with particular frequency in his *Quintessence of Capitalism*, published in 1913. His preference between the two types is clearly indicated in the following from that volume: "It has been asserted that the whole of modern civilization is marked by this self-righteous jealousy, which . . . Nietzsche made responsible for the substitution of aristocratic values by that of crowd morality. . . ." Sombart obviously deplores "the raising of lower middle-class principles born . . . of sheer necessity, into . . . ideals of life. . . . Middle-class men . . . taught the

⁶ *A New Social Philosophy*, p. 215. Sombart's Foreword closes, "'All for our country.'"

⁷ *Ibid.*, p. 116.

⁸ M. Epstein in Translator's Introduction to the *Quintessence of Capitalism*, p. 9. The citations are all to Book I of this volume.

wickedness of the seignorial life, though deep down in their hearts they admired and desired it. . . . Every respectable citizen . . . proclaims that the grapes are sour."⁹ Elsewhere in the same volume, he says, "the aristocratic and the middle-class natures . . . stand facing each other in all human life. . . . The first class regard only those activities as worthy and noble which permit a man to become noble and worthy, which cultivate his personality; the second values all activities alike, provided they contribute to the general good, provided, that is, they are useful. . . . The first are artists (not necessarily by profession). . . . The first are silk, the second wool. . . ."¹⁰

Sombart's preference for the leaders of the syndicalist movement as compared with the bureaucrats of the German socialist and trade union movement is also revealing in the foregoing connection. The former, he states in the 1908 edition of his *Socialism and the Social Movement*, are possessed of "minds of the nicest perception." They "have something of the artistic temperament, and consequently look disdainfully on what has been called philistinism, on business, on middle-class ideals . . . they are . . . the fine silk as compared with the plain wool."¹¹ It will be noted that the analogy of "silk and wool" appears in two writings separated by an interval of five years. Quite evidently this "demagogue of the salon," an epithet bestowed on Sombart during his early academic career, identifies himself with the silk, with the seignorial elite, with the heroes, with the aristocrats. In this aristocratic outlook we find not a necessary but, nevertheless, a congenial premise for Sombart's subsequent violent repudiation of political democracy and democratic culture. It should be mentioned that Sombart was brought up in the midst of affluence in the home of his father who, while he was of lower middle class origin, emerged to the position of wealthy landed aristocrat and member of the higher bureaucracy.

An additional premise for the attitude which emerges in Sombart's *New Social Philosophy* is the circumstance that even in the days when he avowed enthusiastic allegiance to Marxian socialism, he qualified his adherence to this preëminently international movement by a nationalistic outlook. The following is from the first edition of his *Socialism and the Social Movement*, a résumé of lectures given in 1896 and published with minor alterations in 1898. While he acquiesces in the position "that the proletariat of all lands should be conscious of an international solidarity,"¹² he asserts in another connection that "only one who chases after the phantom of a world republic will be able to imagine a social development outside of national limitations. . . . Energetic upholding of national interests can never be entirely unnecessary. . . . Not only Russian civilization threatens

⁹ *Quintessence of Capitalism*, p. 340-41.

¹⁰ *Ibid.*, pp. 205-07.

¹¹ *Socialism and the Social Movement*, 1908, p. 110. See also p. 98.

¹² *Socialism and the Social Movement*, 1898, p. 126.

that of Western Europe, but even the Asiatic more and more strongly presses upon us. . . . The moment will come when European society as a whole will say to itself: All our mutual differences are of no importance as compared with that which threatens us from this enemy. . . . There can be no talk of an essential repudiation of nationalism. . . . A discussion of the question concerns only a circle of central nations to which one does not want to see the principle of antinationalism applied."¹³

Ten years later, the nationalist mood is given more strident expression and we find Sombart applauding the tendency to a nationalistic orientation in the socialist movement: "The view is gaining ground among socialists—indeed, especially among them—that *all* civilization has its roots in nationality, and that civilization can reach its highest development only on the basis of nationality."¹⁴ Civilization is made entirely contingent upon national *Kultur*. From this it is but an easy transition to his position in the *New Social Philosophy* that the highest expression of civilization is to be found in German *Kultur*.

It should be noted, however, that at least so far as the western European community of nations is concerned, his was not a jingo attitude. Thus he says, "Social Democracy professes . . . a 'culture' patriotism, and in the case of the German socialists . . . their patriotism centers at Weimar rather than at Potsdam." It is significant that he adds "that neither for material prosperity nor for intellectual and spiritual progress is it necessary to have great States. All the culture of Germany dates back to the time when it was made up of small States. Switzerland, Denmark, and Belgium are just as wealthy in material goods as Russia, Austria or Germany. . . . The least recognition of Imperialism, Militarism, or Chauvinism would be fatal to its [social democracy's] highest ideals." And most interesting of all, he asserts that "'National Socialism' is a contradiction in terms." But there follows the qualification, "taking national, of course, in a jingo sense." The discussion at this point contains another and more pregnant qualification: "Other questions, also, suggest themselves. Is it not conceivable that a people which increases to a greater extent than its neighbor will find it necessary to extend its food-supply . . . at the expense of another people? And would the 'expansion' always be peaceful?"¹⁵ Perhaps if Sombart were a "trader" and not a "hero" by temperament, it would have occurred to him that additional food supply may be obtained by trade and not by war.

There is one further important aspect in which Sombart was a Marxist with a difference from the very outset. If we look at the career of socialism in its historical perspective, we must recognize that in its origins and de-

¹³ *Ibid.*, pp. 165-68.

¹⁴ *Socialism and the Social Movement*, 1908, p. 203. Italics mine.

¹⁵ *Ibid.*, pp. 208-09.

velopment it was predicated upon an optimistic theory of the historical future. This optimism was premised, in part, upon a belief in infinite material progress. In the so-called utopian phase of the socialist movement, this faith in material progress was associated with an optimism concerning the function of ideals and the appeal to ideals in affecting social reconstruction. Throughout the various editions of his *Socialism and the Social Movement*, Sombart shares with Marx the latter's conception of the futility of mere ideals and mere appeal to ideals. But at the very outset, he conceived that both Marx and the utopian socialists entertained highly exaggerated notions concerning the possibilities of material progress. Sombart was, in fact, something of a Malthusian in his attitude on agricultural productivity and its incidence upon productivity in general. He becomes explicit in this connection in the 1908 edition of *Socialism and the Social Movement*, where he intimates that we must not look to a working day of less than seven to eight hours for the provision of the mere "necessaries of life."¹⁶ It is not without interest that this consistent and, in his later days, violent opponent of the liberal *Weltanschauung* shared with the liberal economic theory its characteristic emphasis on economic scarcity.

Before we proceed to further indications of the sentiments and social attitudes which are congenial to Sombart's nazi phase, it will be necessary to give the latter a little more explicit attention. We have mentioned the adoption of the Führer principle. The leader is to be the head of a "planned" society and that involves, for Sombart, a planned economy. In general, this economy reflects a romantic aspiration toward an idealized feudalism; that is, toward a static hierarchical organization of society well articulated into estates (*Ständestaat*) with the landed nobility as the uppermost estate. So far as the non-agricultural sector of the economy is concerned, the economic organization is adapted to the requirements of the modern technology and the related need, in certain sectors of industry, of large-scale enterprise.

In speeches and articles, Sombart advocated fervently this organization by estates for about a decade prior to Hitler's assumption of power. This medieval conception was also agitated by nazi theorists about the time of the writing and publication of Sombart's *Deutscher Sozialismus*. According to the apparently reliable and authoritative report of Hermann Rauschning,¹⁷ even Hitler toyed with the idea for a while at that time; but with his characteristic disdain for theoretical schemes, he dropped the *Ständestaat* conception when its uses in the context of morale and propaganda could be filled by other, more potent fodder.

Sombart's conception of a planned economy must not be identified with the idea of a collectivist economy. He contemplated, rather, what has come

¹⁶ *Ibid.*, p. 79.

¹⁷ *The Voice of Destruction*, New York, 1940, p. 180.

to be called a "mixed economy" by some of our New Deal theoreticians. Sombart's plan involves public ownership of large-scale industry and utilities, together with private ownership and coöperatives in other sections of industry.

The plan for the organization of agriculture is particularly worthy of attention because it reflects a romantic agrarianism which finds expression in his earliest writings. There is some mention, in his *New Social Philosophy*, of the need to redistribute land so as to increase the number of peasant proprietorships. But a great tenderness is evinced for the maintenance of adequate holdings by the landed proprietors, sufficient to maintain the seignorial splendor becoming to the nobility of the hierarchy. Sombart paints a touching medieval Utopia of a happy hard-working peasantry of small proprietors and cotters. This class is to be the repository of the homely virtues and the guaranty for the stability of society.

He did not have before him, at that time, the contemporary spectacular manifestations of the nazi cult of efficiency, which, we have been told on reliable authority,¹⁸ has led to wholesale "mercy" murders not only of men, women and children incurably and congenitally feeble-minded, but of aged infirm and those rendered economic liabilities by nervous disorders. A presentiment of these things might have led Sombart to reflect that the nazi regime, far from furthering small scale agriculture, would find it necessary to apply the ultimate anaesthesia even to the existing manifestations of his bucolic Utopia. It seems to be the destiny of reactionary (in the temporal sense) schemes of social reconstruction to serve the uses of political despotism. It is not without significance in this connection that Hindenburg's solicitude for the economic status of the large landed proprietors was of considerable importance in implementing Hitler's rise to power.

In Sombart's own conception of social organization by estates, the latter do not have the political significance that obtained in the medieval scheme and during the early stages of modern political despotisms. The estates then represented an element of constitutionalism, in the form of a check on the absolute power of the king. In Sombart's scheme, they are mere instruments of totalitarian absolutism.

Sombart's conception of the organization of agriculture and of the rôle of the landed nobility, whose moral function is to impose a cultural stamp upon society, is quite obviously related to his adoration of the seignorial way of life. In addition, there is Sombart's consistent tendency to romanticize the peasantry. From the very first, moreover, it was with respect to agriculture that he questioned the Marxian theory of economic development. Not only did small agriculture seem to resist the encroachments of

¹⁸ Among others, William L. Shirer, chief of Columbia Broadcasting System's continental staff, in "Mercy Deaths in Germany," *Readers' Digest*, June, 1941.

capitalistic organization, but the alleged superior efficiency of large scale agriculture was also debatable.¹⁹ In his *New Social Philosophy*, Sombart insists that, in any event, economic considerations should be subordinated to the virtues and social values inherent in the organization of agriculture on the traditional pattern.

While, so far as industry is concerned, Sombart makes concessions to the requirements of modern technology, he nevertheless maintains a passionate preference for the persistence of handicraft production—an organic activity as distinguished from mechanical and meaningless routine associated with the division of labor in modern industry.

III

Let us recur to an examination of the quintessential fascist element in Sombart's conception of National Socialism—the political theory, in general, and his acceptance of the Führer principle, in particular. The following from his *New Social Philosophy* should illustrate sufficiently for our purpose the essentials of Sombart's theory: "The principle of leadership, which we recognize, means the acceptance of a supreme will of a leader who receives his directions . . . only from God. . . . He is not required to listen to the 'voice of the people' in so far as he does not recognize in it the voice of God. . . . The *volonté générale* which is to be realized is a metaphysical, not an empirical reality; . . . the leader cannot ascertain it through a plebiscite; he must recognize it and can only have experienced it through revelation. . . . All plans for influencing, controlling or limiting a ruler's will are expressions of an anti-national mindedness."²⁰

Earlier in the same volume Sombart tells us that "the meaning of the state lies in the realm of the transcendental, that its purport cannot be significantly explained from an empirical, that is, 'rational' standpoint."²¹ If we were to take this last statement at its face value, all criticism of Sombart's political theory would be precluded. We prefer, however, to criticize it, particularly, because it reflects the application of a methodological postulate concerning the study and the interpretation of human affairs which in varying forms Sombart entertained from the outset. This postulate relates not so much to his espousal of political absolutism as to his uncritical and uncriticized acceptance of it and his position that in principle it is beyond rational criticism. His methodological attitude also has important implications for his unqualified negation of the so-called Economic Age, the career of occidental communities since the latter part of the eighteenth century. Exception is made, of course, of the fascist phases in Italy and Germany.

¹⁹ *Socialism and the Social Movement*, 1898, p. 159.

²⁰ *A New Social Philosophy*, pp. 194-95.

²¹ *Ibid.*, p. 158.

Sombart posits the following dichotomy in our judgments concerning human affairs: on the one hand, there is the realm of the objective in which judgments represent statements of fact; on the other, the realm of the extra-objective, hence the extra-scientific, related to judgments of value. The distinction as presented thus far will meet with quite general acquiescence. The difficulty, however, is that the extra-scientific represents for Sombart the expression of a *Weltanschauung* which in turn has a purely transcendental, metaphysical status. The dualism, therefore, resolves itself into one between science and metaphysics.

There is an element of truth in the aphorism, "there is no disputing tastes." Nevertheless, a naturalistic, common-sense view of normative judgments, particularly ethical judgments, will recognize that they are not beyond exploration and criticism. Such a view will reckon with their origins, their acceptance and diffusion and, above all, their implications in the context of human experience. These all imply an appeal to facts, and the latter, particularly, implies criticism in terms of our practical social interests. Such criticism is arrested at the source if we conceive normative judgments to be the offspring of an immaculate conception hatched in a Platonic heaven.

What is crucial for our criticism of Sombart, however, is not the relegation of values to the realm of the transcendental but his inclusion not merely of religion and ethics within the metaphysical category, *Weltanschauung*, but also of politics. In doing so, he identifies means with moral ends and ethical values. While he insists throughout that economics should be instrumental, he denies that status to politics. This position is made all the more difficult by his assertion that economics, properly conceived, is political economy.

In the realm of practical politics, Sombart's doctrinal position has its counterpart in Hitler's preference for the "subjective" and his extreme impatience with anything that makes for an attitude of objectivity on the part of the people. When "objectivity steps . . . in," he says in *Mein Kampf*, "and the question is raised whether actually all the others are wrong, and their own nation or their own movement alone is right," the administration of absolutism is fraught with difficulties.²² Subjectivity means, for Hitler, uncritical allegiance to the emotional conditioning foisted upon a people by their Führer and his instruments. As is well known, the technique of this conditioning is the insistent reiteration of a simple, emotively charged idea. In its polemical uses such an idea is directed at any one time to but one object of abomination: Marxism, the Jews, the Poles, the Czechs, the British, and in good time, we may expect, the Americans.

Hitler's subjectivism involves essentially the negation of reason as a method of reconciling the conflict of loyalties, values, appetites and group

²² Reynal and Hitchcock, New York, 1940, pp. 153-54.

interests. That is also the essence of the activism, anti-intellectualism and anti-rationalism which characterizes all fascist doctrine. The intellect is reserved for the fashioning of techniques, material and psychological, which will serve the appetite for power of the leader and his immediate followers. In this one respect, National Socialism has proved itself both eminently rational and scientific. It is very convenient to have a transcendental sanction for brutal pragmatism.

Although such transcendental sanction is fraught with danger and tends ultimately to serve the uses of fanaticism and absolutism, it should be recognized that in the ethics of all the great religions as well as of many systems of metaphysics, notably that of Kant's metaphysics of the practical reason, the sanction is dedicated to the conservation of the autonomy and dignity of personality. And that is the essential premise of democracy.

While this preference for a democratic way of life also involves, like all preferences, something in the nature of an arbitrary resolution, it is the least arbitrary of such resolutions. It recognizes the legitimacy of all widely entertained interests, sentiments and values, as well as the right of individuals and groups to persuade others to share them, as long as this persuasion is not backed up by the threat of violent aggression. It is because the transcendental sanction tends to universalize a particular doctrine, which may have its use and its contingent validity in a particular historical context, that it carries with it the threat of fanaticism and intolerance. It is no accident, therefore, that the humanistic outlook with its democratic dictum that "man is the measure of all things" was historically accompanied by the secularization of thought and knowledge. This secularization, far from involving the abandonment of moral ideals, is the essential guaranty against ever-present proclivities on the part of interested or fanatical individuals and minorities to sacrifice human beings to transcendental monsters of their own creation.

In his writings prior to the first World War, Sombart himself appeared to express allegiance to this humanistic ideal. We may accuse Sombart of romanticism when he says in his *Quintessence of Capitalism* that "the work of production in the middle ages was a work for living human beings whose lives were devoted to it,"²³ and when he states "that man was then the *meteyard* of all things."²⁴ But there speaks Sombart, the humanist. It is the humanist likewise who writes in the 1908 edition of his *Socialism and the Social Movement* "that the opposition of social democrats to social reform is anything but wise. . . . Is it fair," he asks, "to sacrifice the well being of the present generation for the sake of the happiness . . . of future generations? . . . Every real improvement in the conditions of the working classes is an end in itself. If one sorrow is lessened, and one tear dried, as

²³ *Quintessence of Capitalism*, p. 19.

²⁴ *Ibid.*, p. 13.

good a piece of work is accomplished as building up the foundations of a future where there shall be no sorrow and no tears."²⁵ We may be critical of the historical accuracy of Sombart's generalization, but we sympathize with his criticism of capitalism when he says that during this age "man—the flesh-and-blood man—with his joys and sorrows, with his needs and demands has been forced from his place as the center around which all economic activities rotate"; when he deplores that his place has been taken by "Acquisitiveness and Business."²⁶ It is the same Sombart who applauds the social movement because the proletarian class "is striving to restore the old humanistic ideal of humanity."²⁷ But that was before Sombart, the western European, espoused a fanatical nationalism—a nationalism which completely engulfed his humanism.

Reflection on the career of occidental communities in modern times leads one to recognize that the approximation of the democratic ideal is indeed a very difficult social task. But it need not be a hopeless task in a society which affirms the "rights of man" and the principle of equality, and which implements this affirmation by providing a context of political democracy with its positive constitutional immunities, written or unwritten, against arbitrary encroachment by the supreme coercive power in modern societies, the state.

Our gradual and painful emancipation from political absolutism has been accompanied, however, by certain other developments of great magnitude which have made it necessary to invest the state with comprehensive powers. Most important of all has been the development in the context of business enterprises, largely the by-product of a technology which, as Sombart correctly emphasizes, has no parallel in recorded history. We have reference, in particular, to the large aggregates of economic power and the economic instability which characterize modern industry. There are some who think that in the interest of true social democracy, as distinguished from mere formal political democracy, it is necessary to endow the state with even greater control of economic activity, as well as with increasing functions, for the purpose of safeguarding the health and economic security of the great mass of citizens.

These may be tempted to see in fascism not the backwash of barbarism with its characteristic subordination of personality to the mores and tabus of the tribe, but "a wave of the future." They should recognize that the very increase in the scope of the state calls for a reaffirmation of the autonomy of personality. Neither can the opponents of the expansion of state power afford to acquiesce in the fascist degradation of the concept democracy to "a way of doing business." That is precisely Sombart's method in his criticism of the so-called Economic Age.

²⁵ *Socialism and the Social Movement*, 1908, p. 283.

²⁶ *Ibid.*, p. 172.

²⁷ *Ibid.*, p. 286.

IV

More needs to be said of Sombart's methodology in relation to his manner of espousal of a divinely sanctioned autocracy. In this connection, what should be of more interest to social scientists than his identification of the state with a transcendental moral idea is Sombart's position on the relation between normative judgments and social science. The transcendental theme, after all, is of most interest in the context of propaganda, rather than in that of scientific method. Moreover, this theme attains explicit and emphatic emergence only in the later Sombart. But that ethical judgments have absolutely no place in social science represents a position which Sombart has asserted emphatically throughout his career as a social scientist; it is a position to which he has adhered, at least formally, in his *Der Moderne Kapitalismus* down through the last (1928) edition of that work.

Even prior to the first World War, it was rather more difficult for Sombart not to betray his sympathies and his aversions in his writings on the socialist movement. But in these, the exposition adheres quite consistently to the motto inscribed on the title page of the first edition of *Socialism and the Social Movement*: "Je ne propose rien, je ne suppose rien; j'expose."

Sombart's career suggests the hypothesis with respect to human affairs that the pose of considering facts in abstraction from values contributes to the espousal of values in the abstraction of facts. If the selection, organization, and interpretation of historical data presumably does not proceed under the constraint of a normative attitude toward society, and is not intended to implement, confirm, or qualify that attitude, it becomes much easier to adopt a social policy without reference to these historical facts. Moreover, it appears that ethical norms formally divorced from the facts of human history tend to take on an irrational, mystical complexion and tend to gravitate to the realm of the transcendental. Had Sombart the habit of referring his normative and practical social attitudes to matters of historical fact, he might have found much in his own writings to qualify his identification of the totalitarian state with the "superindividual reason," with the moral will in the universe.

Among the dynasties which have occupied the English throne, none has been so loud in protesting divinely sanctioned absolutism as that of the Stuarts. Yet, as Sombart himself intimates in his *Quintessence of Capitalism*, the Stuarts were notorious for their quest after personal economic advantage,²⁸ and, we may add, the consequent perversion of state policy through the sale of monopolies, privileges and offices. Of more interest is his explicit discussion of mercantilism in *Der Moderne Kapitalismus*. The spirit of enterprise, which had its seat preëminently during that period not in business enterprise but in the state, had for its aim, he tells us, "exploitation

²⁸ *Quintessence of Capitalism*, p. 280.

and domination."²⁹ In these newly born modern states, Sombart continues, the great mass of people were subordinated to the dynastic interests—interests, it should be noted, and not ideals. These states, he tells us, had their prototypes in the tyrannies of the early Italian cities. These, we may suggest, were surely not objects for moral edification and political example. What differentiated these European states from the oriental despotisms was that the conception of the state was made coextensive with that of the great mass of subjects. In consequence there emerged what Sombart calls a *Polizeistaat*—a state which tried to subordinate the personal lives of its subjects to the interests of the dynasty. And yet this organization of power tended to have a life of its own and consequently aims and interests divorced from those of the people who were its subjects.³⁰

This subordination of the personal lives of the subjects was accentuated and rendered intolerable, Sombart implies, with the advent of state churches. The self-seeking policy of the ruler was then reinforced by transcendental sanction. It was then that conflicting transcendental sanctions resulted in a long era of persecution and war—civil war and war between nations.³¹ What is fascism, it may be suggested, but a political absolutism implemented by a state church auguring the beginning of a new era of strife and intolerance? The dangers of spiritual bondage and its unfortunate consequences are in the present case aggravated by the circumstance that under National Socialism the state, incarnated in its Führer, is itself the church. There is not even the semblance of a counterpoise to its absolute domination—a domination implemented by the modern techniques and material vehicles of espionage and propaganda.

We do not intend, of course, to imply that the invoking of historical facts relevant to the theme of totalitarianism would have immunized Sombart against his uncritical acceptance of Hitlerism. That is no doubt ultimately grounded in his emotions and social outlook.

There would be no point in dwelling at length on Sombart's condemnation of the Economic Age, this age whose culture was no true *Kultur*³² but "the work of the devil,"³³ this age which constitutes the real fall of man according to the nazi gospel of Sombart's *New Social Philosophy*. We have here an exceptionally intemperate repetition of the familiar romantic criticism of the doctrinaire rationalism of the Enlightenment.

Sombart forgets that in England, for instance, the classic home of modern industrialism prior to the twentieth century, the empirical philosophy, following the lead of Hume, itself subjected certain fundamental aspects of the doctrine of the Enlightenment to a devastating criticism. He does not

²⁹ *Der Moderne Kapitalismus*, 1928, vol. i, no. 1, p. 328.

³⁰ *Ibid.*, pp. 334-35.

³¹ *Ibid.*, pp. 448-55.

³² *A New Social Philosophy*, p. 26.

³³ *Ibid.*, p. 5.

seem to realize that in the development of its political institutions and in the temper of its people it had likewise implicitly repudiated this revolutionary rationalism. Sombart might have reflected on the circumstance that John Stuart Mill, the leading social philosopher in England during the second half of the nineteenth century, had assimilated from German romantic philosophy a large dose of the organic, historical approach to society and social change. He might have recognized that in the last quarter of that century, the economic liberalism of Adam Smith was fast giving way to the political liberalism of a Green and a Bosanquet.

This shift in social doctrine in England during the second half of the nineteenth century was associated with factory legislation, schemes of social insurance, and state intervention in other directions. These developments led so temperate an observer as Dicey³⁴ to refer to this period as the era of collectivism as opposed to the relatively brief era of individualist Benthamism which preceded it. During the period of *Hochkapitalismus*, which for Sombart roughly coincides with the Economic Age, England was most decidedly not one of the homes of revolutionary rationalism. There is in general a very great tension between Sombart's conception of the homogeneity of the Economic Age, on the one hand, and his insistence that the culture of each nation bears the peculiar stamp of its own unique national genius, on the other.

It must be recognized that what Sombart offers us in his condemnation of the Economic Age is not criticism of modern industrialism for failing to live up to the ideals of modern civilization, but a negation of those ideals. His response to the passive acceptance of the inevitability of progress and its excessive identification with productivity and accumulation is the denial of the idea of progress as a legitimate postulate for the pursuit of social ideals. His response to its failure to broaden the principle of political equality into social reality is to erect inequality into a social principle. His response to the failure of modern societies to implement sufficiently the ever-growing power of the state for the liberation of personality is the repudiation of the ideal of freedom. His response to the failure of modern nations to attain the eighteenth century ideal of peace is the glorification of war as the supreme method for conserving and vitalizing the sentiment of "love" within nations.³⁵

The ultimate issue, Sombart tells us at the outset of the discussion devoted explicitly to the repudiation of the Economic Age, is the antithesis between the liberal and the anti-liberal *Weltanschauung*. There is no disputing tastes. Sombart is entitled to his anti-liberal *Weltanschauung*. But from the point of view of social science there is another important issue involved—the problem of the constitution and characterization of historical

³⁴ *Law and Opinion in England in the Nineteenth Century*.

³⁵ *A New Social Philosophy*, p. 219.

epochs. That is a problem which goes far beyond the scope of the present paper. It is, in fact, coextensive with the whole field of historiography. Nevertheless, it may be pointed out that what Sombart gives us in his *New Social Philosophy* is neither history nor historical criticism of society, but mythology. Mythology is a legitimate exercise of the human spirit in the realm of the imagination. It is a means of personifying human values and aspirations, freed from the constraint of historical fact. That is precisely what Sombart does in his transposition of the conflict of values and ideologies into a conflict between historical epochs; namely, the Economic Age as opposed to the ages which preceded this "fall of man."

The epoch of mercantilism which preceded the Economic Age, and which Sombart calls the secular stage of "the age of politics," now meets with his unqualified approval. The feudal handicraft economy which preceded the age of mercantilism, he refers to as the "age of love." We have had occasion to point out the romanticizing of the Middle Ages in his *Socialism and the Social Movement* as well as in his *Quintessence of Capitalism*; and yet the latter volume contains copious reference to the "greed of gold . . . succeeded by the love of money . . . *lucri rabies* which first became marked (if we exempt the Jews) among the clergy" as early as the ninth century, and infected equally the potentates of the towns of Germany, France, and Italy. He refers to Dante's condemnation of the greed of the nobles and the middle classes of the Italian cities. "Their desire for worldly possessions," he quotes another writer of the first half of the fourteenth century, "is like a consuming fire within."³⁶ We have already referred to Sombart's recognition of the rôle of greed and lust for power during the "age of politics."

While it must be recognized that Sombart may be correct in his insistence that, so far as economic enterprise is concerned, the Economic Age was more free than the Middle Ages from the constraint of religious and ethical norms, this distinction certainly does not hold when we compare *Hochkapitalismus* with the mercantile period. Further, as has been pointed out in regard to England, a distinction needs to be made between the first and second half of the epoch of *Hochkapitalismus*.

V

In his *New Social Philosophy*, in terms of a polemical impulse which explicitly abandons the ground of "value-free" science, Sombart transfers his characterization of capitalist business enterprise during the period of "high-capitalism" to the entire culture of that period. While in the criticism of Marx, which occupies a good part of this volume, he indulges in a savage repudiation of the economic interpretation of history, he nevertheless asserts that the economic interpretation applies to the Economic Age.

³⁶ *Quintessence of Capitalism*, pp. 29-30.

His position appears to be that this great aberration in the course of history at the same time makes valid, for an epoch which holds for us the greatest interest, a great aberration in the interpretation of history. Surely, a curious position. It may be noted further that Sombart's is not an economic interpretation, either of the Economic Age in the *New Social Philosophy*, or, for that matter, of business enterprise itself during that period in *Der Moderne Kapitalismus*. Just as Marx stood Hegel "on his head," so Sombart in *Der Moderne Kapitalismus* stood Marx "on his head," without quite getting back to Hegel's position. Sombart comes closer to Hegel's objective idealism in his *New Social Philosophy*.

Our concern, however, is not with the economic interpretation of history and Sombart's relation to it, but rather with the circumstance that, despite the predominantly empirical orientation of *Der Moderne Kapitalismus*, it nevertheless proceeded in terms of certain assumptions which paved the way for his subsequent uncritical transcendental argument for National Socialism.

In the very first edition of *Der Moderne Kapitalismus* Sombart enunciates the methodological postulate that scientific explanation in general, and that of historical epochs in particular, needs to be implemented by some one unifying concept or principle, and that in the case of historical phenomena this principle must of necessity be derived from the context of human motivation. All other aspects, he asserts, are conditions or derivative circumstances. They cannot be looked upon as causes. It is the motivation which is the cause. Otherwise, for instance, if one takes technique as the causal agent in the development of an epoch, there emerges an infinite regression in technical development and, hence, in the alleged causation.³⁷ In consequence, his interpretation in this and later editions, while it takes account in a masterly fashion of the manifold aspect of the historical development and in that way makes a noteworthy contribution both to history and economic theory, runs primarily in terms of the "spirit" of capitalism.

It should be noted that there is at the outset a tension between this approach to social phenomena and Sombart's adherence to "value-free" social science. For it is precisely on the context of motivation that we tend to impose ethical judgments. It appears that the dam of inhibition resulting from the contradictions inherent in Sombart's methodological position bursts with a vengeance in his *New Social Philosophy*. It may also be remarked that Sombart's assumption that scientific explanation must necessarily run in terms of a single central concept involves an uncritical and outmoded presupposition derived from the career of classical mechanics.

Later, this priority of human motivation in the context of history was elaborated by Sombart into a dichotomy relating to scientific method. On

³⁷ *Der Moderne Kapitalismus*, 1902, vol. 1, pp. xiii and *passim* in Geleitwort.

the one hand, there is the approach which is appropriate to the phenomena of nature, and, on the other, that appropriate to human affairs. The latter he calls the *verstehende* method in contradistinction to the natural science or *ordnende* (ordering) method. The ordering method has a place in the interpretation of social phenomena, but should be employed in self-conscious subordination to the *verstehende* method. We are concerned merely to order the phenomena of nature, to discover relations in order that we may control and manipulate nature. That is all that we wish to do, and that is all that we can possibly do. But historical culture, as distinguished from nature, is a man-made product. It is the objectification of the human spirit (*Geist*) and we are therefore in a position to understand it, to get the inner sense (*Sinn*) of it in a manner not possible for the phenomena of nature.

It is the task of the social sciences, says Sombart, to interpret society in terms of historical singularities. The most comprehensive and important of these singularities are historical epochs. These and the historical contexts of lesser scope are unities which only make sense in terms of the purposes which predominate in these contexts. Beginning with the second (1916) edition of the *Der Moderne Kapitalismus*, Sombart's economic history is implemented with the concept, *economic system*. This in turn is articulated into three aspects, namely, the spirit, the form (or order), and the technique. The spirit of the economic process is still primary. In its subjective aspect, the spirit of economic society is related to the aims associated with economic activity, the degree of intensity or passion with which they are pursued, and the norms which may be associated with this activity. However, when this activity becomes institutionalized and the aims are rationalized and externalized by the technique of business organization as well as by technical aids in accounting and calculation, the economic spirit takes on a distinctly objective aspect. This is particularly true in the large business undertakings which for Sombart represent, preëminently, the spirit of capitalism during the era of *Hochkapitalismus*.

There is one further very important aspect of the objectivity of the capitalist spirit. While it is characterized by the single-minded striving for profits and unlimited accumulation and expansion, it is the business enterprise which is the essential vehicle of this impulse and not the individual entrepreneur or the guiding personality of the large corporation. The motivation associated with this personality will typically be quite complex and not primarily dominated by the desire for profits and accumulation. There is desire for power, for prestige and, more particularly, the impulse to enterprise and achievement. But these various other desires and the motivation in its complexity, Sombart quite rightly says, cannot be satisfied unless the enterprise is profitable, unless it becomes large, and unless it continues to expand. He cites Marx's phrase, "the drive of capital for ex-

pansion." In the presence of competition, lack of progressiveness in a business enterprise means retrogression. It must be conceded that Sombart has made interesting contributions to the interpretation of capitalism in connection with this concept of the spirit of capitalism, particularly in its objective aspect. It is his cultivation of the objective aspect of the concept that has prevented his interpretation from relapsing into dubious speculation in the realm of the subjective.

At the same time, his emphasis on the objective aspect of the spirit tends to invalidate his original methodological postulate as to the subjective locus of historical causes. There is also some difficulty with the assumption, for instance, that mechanical aids to accounting are part of the *spirit* of the economy whereas the steam engine, the gasoline engine, the electric motor, and the assembly line belong to the discrete realm of *technique*. Further, since it is not the subjective motivation of the entrepreneur that is of central and most proximate importance but "the drive of capital for expansion," may not the accumulation of capital under conditions of a dynamic technology constitute a more significant causal reference than the *spirit*? Sombart himself points out that the application of science to technology and of the scientific method to invention itself is a distinctly unique aspect of modern industrialism.

It is probable that if he had been preoccupied less with the spirit of capitalism in the form of the rationalization of business organization and more with the dynamics of technology, he would not have been beguiled into the position that capitalism was becoming stabilized. He emphasized the latter as late as 1931.³⁸ He might then have pondered the difficulties of rationalized business enterprise in the context of technological change and obsolescence.

There is also a difficulty with Sombart's position that it is the large undertakings which are preëminently the seat of the capitalist spirit. Attention may in this connection be accorded to Marx's position that the relatively small aggregates of capital, struggling for a place in the economic sun, are not without strategic significance for the tempo of economic development and the instability associated with it.

Sombart's penchant for monolithic explanations in terms of an objective spirit, while extremely susceptible of abuse, did not prevent him from making notable scientific contributions to economic history, economic theory, and the sociology of capitalism. But when this type of explanation is transferred from the economic aspect of a culture to the entire culture; when the objective spirit, instead of being articulated in terms of its empirical institutional aspects, is given a purely ideological transcendental incarnation; when the entire culture is conceived to be the exfoliation of

³⁸ "Capitalism" in *Encyclopedia of the Social Sciences*, vol. 3, p. 208. See also *A New Social Philosophy*, pp. 282-83.

this spirit; then verily there takes place a perversion both of social science and of social criticism. The scientist has then degenerated into a very bad philosopher.

It is a fine thing for the student of human affairs to be a philosopher in the generic, liberal sense of that word, but it is a sad thing for history, in particular, when the conflict between ideas and ideals is transposed to a conflict between epochs. History then becomes converted into a mythology—a mythology, moreover, which like drink and anger may contribute to the ferocity of a conflict, but does not illuminate the way to an ideal society—something to which Sombart tells us his *New Social Philosophy* is dedicated.

LEO ROGIN

University of California

SERVICE INDUSTRIES AND THE VOLUME OF EMPLOYMENT¹

It has often been pointed out that the service industries are growing in importance in the American economy. This trend has usually been welcomed as a factor making for an increase in employment opportunities. This paper attempts to show that there are reasons for doubting this. The service industries use less capital per unit of output than the economy as a whole, but do not use *more* workers per unit of output, but instead use a more expensive type of labor. It is impossible to say on the basis of existing data whether or not the growth of the relative importance of the service industries increases or decreases total expenditure on consumption and judgment must be held in abeyance on this point. But average per worker investment will definitely be reduced, save in some exceptional circumstances, owing to the diminished need for capital equipment resulting from the increase in the relative importance of the "capital unintensive" service industries. On balance, therefore, it is probable, although not certain, that the volume of employment will be reduced as a result of the growth of the service industries.

I

In the past few years it has often been pointed out that the service industries are growing in their relative importance in the American economy. Perhaps the most lucid and detailed statement has been made by David Weintraub of the National Research Project. In *Technological Trends and National Policy*,² he states, "The notable expansion in employment which took place between 1920-1929 was due almost entirely to the rapid growth of service activities." However true this may be, the growth of the service industries has also had certain *indirect* and adverse effects on the volume of employment. In this paper we shall explore the effect that the growth of the service industries (relative to the rest of the economy) has had upon the volume of investment and upon the volume of employment.

The definition of service industries which is used by Mr. Weintraub (p. 74) includes "trade, professional service, public service, and personal and domestic service." In this paper, however, we have adopted the somewhat more restricted definition used by S. S. Kuznets.³ Dr. Kuznets defines service industries as follows: "Service covers the numerous branches of service activities; religious, professional, domestic, personal, recreation and amusement and business." This definition is used rather than Mr. Weintraub's for two reasons: (1) we are here concerned only with private industry and hence will not consider government employment; and (2) trade declined in importance relatively to the rest of the economy during

¹ This paper was written as part of a research project on "The Monetary Aspects of Technological Progress," which has been financed by the Social Science Research Council of the University of Chicago. This project is under the direction of Professor Oscar Lange to whom the author is indebted for advice and criticism. The author alone is responsible for any errors of fact or analysis which may be discovered.

² *Technological Trends and National Policy*; Report of the Subcommittee on Technology to the National Resources Committee, June, 1937, Government Printing Office, p. 87.

³ S. S. Kuznets, *National Income and Capital Formation, 1919-1935*, National Bureau of Economic Research, New York, 1937, p. 12.

the period, 1919-34⁴ and hence its inclusion would merely obscure the growth of the service industries, as here defined, and the phenomena resulting therefrom.

The hypothesis which will be investigated in this paper may be stated in the following way: The service industries, which have grown in relative importance during the period from 1919-34,⁵ are less capital intensive, but not more labor intensive than the rest of the economy and, consequently, the growth in the relative importance of these industries will have an adverse effect upon the volume of employment. It might, at first, seem odd that the service industries should be less capital intensive, but not more labor intensive than the rest of the economy. This apparent paradox is, however, immediately resolved as soon as it is realized that the labor used in the service industries is of a more expensive kind than that used in the economy as a whole.

We shall mean by capital intensiveness, in this paper, the ratio of the value of the plant and equipment of a sector of the economy (*e.g.*, a firm, industry, a group of industries) to the value of its annual output. It might be objected that the capital intensiveness of a sector of the economy is a function of the output of that sector and that it is therefore impossible to define capital intensiveness in a precise manner. In order to circumvent this difficulty, we shall measure the capital intensiveness of a sector of the economy by the *average* capital intensiveness over the relevant range of outputs. An ideal measure of labor intensiveness would be the ratio of man-hours of work to "value added." Due to deficiencies in the data, we shall measure the labor intensiveness of a given sector of the economy by the ratio of employment in that sector (uncorrected for length of work-week) to the value of the output of that sector. The value of the output of a sector is here defined as the percentage of Gross National Product (as defined by Kuznets, p. 34) produced in that sector. Let us now verify the statements made above.

II

There can be little doubt that the service industries are growing in their relative importance in the American economy. The percentage of gross national product that originated in the service industries increased from 9.5 in 1919 to 13.6 in 1934.⁶ This is an increase of 43 per cent in 15 years. The data from which these conclusions are drawn are presented in Table 1. Other evidence of the growing importance of the service industries is presented in Table 2. The evidence presented in Table 2 indicates that the

⁴ *Ibid.*, p. 15.

⁵ It seems probable on the basis of the data presented in Table 2 that the trend continued until at least 1937, but we shall confine ourselves to the period 1919-34.

⁶ Kuznets, *op. cit.*, p. 15.

TABLE 1

TABLE 2

TABLE 3

Per cent of gross national product originating in service industries, 1919-34.	Per cent of total workers employed in service industries, 1920-37.	Per cent of total corporate assets owned in service industries, 1926-34.
1919..... 9.5		
1920..... 8.6	9.9	
1921..... 9.9	10.0	
1922..... 11.7	10.1	
1923..... 10.8	10.2	
1924..... 11.4	10.3	
1925..... 11.7	10.9	
1926..... 11.9	11.1	2.95
1927..... 11.8	11.6	3.26
1928..... 12.2	11.9	3.29
1929..... 12.3	12.7	3.36
1930..... 12.6	12.9	3.29
1931..... 13.8	13.1	3.36
1932..... 14.3	13.4	5.23
1933..... 13.9	13.3	4.93
1934..... 13.6	13.6	5.05
1935.....	13.8	
1936.....	13.8	
1937.....	14.0	

Table 1—Source: S. S. Kuznets, *National Income and Capital Formation, 1919-1935*, National Bureau of Economic Research, New York, 1937, p. 15.

Table 2—Source: David Weintraub and Harry Magdoff, "Service Industries in Relation to Employment Trends," *Econometrica*, Oct., 1940, p. 292. The figures taken represent percentage of employment in the "Total commodity-producing industries and services" that were employed in the "Domestic and personal service," and the "Professional service, recreation, and amusement" industries.

Table 3—Source: Solomon Fabricant, *Capital Consumption and Adjustment*, National Bureau of Economic Research, New York, 1938, pp. 248-49. The "New Classifications" were ignored.

number of persons employed in these industries increased by over 40 per cent from 1920 to 1937.⁷

It also seems very likely that the service industries are considerably less capital intensive than the economy as a whole. The evidence on this point, while not absolutely conclusive, is very persuasive. In Table 3 we have presented the percentage of total capital assets owned by corporations in the service industries during the period from 1926-34. The average percentage of capital assets owned by corporations in the service industries during this period was 3.86 per cent of the total corporate assets of the community.⁸ During this period the average per cent of Gross National Product originating in the service industries was 12.9 per cent,⁹ which

⁷ These figures reflect the influence of a much greater increase in output per head in the non-service industries than in the service industries and hence are not to be relied upon heavily as an indication of the increasing relative importance of the service industries.

⁸ Derived by averaging items in Table 3.

⁹ Derived by averaging entries in Table 1 for the years 1926-34.

would seem to indicate that the service industries were less capital intensive than the economy as a whole. But it must be noted that our capital figures include only the assets of corporations and that this may have introduced a bias.¹⁰ Certain sectors of the economy are dominated¹¹ by corporations to a much greater extent than the service industries. This would lead to an underestimation of the percentage of capital assets owned in the service industries. On the other hand, there are other sectors of the economy which are even less dominated by corporations than the service industries.¹² There are still other sectors of the economy where it is impossible to decide on existing evidence whether or not they are more or less dominated by corporations than the service industries. It is difficult to say whether the tendency to overestimate the capital intensiveness of the service industries, due to the existence of sectors of the economy which are *less* corporation-dominated than the service industries, outweighs the tendency to underestimate it (the capital intensiveness of the service industries) due to the existence of sectors of the economy *more* dominated by corporations than the service industries.¹³

Fortunately, however, there is more conclusive evidence that the service industries are less capital intensive than the economy as a whole. The share of property income (dividends plus interest) in the total income payments of the economy averaged 13.2 per cent between 1919 and 1934.¹⁴ The share of property income in the income payments of the service industries during this period was 1.6 per cent.¹⁵ While allowance must be made for the fact that investment in the service industries may be financed somewhat differently than it is elsewhere,¹⁶ it seems very unlikely that the differ-

¹⁰ Another possible source of bias is that our figures include land, as well as plant and equipment, and our definition of capital intensiveness includes only plant and equipment. However, Fabricant, *Capital Consumption and Adjustment*, p. 271, gives figures for the value of capital assets, excluding land, for 1934. On the basis of these figures the percentage of capital assets, excluding land owned by corporations in the service industries, was 4.55 per cent, while the percentage owned, with land included, was 5.50 per cent. Therefore, it would seem that any bias introduced by the inclusion of land would be in the direction of overestimating the capital intensiveness of the service industries.

¹¹ The percentage of the total output (in value terms) of an industry, produced by corporations, may be used as an index of corporate domination. In any case, when we say that one industry is more (or less) dominated by corporations, we mean that it has a higher (or lower) index of corporate domination.

¹² It should be noted that in this paper we are not using the term industry in the precise theoretical sense of a group of firms producing a homogeneous product, but rather in the manner in which the term is used in the Census of Manufactures.

¹³ It is very likely that corporations are more capital intensive than non-corporate firms and this would lessen, although not necessarily eliminate, any tendency to underestimate the capital intensiveness of the service industries owing to the coverage of corporations alone.

¹⁴ Kuznets, *op. cit.*, p. 30.

¹⁵ *Ibid.*, p. 30.

¹⁶ Entrepreneurs in the service industries could conceivably be more inclined to self-financing (rather than borrowing) than entrepreneurs in other industries, but there is no

ence would be so great as to account for the huge discrepancy between the percentage of income going to property in the service industries and the percentage going to property in the rest of the economy.¹⁷ Therefore, we shall consider that we have tentatively proved that the service industries are less capital intensive than the rest of the economy as a whole.

It is easily seen from the data presented by Weintraub¹⁸ and Kuznets¹⁹ that the service industries are not more labor intensive than the economy as a whole. The average percentage of Gross National Product produced in the service industries from 1920-34 was 12.0 per cent, while the average percentage of total employment in the service industries during the same period was 11.6 per cent.²⁰ In other words, the service industries were, if anything, less labor intensive than the rest of the economy and, in any case, were certainly not more labor intensive.

The data presented here concerning the value of the output of both the service and the non-service industries refer to the total value of the output of these industries and not to the value added. Since it is obvious that the service industries use much less raw materials than the non-service industries, *i.e.*, the ratio of value added to the value of output is higher in the service industries than in the rest of the economy, the volume of employment in the raw materials industries will be diminished as a result of the shift in expenditure from the non-service to the service industries (total expenditure remaining constant). Since, however, data could not be obtained to substantiate this assertion (although there should be little disagreement on it), we shall not base any of our subsequent argument upon this fact. Nevertheless, the reader should keep it in mind when assessing the validity of the conclusions reached.

Now let us trace the consequences of a relative growth in the importance of the service industries under the conditions which we have shown to exist.

III

As can be seen from Kuznets,²¹ during the period from 1919-29 the expenditure on the output of both the service industries and of the non-service industries was increasing in *absolute* amount, but the *proportion* spent on the output of the service industries was increasing. Let us now

more reason for supposing this than there is for supposing that they are less inclined to self-financing.

¹⁷ If the degree of monopoly power, measured by the ratio of price minus marginal cost to price, were greater in the non-service than in the service industries, property would receive a greater share in the non-service than in the service industries. However, there is no reason for supposing that the degree of monopoly power is greater in the service than in the non-service sector.

¹⁸ Weintraub and Magdoff, "Service Industries in Relation to Employment Trends," *Econometrica*, Oct., 1940, p. 292.

¹⁹ Kuznets, *op. cit.*, p. 15.

²⁰ Weintraub and Magdoff, *op. cit.*, p. 292.

²¹ Kuznets, *op. cit.*, pp. 14-15.

analyze the effects which an increase in the proportion of total expenditure directed to the output of the service industries would have under the conditions which existed from 1919-29.

Under these conditions, the *impact* effect of the increase in the proportion of consumption expenditure directed toward the service industries is to increase the amount of new employment offered (at the going wage-rate) in the service industries relative to the amount offered in the non-service industries, ignoring, for the moment, that the volume of investment is also affected by "the shift."²² If the rate of increase of consumption expenditure (per unit of time) is unaffected by the shift, the rate of increase in the volume of employment will not be accelerated owing to the shift, as the service industries are not more labor intensive than the rest of the economy. If the rate of increase of consumption expenditure is *decelerated* by the shift, our previous statement holds, *a fortiori*; but if the rate of increase of consumption *expenditure* is accelerated by the shift, the impact effect of the shift may be to increase the volume of employment. There has been, so far as I know, no study of the variability of consumption expenditure with respect to changes in the component items of expenditure and therefore we must reserve judgment on this point until further empirical work is done.

Having considered the effect of the shift on the volume of consumption expenditure, let us now examine its effect on the volume of investment. Under the above mentioned conditions, the effect of the shift will be to diminish investment and, consequently, employment. For, since the service industries are less capital intensive than the rest of the economy, the "average entrepreneur"²³ in this section of the economy will make a smaller volume of investment decisions²⁴ in response to a given increase in his "optimum output stream"²⁵ (in a given period of time) than the average entrepreneur in the non-service industries. This immediately follows from the fact that the greater the capital intensiveness of a firm, the greater will be the optimum amount of capital²⁶ it will add in order to produce an

²² We shall hereafter refer to the increase in the proportion of total expenditure directed to the output of the service industries as "the shift."

²³ By the "average entrepreneur," in each sector of the economy, we mean that entrepreneur whose firm is the mean firm, with respect to capital intensiveness, of all firms in that sector of the economy.

²⁴ The volume of investment decisions (in any period of time) is equal to the total amount of orders given to entrepreneurs producing "durable" equipment and to contractors who construct plant. For a further discussion see M. Kalecki, *Essays in the Theory of Industrial Fluctuations*, pp. 123 ff.

²⁵ The "optimum output stream" of an entrepreneur is that stream of output which, given the entrepreneur's expectations of future demand schedules for his product and future supply schedules of the factors, will maximize the present value of the entrepreneur's profits. On this point see J. R. Hicks, *Value and Capital*, pp. 191-212.

²⁶ The optimum amount of capital goods for a firm to possess is the amount which makes the discounted marginal net value productivity of each of the productive agents (in-

output stream greater by a specified volume than its previous stream. Therefore, if the rate of growth of expenditure on the output of the service industries increases relatively to the rate of growth of expenditure on the output of the non-service industries (except where an increase in the growth-rate of consumption indirectly increases investment), the volume of investment will tend to diminish (with a time lag) if the shift is permanent.²⁷ Consequently, the growth of the service industries, relative to the economy as a whole, has an unfavorable effect on the volume of employment during a period of prosperity via its effect on the volume of investment.²⁸

During the depression, expenditure on the output of both the service and the non-service industries was diminishing. Under these conditions the effect of the shift on the volume of consumption will be the same as before, but the effect on the volume of investment will be somewhat different. If the firms in both sectors are, on the whole, not expanding,²⁹ which is the case during a depression, the shift does not cause a diminution of new investment, but merely, in the short-run,³⁰ a diminution in expenditure on maintenance and replacement. This (slump period) diminution in the volume of expenditure on investment goods will not be nearly so great as the reduction in the volume of investment that would result from a shift of equal magnitude during a boom. The reason for this is the well-known fact that the average annual expenditure on maintenance and replacement of plant and equipment (dividing the total expenditure on replacement by the number of years of life of the replaced item) is much less than the expenditure *per annum* during the period in which the plant and/or equipment is under construction. In periods where replacements are bunched this factor will be lessened in importance, but in periods where replacement expenditure is sparse, such as depressions, it will have redoubled

cluded in the term capital goods) equal to its discounted marginal cost to the firm (equal to its price in the absence of monopsony). This is, of course, abstracting from discontinuities.

²⁷ It is necessary that the shift in the rates of growth last for a long enough period of time to convince entrepreneurs in the service industries that the shift in demand is not merely a temporary shift.

²⁸ It has been pointed out to me by Mr. Paul MacGann that there is some disguised investment in the service industries in the form of investment in personal capacities, e.g., training for professional people, etc. To some extent, therefore, our argument tends to underestimate the capital intensiveness of the service industries. However, it is impossible to measure statistically the amount of capital invested in a human being. Much of the investment, moreover, is practically indistinguishable from consumption, e.g., living expenses of students, etc., and therefore we can not take recognition of this fact other than to note it. It is the private, although statistically unsubstantiated, opinion of the writer that this is not an important exception to our argument.

²⁹ By an expanding firm we mean a firm which is currently making a positive net investment in its own plant and equipment.

³⁰ The short-run, as used here, refers to the period of time between the impact of the shift up to (but not including) the moment when all the firms have made full adjustments in terms of plant and equipment to the new situation. In the "long-run," the diminution in

weight.³¹ The result of a shift under these circumstances (*i.e.*, a depression) might conceivably be even to increase the volume of investment. In any case, however, the adverse effect on employment of a shift of the type with which we are concerned during a period of depression will be much smaller than during a period of prosperity.

Over the cycle as a whole it is very likely that investment and employment will be diminished by an increase in the relative importance of the service industries. This is so even when we consider the rather remote possibility that during a period of depression a shift might increase the volume of investment, for it is almost certain that the reduction in new investment due to a shift during periods of prosperity will outweigh any increase that might conceivably occur as a result of the shift during depressions.³² We do *not* claim to have proved conclusively that the growth of the service industries relative to the rest of the economy will diminish employment over the course of the business cycle, but we do believe that we have shown the likelihood of such an occurrence.

M. W. REDER

Chicago, Illinois

maintenance and replacement will reduce the volume of investment no matter what happens in the short-run.

³¹ It should be clear that, for our purposes, a depression exists only when there is zero or negative net investment in plant and equipment in the non-service industries. On this definition very few (if any) ordinary depressions are considered as such. This, of course, reinforces our argument as the shift is much more harmful to employment during periods of prosperity than during depressions.

³² Any increase in investment during a depression would be very small since the increase in investment in the service industries would have to counter-balance the diminution in maintenance and replacement in the non-service industries.

TRANSITION TO A COMMODITY RESERVE CURRENCY

The proposal to link the dollar with a composite unit of essential storable raw materials, through provision of what is in essence free minting of the goods in the composite along with free redemption of money in the goods, is theoretically very attractive.¹

Granted that the proposal is administratively feasible, the price *level* of a strategically important group of commodities, now subject to extreme price aberrations, would be absolutely fixed, though the prices of individual commodities would vary in much better response to, and adjustment of, supply and demand than is at present the case.

There is good ground for the belief that the fixing of the price level of raw materials would give us as much stability in the general price level as is practicable or desirable.

Commodity reserve currency would have the further great advantage of furnishing an unlimited demand, at a fixed price, for the composite of goods linked to the monetary unit. This would be a powerful factor in limiting, and offsetting, depressions, not only because it would prevent any fall in the price level in the raw material sector but because it would sustain production in that sector and put new money into circulation, in acquisition of goods for the reserve, which could only be brought to bear on the purchase of other goods. If, on the other hand, a purely inflationary boom were imminent, the resulting redemption of currency, in commodity units at the established price, would operate, both by increasing the immediate supply of goods and by reducing the supply of money, to stifle the menace. Such a currency would, in fact, be uniquely and automatically correlated with goods so as to assure not only a stable price level but also a persistent stimulus toward optimum production.

The ideal situation would perhaps be to supplant all other forms of money with commodity certificate currency, but any such proposal is bound to encounter strong opposition based on fear of the unusual and unknown. The principle will be the more readily adopted as in practice it departs but slightly from established usage and involves few changes in existing legislation which do not already command practically unanimous assent from all respectable writers on monetary questions. On these assumptions the following program is suggested:

¹ The proposal was originally set forth in detail by Mr. Benjamin Graham in his book *Storage and Stability* (McGraw-Hill, 1937) which was reviewed by the present writer in the September, 1938, issue of the *American Economic Review*. Further reference was made to it in my article on "The Primary Functions of Money and Their Consummation in Monetary Policy" in the *Am. Econ. Rev.*, Suppl. vol. xxx, March, 1940, pp. 1-16. A summarization of the plan has been published by the Committee for Economic Stability, 80 Broad Street, New York. Mr. J. M. Keynes treated some aspects of the proposal in an article on "The Policy of Government Storage of Food Stuffs and Raw Materials" in the *Econ. Jour.* of September, 1938, and Professor Richard A. Lester has discussed it in his book *Monetary Experiments* (Princeton Univ. Press, 1939).

1. Commodity reserve money should be introduced on the passing of the present business boom and the appearance of a fall in the basic commodity price level below a designated figure;

2. All commercial banks shall, as of that date or earlier, be required to join the Federal Reserve System;

3. The Board of Governors of the Federal Reserve System shall be given power to fix at its discretion the reserve ratios required of member banks (the present *proportions* between the reserves required of central reserve city, reserve city, and country banks may be maintained);

4. All member banks shall be required to redeem their liabilities, on demand, in cash or checks against their reserve balances at the option of the holder;

5. The Federal Reserve Banks shall be directed freely to buy, at the prescribed dollar value, warehouse receipts representing designated composite commodity units and to pay therefor in Reserve Bank deposits transferable only to a member bank;

6. After a stated reserve of these receipts has been acquired by the Reserve Banks as a whole, the Reserve Banks shall be required to redeem their liabilities, on demand, in commodity units or gold at the option of the holder;

7. A progressive tax shall thereafter be imposed on the Reserve Banks as a whole whenever the total of their commodity reserves falls below the stated figure. (Distribution of the tax as between the several banks should be in inverse proportion to the ratio of their commodity reserves to their demand liabilities, and rediscounting, by any one of the Reserve Banks for another, should be subject, as at present, to the dictate of the Board.)

I take it that there will be no objection in informed and unbiased circles to the proposals that all commercial banks be brought into the Federal Reserve System and that the Board of Governors of the Federal Reserve System be given discretionary power to fix the reserves required of member banks. No really effective control of our monetary and banking system is possible without these measures and they have been repeatedly championed in the most conservative quarters. The status and practice of member banks is not otherwise altered in the program above outlined.

All of the present powers of the Federal Reserve Banks and Board, moreover, are retained in their existing form. Discount policy and open market operations would be handled as at present. The progressive tax on the reduction below a stated minimum in the Reserve Banks' holdings of commodity reserves is on all fours with the traditional tax on a reduction of their cash reserves below a required percentage of note or deposit liabilities.

No conservative in monetary policy will deny that the Reserve Banks

should be held to a redemption of their liabilities in *something* and, under the proposals made above, there could never be any pressure on the Reserve Banks to do more than has always been necessary to prevent inflationary price movements. If, on the other hand, a deflationary situation should develop, the Reserve Banks would automatically acquire reserves through the delivery to them of commodity units for which the outside market would, at the moment, be unwilling to pay the designated price. This would give them the fullest basis and warrant for a resolute policy in the expansion of credit.

The rights of a holder of paper money, or of the demand liability of any bank, would be greater than they have ever been in the past. If he desired redemption in gold he could have gold but if, as is in many cases probable, he should prefer commodity units, they would be at his disposal.

The Reserve Banks' offer freely to purchase commodity units at the beginning of a presumptively severe depression would be a salutary measure of the first importance. If the slump would otherwise be prolonged, the minimum reserve, necessary before redemption in commodity units could safely be undertaken, would be quickly acquired and might be greatly exceeded. The excess would be all to the good.

The transition to a system under which declines in the price level would be automatically checked, depressions automatically cushioned, and inflationary booms automatically retarded, would, under these circumstances, be not only a painless prophylactic against future evils but also a useful therapeutic for those that were current.

All of our present types of money and bank credit could be maintained along with the free purchase of gold at the established, or any other desired, price. There is small reason now for refusing to redeem our money in gold and there would be none after a supplementary reserve in commodities had been established. No private hoarding of gold, or any other type of money, could then lower the price level of commodities in the reserve or prevent their production in unimpaired volume. The very pressure on their price level, arising from the hoarding of gold or other types of money, would lead to an automatic expansion of commodity reserves in compensation of any reduction that might occur in gold reserves through redemption of currency in the metal. Such an expansion of commodity reserves, through the sale of commodity units to the Reserve Banks, would be an assured and self-liquidating accompaniment of incipient depression. Contrariwise, bank credit expansion on the basis of deposited gold reserves would be checked short of inflation through reduction in the commodity reserves, by redemption, to the level appropriate to the maintenance of stable prices.

If our present gold policy is maintained the only possible safeguard against a potentially great inflation is an increase in the reserve ratios required of member banks. But, if discretionary power in this matter is

given to the Board, they would be able to prevent the current stocks, or any probable increment, of gold from exerting such an inflationary influence as would provoke the complete draining away of the reserves of commodities once the latter were established. The same safeguard is effective against reserves arising from the deposit of governmentally-issued cash, unless, indeed, the government should proceed to put out fiat money in such volume as to render even a 100 per cent reserve requirement powerless to prevent a rising price level. Over all other present sources of reserve funds the Reserve Banks have complete control, on the proviso, again, that the government refrains from *forcing* them to put federal funds at the disposal of member banks through the direct purchase of government securities or the like.

A government bent on inflation cannot, of course, be stopped by *any* prescribed monetary policy. If commodity reserves were available at the start of such a move, the redemption of commodity units would prevent any increase in the price level of the reserve commodities until these reserves were exhausted, but any such reserves might, of course, disappear if the government persisted in offsetting the ensuing decline in the volume of money with new issues of other types of actual or potential federal funds. If, however, after commodity reserves were established, inflation were prevented by a credit policy designed to forestall their exhaustion, gold, as well as commodity, reserves would synchronously be protected.

Regardless of any reduction in gold or non-commodity reserve funds, however, no deflation of the price level of reserve commodities, no substantial deflation of the price level of other commodities, and, in these circumstances, no shortage of reserves in general, would be possible so long as free minting of the reserve commodities was maintained.

It is barely conceivable that the present requirements on the percentage holding of gold reserves by the Reserve Banks might, at some distant date, require downward modification. This could happen if it was necessary greatly to increase the liabilities of the Reserve Banks in the process of preventing a decline in the price level.² As things now stand, however, this is so remote a contingency as to permit of incontinent dismissal. If it should ever come to pass it would call for special action whether or not commodity reserves were in the picture.

The method of introduction of commodity reserves proposed in this paper foregoes the complete automaticity which is one of the real virtues in a wholly unadulterated commodity certificate money. If, instead of this method, all of our present cash should be replaced by commodity certificates, and if all future changes in reserves should be limited to the deposit, or withdrawal, of commodity certificates with, and from, the Reserve Banks, the advantages of a stable price level and of a steady stimulus toward

² *Commodity* reserves would then be rising but the *gold* ratio might fall.

optimum production would be realizable without any discretionary, and therefore potentially abused, management of money. This result, even with a system of partial reserves against member bank demand deposits, could be attained, provided the former practice of fixed reserve requirements for member banks were reestablished—and the member banks used the reserves to the full. The sole regulator of the reserves would then be the influx, on private initiative, resulting from the “minting” of commodity units whenever the raw material price level would otherwise fall in a business slump, and the converse efflux, on private initiative, whenever the raw material price level would otherwise rise in an inflationary boom. Such complete automaticity, always in the appropriate direction, has much to commend it. It would entirely remove the possibility of arbitrary official action.

But objection to any such scheme would no doubt be taken on the ground of lack of elasticity. This objection would be even more strongly urged if, in the interest of conceptual purity or otherwise, a 100 per cent reserve of commodity certificates were required against member bank demand deposits. Such a requirement would, in addition, prove very expensive. In neither case, in my judgment, would the charge of lack of any desirable elasticity be truly justified but whether it was or not could not be proved in advance. There is, in any event, much to be said for the retention of techniques which have been empirically tested and found, on the whole, good.

If, then, holding to what we now have, we merely require the Reserve Banks to add to their existing functions the free receipt of commodity units against Reserve Bank deposits, and the redemption of all forms of money in such units on demand, we can count on all the benefits which commodity reserve money promises, provided only that our monetary authorities are entitled to a minimum of confidence and are given the powers universally regarded as necessary to the control of any type of monetary system. So much reliance on the principle of administrative discretion, and no more, would not appear to be dangerous.

International, as well as domestic, monetary and commercial relations would be carried on in the traditional manner. Exchange rates against gold currencies would be stable and gold could serve its traditional international functions. Exchange rates against other currencies would be subject to much less instability than has hitherto been present. Debtor countries in the international account would have the great advantage of an opportunity of meeting their debt through the delivery of commodity units, rather than gold, whenever they were short of the metal. This would well-nigh, if not completely, eliminate the transfer problem, would greatly diminish noxious controls of imports and exports, and would tend to expand the volume of international trade.

Except for the cost, to the Reserve Banks, of storing the commodity reserve, no vested interest could be in the least injured by the innovation as a supplement to our existing practice.

The expenses of storage might appropriately be assumed forthwith by the government as the cost of maintenance of a satisfactory monetary system, though, in the alternative, they might be defrayed by seigniorage charges. Investigations have shown that they are unlikely to run to more than one or two per cent of the pre-1940 revenues of the national government and they would certainly be minor compared to the real cost of our recent acquisitions of gold. They would, in any case, be very cheap insurance against enormous evils which commodity reserve money would, so well as can be seen, go far to avert.

FRANK D. GRAHAM

Princeton University

ECONOMIC RESEARCH IN THE FEDERAL GOVERNMENT¹

I

In view of the great number and wide variety of contributions of government to economic research and the consequent breadth of my subject, it might be appropriate to begin with a careful delimitation of it. Unfortunately, economic research is a peculiarly difficult thing to define. Moreover, the difficulties are far greater in the case of government, and I believe in that of business, than they are for a research institution or even a university.

It has been frequently suggested that a running inventory should be maintained of research projects under way in government. If well done, such an inventory might be a very useful "clearing house." But to be useful it would have to be done with discrimination. Otherwise, it would be bogged down with a host of undertakings of little consequence and little relevance. Such undertakings are vastly more numerous than research projects which promise to be of material value.

Let me illustrate some of the problems of defining economic research in government which such a running inventory would meet. A cabinet officer or other high executive desires information on the best way to finance new industrial facilities to support the defense program. He asks for a confidential memorandum. Or perhaps this government executive plans to make a speech on the subject of industrial facility financing and asks to have a draft prepared for him. Or again one of his correspondents has inquired about this subject, and he requests a draft reply. In each case the government employee of whom the executive makes his request is seeking to give the best answer he can to a question which most of us today would regard as definitely in the realm of economics. Is the process of preparing the memorandum or draft, letter or speech, to be regarded as economic research? Is it equally economic research if the government employee is allowed on the one hand two or three hours for the task and on the other two weeks or possibly two months, or even more? Is it equally government economic research if the government employee who receives the request for the memorandum or draft is a librarian? a lawyer? a newsman? a secretary? a ghost-writer? an economist? Clearly the answer is, "No."

Nor do these cases exhaust the difficulties of defining economic research in government. Under what circumstances, if any, are the following to be regarded as economic research: the taking of a census; the holding of a hearing on convenience and necessity in connection with a new railroad line; the tabulation of statistics from income tax returns; the compilation of an index number? Is the mere routine collection or tabulation of statistical

¹ This paper was read at the round-table on economic research at the annual meeting of the American Economic Association at New Orleans, December, 1940.

data economic research? Or must it be coupled with appropriate planning and interpretation? Clearly planning and interpretation are essentials of research. The case of a commission hearing is particularly awkward. The question to be answered may be clearly in the realm of economics. The evidence needed to answer this question may be gathered objectively and according to strict rules uniformly applied. But if the facts are organized and interpreted in accordance with quasi-judicial procedures, ought we to call the process "economic research"? I think not.

With these troublesome cases in mind I should like to venture a more constructive statement as to what economic research in government is. I suggest that to be economic research an activity must involve three elements: (1) it must seek to provide an answer to an economic question; (2) it must collect or determine facts pertinent to answering such a question; (3) it must organize and interpret these facts so as to provide the answer in accordance with sound research procedures. The difficulty in defining economic research in government derives from the fact that while economic questions are frequently posed and while facts are frequently sought to answer such questions, a variety of procedures are used in organizing and interpreting these facts to give answers to these economic questions.

No doubt it will be said that I have offered a definition of economic research which does not define; that it still remains for me to state what processes of organization and interpretation of facts are essential to economic research. It may even be said that the formulation I have offered leaves it a matter of taste to determine whether a given activity is economic research, *i.e.*, whether the procedures are sound research procedures. To this charge I gladly plead guilty. Indeed, the proposition that there are no clearly established standards of economic research in government is a large part of my present thesis.

For the moment, however, I wish to note that my unsatisfactory definition of economic research has certain advantages in dealing with the troublesome cases I have posed. A mere gathering of facts to answer an economic question is not enough to constitute economic research even if the answer is what economists would generally regard as the correct one. If the pattern of collection and compilation has already been established, as in the case of an established index number; or if the procedures of organizing and interpreting facts are quasi-judicial, as at a hearing; or again if the processes of collection and organization of facts are casual and abbreviated, as they characteristically are in the case of letter writing, I think it would be generally agreed that we ought not to call the process one of economic research. If the processes of collecting, assessing, organizing, and interpreting facts to answer an economic question are to be designated "economic research," these processes must conform to appropriate standards. Such standards are not yet adequately established.

In the light of this imperfect definition, let us proceed to consider the

main functions which economic research in government performs. I suggest that these are as follows:

1. Economic research may serve as an aid in the formulation of public policy.

2. Economic research may serve as a means for effectuating or enforcing a public policy.

3. Economic research may be an end in itself, or at any rate the answers which it seeks to provide may be desired for their own sake.

4. Economic research may be a pawn in the game of politics or bureaucracy.

5. Economic research may serve as a form of made work.

Let us consider each of these functions in turn.

1. *As an aid in the formulation of public policy.* Economic research may be involved at various levels in the formulation of public policy. It may precede and provide assistance in the framing of legislation—thus extensive investigation was the precursor to the Social Security act, and much earlier, to the Federal Reserve act. Also estimates of tax revenue regularly precede federal revenue acts. And many of the monographs now issuing from the T.N.E.C. should be classed at the legislative policy level, whatever Congress may do to these proposals. Again, economic research may aid in the executive formulation of policies, as did the terminal and freight-car studies of the Coördinator of Transportation. There are recurring examples of this use of research in connection with the development of international trade agreements or with the easing and tightening of Federal Reserve credit. Or economic research may operate at a much more detailed level; for example, in connection with the actions of the Defense Commission on proposals for the locations of new industrial facilities.

Without passing judgment upon any of these illustrations of research it is well for us to bear in mind our imperfect definition. Decisions of public policy are made by legislators or other officials of government on the basis of those answers to economic questions which they have come to accept. Those answers may be the answers which sound and adequate research has given, and sound and adequate research may be responsible for their acceptance. But economic research has no monopoly of influence upon legislators and other officers of government. Indeed, "free-for-all" competition between economic research and other processes of organizing and interpreting facts to answer economic questions may be said to prevail. It is, I think, fair to report that this competition among methods of answering economic questions has latterly been subjected to some restraints; that substantial progress has been made toward the establishment of fair minimum standards of professional economic workmanship, but unsound competition in the perpetration of economic findings has certainly not yet been eliminated. Skill in presenting economic findings to a government official

or personal relationship which gives that official confidence in the finder may be far more important in getting economic findings accepted than professional research competence.

2. *As a means of effectuating or enforcing a policy.* Economic research may be employed as an instrument of law enforcement. Thus it may be used extensively in the development of a brief in an antitrust case or a National Labor Relations Board case. Again it may be used to aid in patching up loopholes in the law. For example, we may have studies of tax evasion and delinquency. There is indeed no sharp line between the use of economic research as an aid in the formulation of economic policy and its use as a means of effectuating policy. We may ask whether the findings of the Tariff Commission under the flexible tariff act illustrate the first or second function of economic research.

As a means for effectuating public policy economic research may stand in one of three rather special relations to the policy. First, it may provide a quantitative base to which a procedure established in law is to apply. Thus the price parity legislation for agriculture involves the problem of finding what parity is. We need not agree with this agricultural economic policy to designate the process of measuring parity as economic research. Railroad valuation has probably included enough economic research to be cited as a further illustration of the use of research to establish a quantitative base. Second, the provision of facts through economic research may help directly to promote the policy of a better functioning of our economy. Thus we have various agencies designed to provide market information; the Market News Service and the Division of Crop Estimates of the Department of Agriculture are cases in point. A substantial part of the work of the Securities and Exchange Commission may be said to fall in this category; also, some of the work of the Federal Reserve Board. Third, economic research may serve as a subsidy in kind. This special method of effectuating a policy is not sharply differentiated from the second. Some of the work of the Department of Agriculture may be classified here; also some of the foreign trade conditions work of the Bureau of Foreign and Domestic Commerce and State Department.

To say that economic research may function as a means of effectuating policy is to raise again the question, "What is economic research?" Economic findings may be used regardless of the process by which they were arrived at. If competent economic research has in recent years more frequently been preferred to competing methods of providing answers to economic questions, we must not forget that most of those who have exercised this preference lack professional economic competence. Professional economic research in government is subject to a grave difficulty. Findings of economic fact and recommendations of economic policy must be judged ultimately by an executive or other government official who may commonly be pre-

sumed to be without professional competence as an economist. And if there are competing economic findings or competing recommendations the choice between them will almost inevitably be made by a lay-economist using a layman's criteria.

3. *For its own sake.* Intellectual curiosity is undoubtedly an important motive force in economic research in government. It is present in most economic studies; in some it is the main motive force. As illustrations of this latter sort of study may be cited the work on the national income and on the balance of international payments by the Bureau of Foreign and Domestic Commerce and the studies of population and of patterns of consumption and income by the National Resources Committee (now the National Resources Planning Board). To be sure, idle scientific curiosity is not likely to be the predominant objective of any research project unless the general public shares the curiosity with technical economists. Moreover, even here we cannot escape the question, "What is economic research? How distinguish it from off-hand letter writing?"

4. *As a pawn in the game of politics and bureaucracy.* This fourth function of economic research in government, if function it be, is listed to call attention to the diversity of motives for economic research. Research may be undertaken or continued, discontinued or avoided, from motives which have little or nothing to do with an interest in economic truths either for their own sake or as aids in the formulation or effectuation of public policy. The characterization of these motives as political or bureaucratic suggests that it may not be tactful to cite illustrations of all of them. It may be noted, however, that one reason for the continuation of economic research is the force of inertia and tradition. Again, new economic research may be undertaken because of the desire on the part of a bureaucrat to expand his functions without any particular concern on his part as to what functions he expands.

A converse case to that of bureaucratic expansion is the cutting off of a research unit, not because the research has been judged by competent economists to be worthless or poorly done, but because the research unit is a vulnerable part of an organization under political attack. Without commitment on the merits of the case, except to note that the professional merits were certainly not decisive in its termination, citation may be made of the Division of Economic Research of the National Labor Relations Board. A somewhat different aspect of the motives which may affect the conduct or non-conduct of economic research was revealed by the N.R.A. The proposal to incorporate in a code a provision for economic research to determine whether the code is operating satisfactorily in the public interest was commonly regarded as on a par for bargaining purposes with all the other provisions of the code. Thus, the attitude of business was frequently that such a provision for economic research was a concession, the

granting of which should be offset by appropriate relief to business in the provision affecting the level of wages or in some other substantive provision.

5. *As a form of made work.* No list of functions of economic research in government would be complete without mention of F.E.R.A., C.W.A., and W.P.A. projects. Some of these which have had comparatively little overhead financial assistance, such as the Financial Survey of Urban Housing, have made important contributions to our knowledge.

II

If I have suggested by the above discussion of functions a modest rôle for economic research, let it be noted in passing that it is certainly not intended here to minimize the accomplishments of economic research in government. It would be conservative to say that these accomplishments are of substantial and increasing importance. In the fields of agriculture and banking, government research is preëminent. It is outstandingly important too in analysis and forecasting of business conditions. There is, indeed, no field of economics, except economic theory, in which the contributions of government research are not a substantial part of the whole.

Economic research in the federal government enjoys several important advantages. In addition to the Library of Congress there are a number of special economic libraries. There is also ready access to a very large part of the basic statistical data in this country and to the methods involved in their collection and compilation. There is even a chance to influence government questionnaires and report forms. In access to basic economic data, no other American city can approach the facilities offered by Washington.

Another advantage enjoyed by economic research workers in the federal government may be noted. First, the fields of economic inquiry are less marked off into detailed specialties than in academic life. Boundary lines of specialties do not restrict freedom of inquiry. Second, clerical assistance and mechanical aids to research are more plentiful than in academic life. There is, however, no reason to think that government research has any advantage over research in business in these last two respects.

On the other side of the ledger we must reckon with a number of disadvantages. I propose to dwell disproportionately upon these disadvantages in order to lead up to several recommendations for improvements. Let me say that, in spite of this disproportionate emphasis, I am convinced that there is relatively a substantial ledger credit balance in favor of economic research in government.

First among the drawbacks to economic research in government may be noted the pressure for prompt results which makes it difficult for government to develop long retrospects in statistical data or to engage in studies that require several years to reach a conclusion. Abstract and highly theo-

retical inquiries are also not likely to be welcome in government. None the less, opportunities are offered for research upon a very wide variety of questions.

A second disadvantage is a tendency which I shall describe as "officialism." Government officers and employees have been too often characterized by lack of imagination and an unwillingness to "stick out their necks." I believe, however, that the extent to which government differs from other organizations in this respect has materially decreased in recent years. I suggest that a system of personnel exchanges between universities and government analogous to professorship exchanges would still further improve the situation. Such a plan would both encourage initiative and new ideas and strengthen generally the economic research personnel of government.

A third disadvantage may be referred to as "canons of governmental propriety." I am inclined to believe that the importance of this difficulty has frequently been overstated, but such a difficulty there certainly is. It raises a question as to how far a governmental agency can be objective and candid if the economic research affects a current political issue on which a responsible official is committed, or again how far government economic research can be objective and candid if it involves an appraisal of governmental administration. Governmental propriety may also restrict the forms of language used. I suggest, however, that the principal danger to freedom of economic research comes from the canons of governmental propriety only when they operate in conjunction with the timidity and lack of imagination that has too often characterized government officials. It scarcely seems too much to assert that, with a fair amount of ingenuity in form of expression, the research worker can find a way to say almost anything without violating the canons of governmental propriety.

A fourth difficulty has to do with existing procedures for training and recruitment. Two principal sources of young economists are the graduate schools of our universities and clerical positions in government. The objections to developing an economist out of a clerk by apprenticeship need no elaboration. The legal profession is in process of discarding such a procedure. The main difficulty with graduate schools as a source of young economists, to my mind, may be briefly stated: Work in the various subject fields, banking, public utilities, and so forth, and work in such a major empirical technique as statistics are, in our graduate schools, kept in separate mental compartments. Thus a graduate student who gets his banking theory from a professor of banking may have to look to a professor of statistics for an analysis of banking statistics. So long as the division of academic labor designates one man a statistician for the whole of economics, if not more broadly, these mental compartments are likely to continue. The unwisdom of such a division of labor is illustrated by supposing an analo-

gous arrangement in physics. Imagine, in the field of physics, getting one's laboratory work exclusively from a professor of laboratory! Fortunately in government economic research on a problem we do not ordinarily assign the theory to one man and the statistical analysis to another.

A recent development which avoids such undesirable mental compartments and which promises well for improving our training for economic research is the interne system. There has been established in Washington under the sponsorship of the National Institute of Public Affairs a system of internships under which neophytes in the social sciences (and other fields) are placed in government agencies of their own choosing for a year to study and observe agency operations and to carry out practical assignments. Internes are on a full-time, non-salary basis in these agency positions. I am glad to say that the Rockefeller Foundation has recently renewed its administrative grant to the Institute for the continuation of this experiment. The program would, I believe, be better for purposes of training economic research workers, if two or three years of graduate work were a prerequisite to internship and if it were administered by the profession. In any event it is to be hoped that the interne system may develop and become a permanent arrangement and that in the not too distant future new recruits to the economic profession may be expected normally to go through a period of internship.

III

Probably the most important difficulty which government research faces is associated with the difficulty of defining government research. There are today no clearly established professional standards of competence for economic research workers. We cannot today say with any certainty who is an economist, nor can we with assurance draw the line between various other positions in the federal service and the position of economist. Some economists have the title "statistician"; many sociologists have the title "economist." But if this were all, the case would not be so serious. The distinction between an economist, on the one hand, and an administrator, a fiscal specialist, an engineer, a lawyer, or a field man, on the other, is not too sharply drawn. Recently an attempted sampling enumeration of economists in the federal service encountered difficulties. According to this count, there were more than five thousand. There are some three thousand members of the American Economic Association. We don't know what an economist is, or how many economists there are. The National Resources Planning Board and Civil Service Commission are now in process of compiling a National Roster of Scientific and Specialized Personnel which will include members of the American Economic Association. It will not tell us how many economists there are.

The absence of standards of professional competence in government

economic research is, I believe, associated with the fact that there is no regular procedure by which a memorandum or other document embodying the results of such research is passed upon by other economists, as, for example, a doctor's thesis is passed upon. Findings of government research workers, of course, may be and often are presented before the annual meetings of this Association or submitted to professional journals for publication. They are also frequently published elsewhere. They may appear in government documents. Or again they may be confidential and not be made public at all. Publication in a professional journal plays too small a rôle to exercise a dominating influence on one's standing as a government employee.

Both the difficulty in identifying economists in the federal service and the fact that there is no regular procedure in government for submitting economic research to the judgment of professional economists are partly responsible for the absence of standards of professional competence in governmental economic research. But there is a third and more basic factor which underlies them: there is no formal point under present arrangements at which a neophyte becomes an accredited member of the economic profession. If professional (or other cult) standards are to be maintained, it is, I think, generally recognized by anthropologists that there is need for a formal initiation procedure. Formerly the Ph.D., although only in process of establishment, served as an initiation procedure for the economic profession. At that time, our institutions of higher learning were both less numerous and more homogeneous than they are now. The Ph.D. consequently was a fairly effective type of initiation procedure. Today the number and diversity of academic institutions makes a locally administered initiation procedure somewhat unsatisfactory. Moreover, the fact that a large and growing proportion of the economic profession is engaged in research work in government and in business means that the Ph.D. is not adequately representative of the profession as a whole. Although satisfactory statistics are not available, I believe it is safe to assert that a substantial and increasing proportion of new recruits to the economic profession in government positions are without doctoral degrees. There is, then, urgent need for some generally accepted and nationally administered initiation procedure for the economic profession; and such a need is particularly urgent as it affects economic research in government.

I believe that the most important single thing that could be done for the improvement of economic research in government is establishment of a new initiation procedure, of a system for certifying that economic research workers have attained a given high degree of professional competence. Such a plan would not give to government officials who are laymen a professional judgment as to which of two competing economic findings is correct. There is too much disagreement among professional economists for this to be

feasible. Nor would the plan of certifying professional competence subject more than a small part of the economic research done in government to a professional judgment. To judge all economic research professionally would be a very large undertaking. Moreover, we do not have such an arrangement for other professions.

What is proposed is a judgment of economists at an early stage of their careers. The government official who must use the results of economic research is, I submit, in a position analogous to that of a patient who must rely on the diagnosis of a physician. To protect their patients we require that the professional competence of physicians be certified before they can practice. My proposal is that certification of professional competence be established for economists, but on a voluntary, not a mandatory, basis.

I recognize that there are serious difficulties in such an undertaking. Substantial administrative costs would be involved. And it will be said that it will be difficult to rate young men and women—and older ones to start with—without doing serious injustice. These are familiar arguments in other connections. Analogous statements have been used, for example, against the establishment of fair labor standards. There is no more reason to think the difficulties insurmountable in the present case. The problem of certifying professional economic competence is like—and certainly no more difficult inherently than—the problem of conducting effectively a general civil service examination for economists. It would presumably involve, first, a similar appraisal of the candidates' ability, education, and experience, but with a fuller use of economists in the process of appraisal; and, second, the acceptance of a suitable thesis or piece of research. Incidentally, a system of professional certification would greatly assist—and it would, I believe, improve—the rating of civil service examinations. The increasing importance of civil service examinations for economists in our economy is clear.

If the carrying out of my proposal involves difficulties, there are also dangers in rejecting it. Unrestrained quality competition among producers does not in general offer adequate protection to the public interest. It may lead to product deterioration or the substitution of salesmanship for quality. Gresham's law was a recognition of the significance of quality competition in the field of money and the need for maintaining a standard. As J. M. Clark pointed out, the difficulties of quality competition are particularly great when the competition is between qualities of professional service; for, when the producer is a practitioner of a profession, the consumer as a layman is *ipso facto* incapable of judging in advance the quality of what he gets. Consequently, there is need to establish standards to protect the public interest.

Economic research is a profession. If sound economics for the professions calls for establishing minimum standards, it seems appropriate that econo-

mists should apply the finding to their own calling—should certify professional competence to practice economic research. If something like Gresham's law is not to operate in the field of economic research, we should find ways and means to overcome the difficulties involved and introduce the equivalent of coinage for research workers who conform to suitable minimum standards. Without attempting to provide a detailed specification for such a system for initiating neophytes into the economic profession and certifying their professional competence, I should like to suggest that if such a system is successfully to promote improved economic research it should conform to the following conditions:

1. Rating should be clearly independent of the position of any party on any current political issue.
2. The task of rating should be fully in the hands of professional economists and other social scientists.
3. There should be emphasis on the use of the various techniques of research, including statistics.
4. There should not be emphasis on narrow specializations. The lines between fields within economics and probably between economics and its sister social sciences should not be unduly emphasized.

MORRIS A. COPELAND

Washington, D.C.

WATERWAYS VERSUS RAILWAYS

Three propositions are here advanced:

1. The total cost of light-draft waterway transportation to shippers, plus the costs imputable to the federal government, are less than the rates charged shippers for equivalent service by railroad. This involves consideration of inland and coastal navigation as a system, and does not imply that all or even most separate waterway projects are economically sound except as parts of a system, since a few extremely low-cost channels can offset many smaller high-cost channels.

2. Waterway competition is not a significant factor in the present difficulties of the railroads.

3. The plight of rail carriers would not be alleviated if federal aid to light-draft waterways were entirely abandoned.

It is not proposed to offer an elaborate rebuttal to the arguments that have been advanced by many writers against river and canal navigation.¹ To avoid misunderstanding, however, it may be well to note certain differences between this survey and some of the analyses presented by waterway opponents.

Except for port rivers, which are classified with their harbors in the traffic reports of the army engineers, this study embraces every improved waterway in the United States on which the net registered tonnage by barge or light-draft motorboat in 1938 exceeded the net registered tonnage of ocean or lake vessels.² All studies adverse to waterways have relied on a sampling method.

This investigation considers the influence of length of haul as a factor in railroad rates. With one exception, adverse critics have relied on average ton-mile revenue to railroads as the basis for their comparisons, in spite of the fact that rail hauls are typically from two to three times as long as water hauls.³

¹ Compare Bureau of Railway Economics, *Economic Survey of Inland Waterway Transportation in the United States* (1930); Harold G. Moulton and associates, *The American Transportation Problem* (1933); Harold G. Moulton, *Waterways versus Railways* (1913, rev. ed. 1926); Frank M. Patterson, "The Investment Value of Inland Waterways," *Public Utilities Fortnightly*, vol. 26 (1940), pp. 207-13; President's Committee ("Committee of Six") to Submit Recommendations upon the General Transportation Problem, *Report* (1938); U. S. Federal Coordinator of Transportation, Section of Research, *Public Aids to Transportation*, vol. iii (1939).

² The basic list chosen for analysis was "Rivers, Canals and Connecting Channels," *Annual Report of the Chief of Engineers, U. S. Army*, 1939, pt. II, p. 23. To this were added 35 improved waterways that are listed in the cost reports but that did not carry any commercial freight in 1938. Then light-draft channels were separated from ship channels on the basis of a separate analysis for each stream of the "Trips and Drafts of Vessels" section of the report cited.

³ The average haul in 1938 for Class I railroads was 207.3 miles (U. S. Interstate Commerce Commission, *Statistics of Railways in the United States*, 1938, p. S-41). In the same year, the average haul was 103.9 miles on light-draft waterways and 72.1 miles on all channels (Table II below).

If parts of a river are used by ocean or lake vessels, as in the case of the Hudson above New York City and the Mississippi below Baton Rouge, imputed government costs are here allocated on a ton-mile basis to the traffic of heavy-draft as well as light-draft carriers. Some studies of waterway costs have assigned all expenditures to the light-draft traffic.

Waterway Costs

Table I presents a summary of imputed annual federal costs on the waterways of the country, classified by geographic areas. The general procedure involved is to accept the cumulative costs for new work reported by the army engineers without adjustment, except for the Mississippi River below Cairo, which is officially a flood control project. It is not believed that refined methods of cost allocation for the Mississippi would give an answer essentially more valid than a rough computation, so that capital costs have been taken at one-third the total cost for new work, including both previous and existing projects; maintenance has been assigned to navigation for all dredging, revetment and contraction costs. This probably overstates the navigation costs which would be worked out in a more

TABLE I
FEDERAL COSTS FOR WATERWAY PROJECTS, 1938¹

Section	Number of Projects	Federal Costs New Work to June 30, 1938	Annual Capital Cost at 4.26%	5-Yr. Average Annual Maintenance	Total Annual Federal Costs
New England	13	\$ 4,913,179	\$ 209,301	\$ 136,804	\$ 346,106
Middle Atlantic	36	22,993,996	979,544	438,316	1,417,862
Chesapeake Tributaries	63	13,350,245	568,723	465,206	1,033,930
South Atlantic	44	26,968,738	1,148,865	773,606	1,922,472
Gulf, East of Mobile Bay	23	22,159,721	944,002	284,080	1,228,082
Gulf, West of Mobile Bay	46	37,326,817	1,590,125	1,013,935	2,604,063
Mississippi Valley	50	760,108,370	32,380,618	14,563,901	46,944,519
Pacific	27	9,836,695	419,043	268,696	687,741
Total, Light-Draft Channels	302	\$ 897,657,761	\$38,240,221	\$17,944,544	\$56,184,775
Ship Channels Reporting Ton-Miles ²	20	109,137,337	4,649,251	3,538,428	8,187,679
Total, All Channels Reporting Ton-Miles	322	\$1,006,795,098	\$42,889,472	\$21,482,972	\$64,372,454

¹ Computed from *Annual Report of the Chief of Engineers, U. S. Army, 1933-38*, pt. I.

² Ship channels not reporting ton-miles include most port rivers and four short connecting canals; namely, Keweenaw Waterway, Mich.; St. Marys Falls, Mich.; Detroit River, Mich., and the Lake Washington Ship Canal, Seattle, Wash.

careful allocation.⁴

It is assumed to be a good policy to amortize the federal investment over a fifty-year period. A basic interest rate of $3\frac{1}{2}$ per cent is used, which gives a rate for interest plus amortization of 4.26 per cent by the sinking fund method. Because maintenance (which includes operating costs) fluctuates widely from year to year, this factor is averaged over the preceding five years. The total of imputed annual capital cost plus average maintenance is taken as the total annual federal cost.

Table II analyzes what may be called line-haul waterway freight; that is, it eliminates passenger and ferry traffic, recreational boating and non-commercial fishing. It also makes appropriate corrections to avoid duplications in tonnage for through traffic, but to include this traffic for a few channels like Lake Champlain and the Cape Cod Canal that were improved primarily to accommodate through traffic. Cargoes in transit are not in-

TABLE II
ALLOCATION OF FEDERAL WATERWAY SUBSIDY, 1938¹

Section	Total Annual Federal Costs (Table I)	Tons	Ton-Miles	Average Haul (Miles)	Subsidy per Ton-Mile
New England	\$ 346,106	2,213,337	57,497,374	26.0	\$.0060
Middle Atlantic	1,417,862	12,322,800	1,029,163,307	83.5	.0014
Chesapeake Tributaries	1,033,930	4,800,236	391,933,305	81.6	.0026
South Atlantic	1,922,472	3,844,206	150,565,079	39.2	.0127
Gulf, East of Mobile Bay	1,228,082	1,088,610	34,838,068	32.0	.0353
Gulf, West of Mobile Bay	2,604,063	28,004,262	1,607,314,474	57.4	.0016
Mississippi Valley	46,944,519	80,856,187	10,981,186,780	135.8	.0043
Pacific	687,741	4,586,751	53,057,177	11.6	.0130
Total, Light-Draft Channels	\$56,184,775	137,716,389	14,305,555,564	103.9	.0039
Ship Channels Reporting Ton-Miles	8,187,679	94,535,067	2,445,128,659	25.9	.0033
Total, All Channels Reporting Ton-Miles	\$64,372,454	232,251,456	16,750,684,223	72.1	.0038

¹ Computed from *Annual Report of the Chief of Engineers, U. S. Army*, 1939, pt. II.

⁴ Cf. U. S. War Department, Chief of Engineers, *Flood Control in the Mississippi Valley*, 70th Cong., 1st sess., House Document no. 90 (1927), pp. 4-5; *ibid.*, *Control of Floods in the Alluvial Valley of the Lower Mississippi River*, 71st Cong., 3rd sess., House Document no. 798 (1931), pp. 4-11; H. L. Lutz, "Financing Flood Control Measures in the Mississippi Valley," *Jour. Land and Pub. Util. Econ.*, vol. 5 (1929), pp. 169-75; Horace W. Gray, "Allocation of Joint Costs in Multiple-Purpose Hydro-Electric Projects," *Am. Econ. Rev.* June, 1935, vol. xxv, pp. 224-35.

cluded.⁵ The significant ratios in this table are average haul and computed federal subsidy per ton-mile.

To complete the picture, a measure of shippers' costs is needed. The most careful study that has been made of this factor is that of the Section of Research, Federal Coördinator of Transportation, whose findings are summarized in Table III.

TABLE III
TYPICAL WATERWAY LINE-HAUL AND TERMINAL COSTS¹

Class of Service	Line-Haul Cost Per Ton-Mile	Terminal Cost Per Ton
Common carrier, lower Mississippi River	\$.00326	\$1.24
Common carrier, Ohio, Illinois, Warrior Rivers	.00376	1.24
Bargelot, Mississippi and Ohio Rivers	.00215	.70
Bargelot, channels less than 9 ft.	.0026	.70
Bargelot, coal and similar commodities, small tows	.0024	.25
Bargelot, coal and similar commodities, large tows	.0021	.20
Petroleum, tows of 1,000 tons, 9 ft. channels	.0035	.25
Petroleum, tows of less than 1,000 tons, less than 9 ft. channel	.0045	.30

¹ Compiled from Federal Coördinator of Transportation, *op. cit.*, vol. iii, pp. 55-72. For a somewhat different method of analysis, compare U. S. War Department, Chief of Engineers, *Lake Erie and Ohio River Canal*, 76th Cong., 1st sess., House Document no. 178 (1939), pp. 57-60, 284-98.

Well over half the tonnage and substantially half of the ton-miles on inland waterways are carried by bargelot operators; however, the data given for many individual rivers indicate that a not inconsiderable portion of waterway freight is carried in extremely light-load craft.⁶ As an approximation for further use in this study, a line-haul cost of 4 mills per ton-mile and a terminal cost of \$1.00 per ton will be used. Both of these figures are considered liberal in the light of the foregoing discussion.

Most railroad freight, of course, goes under commodity rates, and it is impossible to find a strictly comparable measure of shippers' costs by rail. The basic Eastern District sixth class scale, which has been raised approximately 10 per cent by I.C.C. Ex Parte 123, and which is subject to arbitraries of approximately 10 per cent for branch line hauls, has been taken as an appropriate measure of railroad rates. Some high-tonnage waterway freight would go at commodity rates lower than Eastern sixth class, but most of it would go at higher rates. A comparison of waterway

⁵ Mississippi River traffic that goes into the Yazoo River and back out again on a stopover at Vicksburg is an example of "cargoes in transit."

⁶ Cf. "Trips and Drafts of Vessels," *Annual Report of the Chief of Engineers, U. S. Army*, pt. II, for each waterway.

costs with rail rates at this scale is not overstating the case for the waterways.⁷ Such a comparison is made in Table IV.

TABLE IV
COMPARISON OF WATERWAY COSTS WITH RAILROAD RATES

Section	Average Haul (Miles)	Waterway Costs ¹				Rail-Road Rate ²
		Terminal	Line Haul	Federal	Total	
New England	26.0	\$.0385	\$.0040	\$.0060	\$.0485	\$.0667
Middle Atlantic	83.5	.0119	.0040	.0014	.0173	.0353
Chesapeake Tributaries	81.6	.0122	.0040	.0026	.0188	.0353
South Atlantic	39.2	.0255	.0040	.0127	.0422	.0550
Gulf, East of Mobile Bay	32.0	.0313	.0040	.0353	.0706	.0629
Gulf, West of Mobile Bay	57.4	.0174	.0040	.0016	.0230	.0433
Mississippi Valley	135.8	.0074	.0040	.0043	.0157	.0257
Pacific	11.6	.0862	.0040	.0130	.1032	.12
Averages ³	103.9	\$.0096	\$.0040	\$.0039	\$.0175 ⁴	\$.0291 ⁴

¹ Based on Table II; costs shown are per ton-mile, with line-haul rate at 4.0 mills per ton-mile and terminal costs at \$1.00 per ton for average haul shown.

² Rates shown are per ton-mile, computed from basic Eastern scale, sixth class freight. Cf. *Freight Traffic Red Book* (1940), pp. 1106, 1125.

³ Note that these averages do not include ship channels, which are not ordinarily competitive with railroads.

⁴ Comparisons between average rail and water costs are subject to qualifications introduced below, pp. 541-43.

Every waterway cost here given is less than the railroad rate shown, except for Gulf tributaries east of Mobile Bay. The average ratio of rail rates to water costs is tentatively set at 1.66:1.

Qualifications

The procedure followed is approximative, but it is believed that the sources of error tending to overstate the federal contributions and shippers' costs by waterway are larger than those tending to understate the costs of light-draft navigation: (1) The analysis ignores the demonstrable fact that for many projects navigation is in part a legal fiction blanketing other

⁷ The latest study of the comparative quality of river and rail freight is that of John D. Sumner, who gives the 1928 average value per ton for railroad freight as \$53.08 and for all rivers in the United States as \$42.10. ("An Analysis of Mississippi River Traffic, 1918-1930." *Jour. Land and Pub. Util. Econ.*, vol. 7 [1931], p. 360.) Army engineers regularly trace specific shipments at actual rail rates charged, in reporting on the feasibility of new projects. In only one important case have they relied on averages, and the rail costs used then were substantially higher than those used here, but the army figures were defective for present purposes in that they separated coal traffic out for a different type of analysis. See U. S. War Department, Chief of Engineers, *Tennessee River and Tributaries*, 71st Cong., 2nd sess., House Document no. 328 (1930), pp. 83, 491-95, Appendix Plates 173 ff.

public purposes; (2) it makes no deduction for the bad guesses of the past which would have been wiped out for a private enterprise by bankruptcy or reorganization; (3) it ignores investments in waterways prior to 1888, which logically should be deducted, but the reports then published do not provide data for such a correction;⁸ (4) some of the eliminated traffic benefits from the channel improvements, but no basis is available for an allocation of costs to it; (5) waterway carrier costs are probably exaggerated and railroad rates understated.

The possible errors in the direction of understating costs deserve more extensive consideration:

1. The computations given take no account of interest during construction. If the date at which amortization begins is considered to be the date on which the cost of new work is incurred, an allowance for this factor is not necessary.

2. The length indicated for average haul is slightly too small because even such characteristically short-haul traffic would sometimes use more than one waterway. The correction for duplication in tonnage made by the army engineers in the 1938 traffic report for all rivers, canals and connecting channels was 9.03 per cent,⁹ but this is high for the waterways here considered. The much greater tonnage involved in such obvious duplications as the several ship channels in Chesapeake Bay and Delaware Bay with the Chesapeake and Delaware Canal, or in the several ship channels in the Great Lakes area, would account for most of the duplication. Nevertheless, if the average haul for waterways is lengthened, that will decrease the cost per ton-mile assigned to terminal costs; and this advantage for the waterway will tend to offset the advantage of the relatively lower rail rate for the longer distance.¹⁰

3. Many critics add 50 per cent to waterway costs to correct for the greater circuitry of river routes. The circuitry factor is highly variable for different channels, or for different stretches of the same channel.¹¹ A

⁸ Cumulative expenditures to 1888 for both new work and maintenance of all river and harbor improvements were only 5 per cent of the similar total to 1938. Cf. U. S. War Department, Chief of Engineers, *Examinations, Surveys, and Appropriations for River and Harbor Improvement*, 76th Cong., 1st sess., House Document no. 106 (1939), pp. 868-71; *ibid.*, *Annual Report*, 1938, vol. 1, p. 22.

⁹ *Annual Report*, 1939, pt. II, p. 3.

¹⁰ On the basis of the average haul reported in Tables II and IV, the rail rate is 16 cents per hundredweight or \$.0291 per ton-mile. Moving into the 110-120 mile bracket, the rail rate is 17 cents per hundredweight or \$.0283 per ton-mile. The difference in favor of the railroad for the longer haul is \$.0008 per ton-mile. At 103.9 miles, the terminal cost of \$1.00 on the waterway averages \$.0096 per ton-mile. Increasing the length of haul to 113.6 miles will wipe out this advantage to the railroad, and at any mileage between 113.6 and 120 the extra distance will favor the waterway more than the railroad.

¹¹ For example, from Mobile, Ala., to Selma is 210 miles by water, which is 28 per cent longer than the 163 miles by rail; from Mobile to Montgomery is 291 miles by water, which is 63 per cent longer than the 178 miles by rail (U. S. Interstate Commerce Commission, *Reports*, vol. 229 [1938], p. 512).

valid average for all waterway traffic would require tracing the movements of a statistically significant number of different shipments, and data for such a study are not available. Accepting the 50 per cent estimate for want of a better, the average haul of 103.9 miles used in Table IV corresponds to a rail distance of 69.3 miles. The appropriate correction is to consider the cost of the same shipment by rail and water. The railroad rate for 70 miles is 13 cents a hundredweight, or \$2.60 a ton. The total waterway costs (103.9 miles times \$.0175 per ton-mile) are \$1.82, a saving of \$.78 per ton by waterway. The ratio of rail to water costs indicated by Table IV is reduced by this correction from 1.66:1 to 1.43:1.

4. Should a tax cost be imputed to federal improvements in waterways, corresponding to the taxes paid by railroads? The relevant questions of economic theory and policy are complex, and their pursuit in this essentially statistical analysis would be a digression.¹² For the sake of persuasion rather than logic, the validity of such a tax imputation may be accepted. America's Class I railroads paid \$342,385,704 taxes in 1938 on assets valued at \$31,922,691,000.¹³ The same rate of taxation on the \$897,657,761 investment in light-draft waterways would give an imputed tax of \$9,604,948, and this would add 17 per cent to the federal subsidy computed in Table II. The margin of advantage that has been demonstrated for the waterways would easily absorb this imputed tax.

5. Many analysts add capital costs on municipal terminals to the so-called "hidden costs" of waterways. This factor is logically irrelevant to the present analysis, because it would be blanketed into the terminal charge assumed. However, it may be noted that fifteen inland cities whose population is over 100,000 maintain revenue-producing terminals. In 1936, thirteen of these showed a net cash income greater than expenditures, and only two showed a net cash income less than expenditures.¹⁴ It may be that the same accounting principles used by private enterprises would turn these surpluses into losses, but the extent of the subsidies is of only forensic importance. St. Louis, for example, is said to lose \$33,000 a year on its terminals, on an inclusive cost basis. If so, it is subsidizing its 94 million-dollar river traffic at the rate of .04 of 1 per cent a year.¹⁵ The

¹² Numerous economists have argued that the public welfare is enhanced by government subsidies to decreasing cost industries. The argument would imply that railways should be subsidized, too. Cf. Alfred Marshall, *Principles of Economics* (8th ed., 1920), p. 469; A. C. Pigou, *Economics of Welfare* (4th ed., 1932), pp. 223-25, 313; Harold Hotelling, "The General Welfare in Relation to Problems of Taxation and of Railway and Utility Rates," *Econometrica*, vol. 6 (1938), pp. 242-69, and subsequent discussion, vol. 7 (1939), pp. 145-60; R. H. Montgomery, "Government Ownership and Operation of Railroads," *Annals*, vol. 201 (1939), pp. 137-45.

¹³ U. S. Interstate Commerce Commission, *Statistics of Railways in the United States*, 1938, pp. S-92, S-109.

¹⁴ U. S. Department of Commerce, Bureau of the Census, *Financial Statistics of Cities Having a Population of Over 100,000*, 1936, pp. 102-04, 141-43.

¹⁵ U. S. Federal Coordinator of Transportation, *op. cit.*, vol. 3, pp. 266-67; cf. *Annual Report of the Chief of Engineers*, 1939, vol. 2, p. 1415.

municipality could probably demonstrate that it offsets this by taxes on the value added to its river-front real estate.

Are the Railroads Hurt?

Is the present plight of the railroads in any degree traceable to waterway competition? The first help to an answer is the total ton-mile data for each type of transportation. In 1938, these barge and motorboat channels carried 14 billion ton-miles, but the railroads carried 292 billion. There are few years in which the change in railroad ton-miles since the preceding year is not more than the entire total ton-mileage of all waterways.¹⁶

It is asserted, however, that the important influence is not the diversion of traffic, but the competitive rate adjustments that the railroads are forced to make to hold the business. The weakness of this argument is that almost without exception the most important railroad paralleling each of the heavy-traffic waterways is more profitable than the average for all railroads. For example, in 1939 all roads as a system earned 2.26 per cent on their average invested capital, but the four railroads paralleling the Ohio River made 3.72 per cent (Southern), 2.76 per cent (Baltimore and Ohio), 3.90 per cent (Louisville and Nashville), and 5.85 per cent (Chesapeake and Ohio). Competing with the lower Mississippi, the Illinois Central made 3.00 per cent on its invested capital.¹⁷ If the roads competing with such important channels are more profitable than the interior roads, river navigation is not responsible for the financial difficulties of the railroads.

Could Railroads Get the Traffic?

If the government should discontinue aid to inland navigation, much of the freight now on the rivers would continue to use them. At the lowest ebb of waterway traffic, a substantial tonnage of short-haul freight used the rivers,¹⁸ and there would always be some specially adapted cargo for inland navigation. Highway carriers would inherit a share; coastwise steamers would get another; some petroleum traffic would be diverted to pipelines. Finally, since river transportation costs are cheaper to some shippers, some might curtail items being manufactured near marginal costs, if they had to change to higher cost transportation, and some of the waterway traffic would disappear from commerce. Presumably the railroads would get the remainder of the freight now carried by motorboats and barges. Probably no single widow or orphan would be benefited thereby, and not one insurance policy would be safer.

HAROLD KELSO

Miami University, Oxford, Ohio

¹⁶ U. S. Interstate Commerce Commission, *op. cit.*, 1938, p. S-41.

¹⁷ *Poor's 1940 Railroad Manual*, *passim*.

¹⁸ Frank Andrews, *Inland Boat Service*. U. S. Dept. Agric. bull. no. 74 (1914).

PROFESSOR PIGOU'S *EMPLOYMENT AND EQUILIBRIUM*¹

I

When Professor Hicks wished to discover what a "classical" economist believed to be the determinants of the level of employment, he was very much in the position of the man who, having lost his donkey, had no recourse but to ask himself what he would do if he were a jackass, and then do the same thing. But now the animal has come forward to speak for himself, and all economists will welcome Professor Pigou's new and stimulating book.

Just as Marshall² in his review of Jevons' *Theory of Political Economy* did Jevons, and himself, less than justice, so Pigou³ reacted to Keynes in a remarkably parallel fashion. Apart from Marshall's vexation at prior publication in less perfect form of doctrines which he was himself developing, and only here does the parallel begin, his annoyance was generated by Jevons' treatment of earlier writers. "[Jevons] seemed perversely to twist his own doctrines so as to make them appear more inconsistent with Mill's and Ricardo's than they really were . . . [Marshall's] youthful [!] loyalty to [Ricardo] boiled over."⁴

That Pigou was justified in his reaction to Keynes's treatment of the "classical" economists, particularly of their beloved mutual master, there can be no doubt. Whether Keynes was deliberately Machiavellian in this, only he can tell, and whether or not such tactics helped the spread of his doctrines, only his biographer will be able to tell us.

In any case, it is clear that the time has come for the calm reconsideration which the present work attempts. In his preface, Professor Pigou makes generous acknowledgment to the stimulus of Keynes's thought, and this is borne out by a comparison of this book with his own previous review and with the *Theory of Unemployment*. *Employment and Equilibrium* is for the most part not such difficult reading as the former book, and in my opinion more important.

With respect to methodology, it is almost ideal. Following introductory discussions of definitions, Part II treats the conditions of equilibrium determining employment, income, savings-investment, interest, etc. This section will probably be of major interest to most readers. It is less technical in character than Part III, which is concerned, along rigid lines of comparative statics, with the effect after equilibrium is re-attained of changes in various parameters such as banking policy, productivity, thriftiness, etc. The

¹ *Employment and Equilibrium—A Theoretical Discussion*. By A. C. PIGOU. (London: Macmillan. 1941. Pp. xi, 283. \$3.00.)

² A. C. Pigou, ed., *Memorials of Alfred Marshall*, pp. 93-100.

³ A. C. Pigou, "Mr. J. M. Keynes' General Theory of Employment, Interest, and Money," *Economica*, May, 1936, vol. iii, pp. 115-32.

⁴ *Memorials of Alfred Marshall*, pp. 99-100. Brackets mine.

problem of the dynamic approach to equilibrium is left to Part IV, but even here the treatment is sketchy rather than complete. In particular, the dependence upon dynamics of the stability conditions, which are of such great importance for the preceding parts, is not brought out. Some consequences of this will be touched upon later.

II

Because of the disproportionate attention paid in the literature to the equality of saving and investment, notice is taken here of Pigou's complete acceptance of the Keynesian definitions, despite the "plain" man's wish to regard these magnitudes as not necessarily equal. For the system as a whole, saving and investment, as observables, are defined as the same thing: the difference between income and consumption *when appropriate allowances are made for capital revaluations in the reckoning of income*; or as the value of the increment of capital equipment. For a single individual who can hoard and not consume, and thereby induce dishoarding and income decreases on others, they need not be the same. From the discussion on page 24, one might get the impression that he attributes the final equality to the fact that individuals cannot on balance increase their holdings of a given total amount of cash. If this is his meaning, it reflects a momentary lapse, since as he himself shows elsewhere (pp. 21-22), the equality of the above definitions holds even if new money is being created per unit time.

In the above senses, saving and investment may be called for clarity saving-investment. It is not true, however, even in the Keynesian system that for *virtual* displacements, which by their nature cannot be simultaneously observed, the saving (saving-investment) which households *would* perform out of a given income need equal the investment (saving-investment) which entrepreneurs *would* make at that same income. It is precisely because of their being unequal except at one point that income is uniquely determined. The idea of saving and investment being equilibrated, in the sense of schedule intersections, by income and by the other variables of the system, is implicit in the minds of most Keynesians (*e.g.*, Harrod), but is often badly expressed. The concepts *ex ante* and *ex post* attempt to convey the idea, but seem less suitable than the terminology *virtual* and *observable*.

Equality in the above sense may take time to be established. Until the intersection of schedules defining equilibrium is reached, saving-investment may be inappropriate for both households and enterprises. It is precisely this "inappropriateness" which acts as the moving force leading a stable system to equilibrium. The problem of time, so carefully worked out by Marshall for partial equilibrium markets, is only beginning to receive the attention it deserves in connection with aggregative equilibrium.

Professor Robertson has provided definitions which permit the inequality of saving and investment. Today it is fashionable for most writers when

they speak of inequality hastily to add that they are using the Robertsonian rather than the Keynesian terminology. But not one out of five who make this disclaimer seem actually to have in mind these extremely specialized definitions. More often they seem to have in mind their virtual inequality at full employment (which is thereby unattainable!), or their inequality for the individual, or the treatment by individuals of capital gains and losses as income. While Pigou's criticism (p. 26) of Robertson's system on the basis of the difficulty of slicing time into discrete units does not seem well taken and seems confused on the question of synchronization, he very rightly points out that the Robertsonian inequality is not what the plain man has in mind, nor is it anything but a reflection of the change in income level of the system. However, it would be like throwing the baby out with the bath water to let the sterility of the Robertsonian definitions deflect attention from the fruitful detailed time-sequence analysis of the path to equilibrium characteristic of Robertson, Kahn, J. M. Clark, Lundberg, Keynes at an earlier stage, *et al.*

But Professor Pigou wishes to concentrate on the intermediate short run "flow" equilibrium reached over a time period long enough to insure constant, appropriate values of saving, investment, income, employment, etc.⁵ This implies that unintended changes in investment have been rectified. However, the time period is not so long as to lead to any appreciable change in capital through the cumulation of positive net investment. Previously, Pigou criticized Keynes for using this same device, but he has now come to realize its value in separating short-run from long-run effects. Moreover, if investment is regarded as the instantaneous rate of increase of capital ($= d \text{ capital} / d \text{ time}$), there is no inconsistency in taking capital as constant at the same time that it is changing, Zeno and the ancient philosophers notwithstanding. As a special, singular case of "flow" equilibrium, we have long-run equilibrium in which net saving-investment per unit time equals zero, and the stock of capital is strictly constant.

III

In the second part when he states the conditions which determine flow equilibrium, Professor Pigou selects almost exactly the same equations as those suggested by Professor Hicks⁶ as being in the minds of the "classical" economists, although he may have been unaware of the close similarity. In two respects there are differences. The first is the minor one of allowing

⁵ The term "flow" is used in contrast to the momentary market equilibrium discussed by Marshall. Because "stocks" as distinct from "flows" are equilibrated in even longer runs as well as in shorter runs, it is possible that some such term as intermediate short-run equilibrium is preferable to flow equilibrium.

⁶ J. R. Hicks, "Mr. Keynes and the 'Classics'; A Suggested Interpretation," *Econometrica*, vol. v (1937), pp. 147-59.

for monopolistic competition by equating price times a correction for the elasticity of demand (= marginal revenue) to marginal cost. Secondly, as will be seen, more specific assumptions are made with respect to bank policy.

A classical system even simpler than that of Hicks and Pigou, implicit in many discussions of Say's Law, is simply as follows:⁷ The velocity of circulation of money is taken as constant, and the amount of money is fixed. Curtailing of consumption results then automatically in investment. The attempt to save leaves employment just where it was before, but not necessarily full. However, if money has "legs" as described, unemployment can be prevented by lowering wages and costs. This lowers prices and, with total value of sales constant, necessarily means greater output and employment. In the simplest case prices may be made proportional to costs (wage rates), as would be the case if there were not increasing or diminishing returns. Thus, the quantity equation is not used to determine the price level directly, for wages determine prices. With fixed wage rates the quantity equation determines output and employment. But if the wage always falls to guarantee full employment, both it and prices are simultaneously determined by the quantity equation.

The above model is instructive because it shows clearly how misleading it is to phrase the problem of guaranteeing full employment as one of lowering the *real wage of labor* in order to increase employment along a given real productivity curve. Keynes himself has accepted uncritically the classical law of diminishing marginal productivity, permitting his critics to interpret an increase in effective demand as simply a round-about way of lowering the real wage. Actually, in the above example, a decrease in money wages by lowering prices with fixed money income directly increases effective demand and employment. To the limited extent that one can speak of cause and effect in a closed interdependent system, it is more nearly correct to regard effective demand as increasing employment, and the increased employment as raising, lowering, or leaving marginal productivity the same, depending upon the laws of returns.

In Keynesian terminology full employment is guaranteed in this model, not because the propensity to consume is always unity, but because the marginal propensity to consume plus the marginal propensity to invest are always unity. As of a fixed money wage level, the system is in neutral equilibrium. If the money wage is flexible, the system is in stable full employment equilibrium. Any decreases in consumption are automatically made up by investment. An act of saving does inevitably become an act of investing.

Professor Pigou's model is not so simple. He follows Keynes in assuming a consumption schedule varying positively with income, but also depend-

⁷ Cf. Ricardo, *Principles of Political Economy and Taxation* (Everyman's Library), chap. xxi, especially pp. 192-93.

ing on the rate of interest. The nature of this dependence cannot be definitely determined; some forces make for a positive supply curve of saving, others for a negative, while institutional factors argue in favor of independence. In a long chapter (Part II, chapter VI) an attempt is made to squeeze out an answer to the problem by the utility calculus, but the assumptions made are highly restrictive. He holds that within some range saving must increase with the interest rate, "for otherwise, in a state of full employment, there will be no machinery through which an enhanced demand for labour for investment could evoke a correspondingly enlarged supply" (p. 57). To many this will carry no weight, for aside from the mechanism of forced saving via price increases, there is no evidence that an increased demand does evoke an increased supply. If the supply curve is backward rising, but stable in the Walras, Hicks, Marshall-of-international-trade sense, an increase in demand will only raise the interest rate.

This is a matter of considerable moment, because Pigou's whole rosy theory of long-run equilibrium in contradistinction to Keynes's gloomy "Day of Judgment" rests upon Pigou's rather diffident assertion that reductions in the rate of interest can wipe out net saving completely. I fear that few economists will follow him in believing that under modern conditions there exists a positive rate of interest at which saving out of full employment income would be zero. This means that in the absence of dynamic, new investment outlets, the rate of interest will approach a lower limit—be it zero or two per cent—and investment will be zero after the capital stock has adjusted itself. But at this rate of interest people are still attempting to save with the inevitable consequence that income remains at a sufficiently low level to make actual saving abortive. (It is a common fallacy to believe in this connection that any hoarding either in the sense of money accumulation or lowered velocity will take place in the new equilibrium.) To avert the Day of Judgment, most of us will continue to hope for the appearance of dynamic new investment outlets and broad institutional changes in saving habits brought about by changes in the age distribution, changes in public and private finance, etc., rather than rely upon the slender reed of the interest rate's effects on motivation.

To return to flow equilibrium, Professor Pigou assumes a marginal efficiency schedule inversely relating investment to the rate of interest. He does not go on to point out that, as of a given stock of equipment, investment will certainly depend upon the level of consumption and/or income. Thus, he is unable to duplicate the Malthus-Lange argument which shows that an increased *desire* to save, even if it lowers the rate of interest, may result in less actual saving-investment, although he recognizes that it will involve less real income in the absence of perfect wage flexibility.

To the two Keynesian pillars of the propensity to consume and the marginal efficiency of capital must be added a third. Rather than deal directly

with a liquidity preference schedule, the author prefers to take the level of money income (MV) as a function of the rate of interest, the form of which varies with the particular Central Bank policy followed. Since the velocity of circulation is itself a function of the rate of interest and the level of income, it is by no means clear that the Central Bank can in fact make MV what it likes. It can hope to influence M , but under moderately realistic conditions this may be completely compensated by changes in V . By a slight change of emphasis, Pigou is able to short-circuit the determination of income by saving and investment decisions to a quasi-quantity theory determination, in which the combined action of the Central Bank in determining the amount of money income (MV) and the working class in determining the money wage and prices, directly determine the level of real output. So to speak, only after total output is determined can the propensity to consume and the marginal efficiency schedule together parcel out income between saving and consumption in the appropriate proportions. More precisely, of course, in so doing the interest rate is affected, and this affects Central Bank action reciprocally.

Thus, in the system of Pigou, as in the system of Keynes, a cut in the money wage increases employment only by making money so redundant as to lower interest rates and thereby increase investment and consumption. It cannot be more effective than cheap money. But as Professor Hansen has pointed out, a decade of gold inflows from abroad has given us a laboratory experiment in cheap money beyond the wildest dreams of earlier writers, and the result has been extremely disappointing. Perhaps a 75 per cent cut in wages and prices would not have released so much money from the transaction sphere as to affect interest rates comparably.⁸

Analytically the error in Pigou's formulation consists of the failure to recognize the compensating adjustment of V when one of two conditions is filled: (a) the liquidity preference schedule is almost perfectly elastic so that absorption of money takes place with little change in the interest rate; (b) the schedule of the marginal efficiency of investment is extremely inelastic. It is the primary virtue of recent business cycle theory to have recognized the strategic significance of both of these hypotheses for the period of the thirties, rather than to have formulated aesthetically elegant models of aggregative equilibrium.

To defend the "classical" notion that the money wage was sufficiently flexible in the pre-World-War era, Pigou cites the lack of a secular trend in the degree of unemployment. Our knowledge of unemployment for this period is notoriously incomplete, but even if the facts were better established, from the nature of Pigou's system one could not tell whether

⁸ Because of a preoccupation with flow equilibrium, the author does not discuss the possible effects on employment of continued changes, upward or downward, in money wages. But this is not the place to discuss the economics of hyper-deflation and inflation.

it was not bank policy rather than wage policy which kept employment full; or extensive growth coupled with foreign investment; or fortunate dynamic changes in investment outlets. In the interpretation of history we must insist upon as rigid standards of isolation and control as in the statistical analysis of the recent past.

In this connection it is necessary to discuss the chapter on stability conditions (Part II, chapter III). For as Professor Pigou's sound methodological instincts have suggested, almost all meaningful hypotheses emerge from them. It is unfortunate, therefore, that he simply generalizes mechanically the Marshallian market conditions. These are not necessarily correct even for a simple market, as countless writers have shown. He further identifies them with the maximum conditions for a single firm (*i.e.*, that marginal cost must cut marginal revenue from below). This leads to the identification of a minimum as a position of unstable equilibrium when it is in fact no equilibrium at all. Actually the stability of a market is only indirectly and distantly related to the stability of a single unit facing prices or given demand and supply curves. It is interesting to note that his stability condition that a change in interest rate must not change saving more than investment, while correct, is so only because he slips in applying the Marshallian conditions and instead derives the Walrasian conditions relevant to a backward-rising (as distinct from forward-falling) supply curve of saving.

Most important is the failure to distinguish the changing elasticity of demand *as it appears to a single seller in the neighborhood of a given level of output* from the change in his elasticity if effective demand increases all employment by (say) fifty per cent and shifts the demand curve for one small producer. While it probably can be shown on the basis of dynamical considerations that in the systems of Keynes and Pigou a change in money wage *cannot* change employment in the same direction, Professor Pigou shamelessly deduced this from the properties of the *ceteris paribus* demand curve confronting a single firm. Probably the analytic device borrowed from Mr. Harrod of assuming extreme symmetry between goods and then concentrating upon one as typical of all blinded him to the fact that changes for all mean shifts, albeit equal ones, in the demand of each. Actually he should have relied upon the changes in interest rate, real investment, real income, and finally employment; and then it would be clear, as mentioned earlier, that the increase in employment might come about even though prices fall more than wages so that real wages rise.

IV

Part III and the tables in the mathematical appendix present a somewhat formidable and technical appearance. Nevertheless, they contain the empirically meaningful content toward which all the previous material was

aimed. Pigou, as much as any economist, has grasped the fundamental principle that the statement of equilibrium conditions is empty without specification of their structural properties, on the basis of which refutable hypotheses concerning empirical magnitudes can be formulated.

Moreover, the complexity results in part from the rich variety of assumptions which are examined. Permutations and combinations of the four alternative banking policies—(a) that in which money income increases with the interest rate, (b) that aimed at keeping money income constant, (c) that aimed at constant prices of consumers' goods, (d) that aimed at a constant interest rate—are combined with varying assumptions of monopoly and competition, and distribution of income. In particular, the discussion (chapters IX and X) on various multipliers represents a long overdue contribution.

Part IV on the dynamic transitions between positions of flow equilibrium seems almost an afterthought. For simplicity only transitions resulting from shifts in investment demand are considered. Most readers will grant these to be the most important factors in the trade cycle, but the cited positive correlations between employment and short term interest rates will not add much to this conviction. The conjecture (pp. 230-231) that any factor which displaces equilibrium states in a given definite direction will also displace a moving system in the same direction should be rigorously demonstrable on the basis of truly dynamic mathematical analysis.

The last chapter on cumulative movements rather refreshingly controverts the notion that the economic system is so unstable that a change in behavior in any small sector may spread cumulatively. While a glance through any review of business cycle theories, such as Haberler's, confirms the need for this emphasis, Pigou's method of proof is not conclusive. As he himself points out, the question is begged as to whether a given change is followed by a "once-for-all" adjustment, or a never-ending one. On the other hand, it is not inevitable, as he believes, that the psychological factor of expectations, generated by price changes and generating changes in the same direction, should lead to an unstable system. The key to all these difficulties must be found in the failure to supplement the detailed algebraic analysis of previous sections by a detailed differential or difference equation analysis (or its literary equivalent) of the approach to equilibrium.

While most of my discussion has been concerned with questioning details of Professor Pigou's book, this is so only because of the richness and fertility of his analysis and conclusions. Judged in shotgun fashion only by hits, or riflelike by hits compared to misses, this is one of the most important books of recent years. Moreover, it reveals with remarkable force the extent to which the Keynesians all along have been speaking classical prose, at the same time that "classicists" have thought in Keynesian poetry.

PAUL A. SAMUELSON

Massachusetts Institute of Technology

*

COMMUNICATIONS

Tariffs and Prices: A Diagrammatic Representation

The usual diagrams for the determination of price have been extended to cover the determination of price interdependence in different countries connected by international trade. Figure 1 shows the price determination of a commodity in each of two countries, which I shall label M and X, before any trade in that

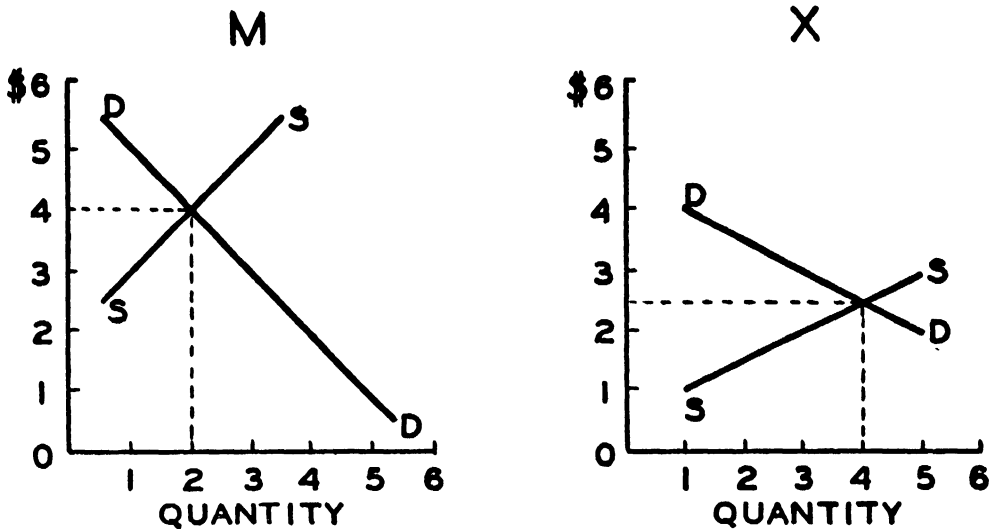


FIG. 1. No Trade.

commodity has begun. In this and all the following cases I have assumed that (1) the supply is in the phase of increasing costs and (2) that the exchange rate is constant. The latter assumption enables me to express the price in each country in terms of the same monetary unit. In country M the price is set at the point where two units are taken at a price per unit of \$4.00. In country X the price is set at the point where 4 units are taken at a price of \$2.50 each. As buyers in M are eager for more of the commodity if they can get it at the low price prevailing in X, they enter the markets of X and compete for the commodity, provided they are free to do so.

If there are no trade restrictions of any sort and if we assume that (1) there are no costs of transport, (2) the demand and supply schedules in each country will remain unchanged in the period under consideration (which perhaps implies that there are no changes in incomes caused by international money flows), and (3) the foreign exchange rate remains unchanged, we may connect these two graphs in the diagram by a horizontal line. In Figure 2 I have shown the position of this horizontal line after sliding it up and down the graph in order to determine the price (represented by the line) at which the excess of the quantity supplied over the quantity demanded in X is equal to the excess of the quantity demanded over the quantity supplied in M. At the point where this condition is met we find that the price is \$3.00 and that at this price both the excess supply in X and the excess demand in M are exactly 2 units. Therefore, these two units will be exported from X to M and the market will be in equilibrium. Thus in the case of free trade and perfect competition the commodity must sell at the same price, for the two countries really constitute one market.

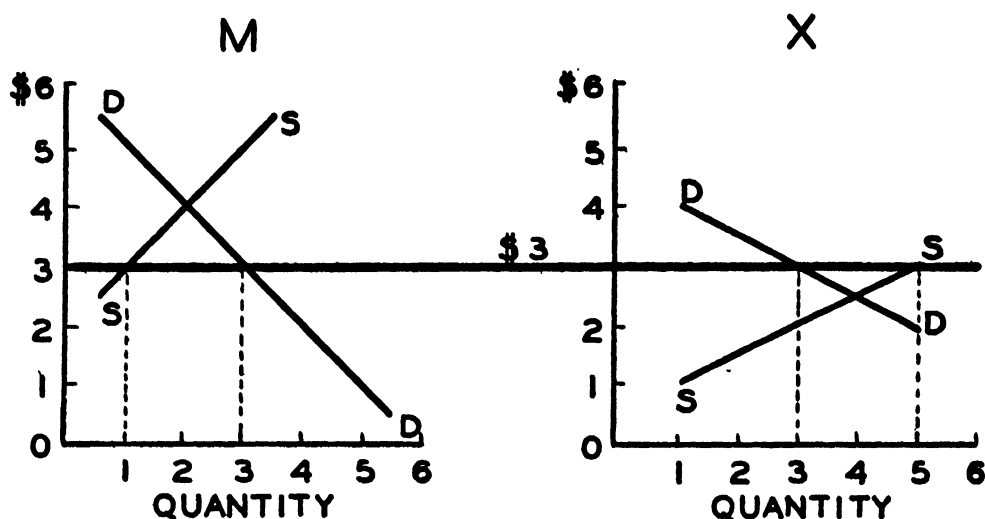


FIG. 2. Free Trade.

Now if a specific duty of \$1.00 per unit should be levied on the imports of the commodity into country M, the price in M must, if there is trade between the two countries, be \$1.00 higher than in country X. The same diagrams may be used if a slight modification is made in the horizontal line connecting the two countries: a jog is put in the line so that it represents a price \$1.00 higher in M than in X. We can slide the jogged line up and down until the equilibrium point is discovered. This equilibrium will be, as before, at the point where the excess quantity demanded at the price indicated by the connecting line in M is equal to the excess quantity supplied at the price indicated by the connecting line in X. By the use of this jogged line, we have automatically taken care of the difference in price in the two countries caused by the tariff duty.¹ In Figure 3 it is shown that under the assumed conditions equilibrium will be at a price of \$3.67 in M, with .67 units more of the commodity demanded than supplied, and a price of \$2.67 in X, bringing forth .67 units more than is demanded in the country at that price. Therefore, these .67 units will be purchased in X at a price of \$2.67 per unit, transported to M, subjected to a tariff duty of \$1.00, making a total cost to the buyer in M of \$3.67—the same that he has to pay for an identical domestically produced unit.

Analogous methods of handling these cases have been developed by Professor Enrico Barone in his book on economic principles² and used by Professor Haberler in his *Theory of International Trade*³ and by Professor Ellsworth in *International Economics*.⁴ Their diagrams use a single price axis and measure

¹ The same method would be applicable to the portraying of price differences due to transport costs set on per unit basis.

² Enrico Barone, *Principi di economia politica*, translated into German by Hans Stachle, *Grundzüge der Theoretischen Nationalökonomie* (Ferd. Dümmlers Verlag, Berlin und Bonn, 1935), pp. 102 ff.

³ Gottfried von Haberler, *The Theory of International Trade*, as translated from the German by Alfred Stonier and Frederic Benham (William Hodge and Co., Ltd., London, 1936), pp. 171-72.

⁴ P. T. Ellsworth, *International Economics* (Macmillan Co., New York, 1938), pp. 292-93.

the quantity in the importing country to the left from the price line. This, I believe, is confusing to the student who is accustomed to thinking of the demand and supply diagrams with the quantities measured to the right from the vertical axis. The mirror-reflection effect, making the demand curve slope upward to the right and the supply curve slope downward from the left, is an unnecessary complication for the student. For portraying the case of a specific tariff—for which the jogged line was used in the above representation—Professors Barone, Haberler and Ellsworth continue to use a straight line connecting the two countries, but accomplish the same result that I have by dropping the base line in the importing country by the amount of the tariff. This, of course, involved a redrawing of the supply and demand schedules at the correspondingly lower level. I believe that my diagrams, which have been suggested by Professor Machlup, set forth the principles in a much less complicated manner.

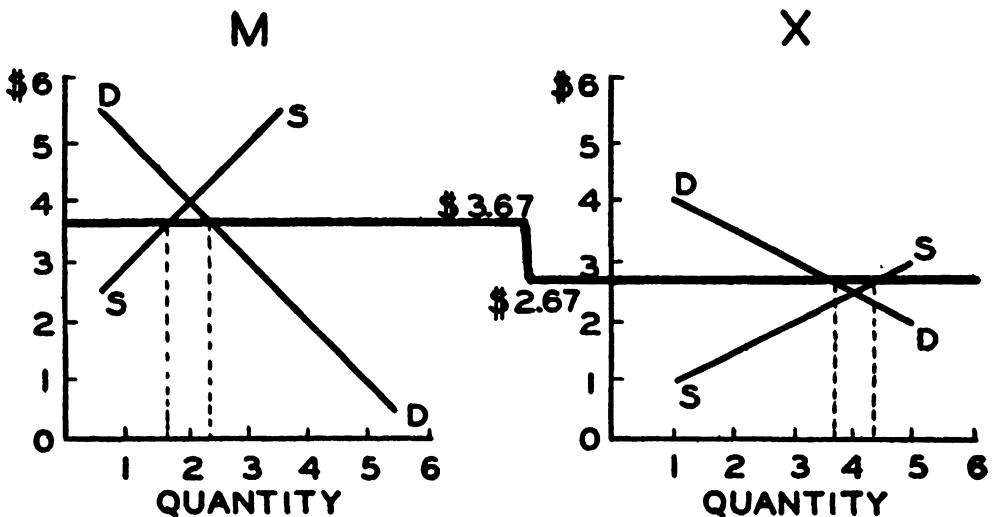
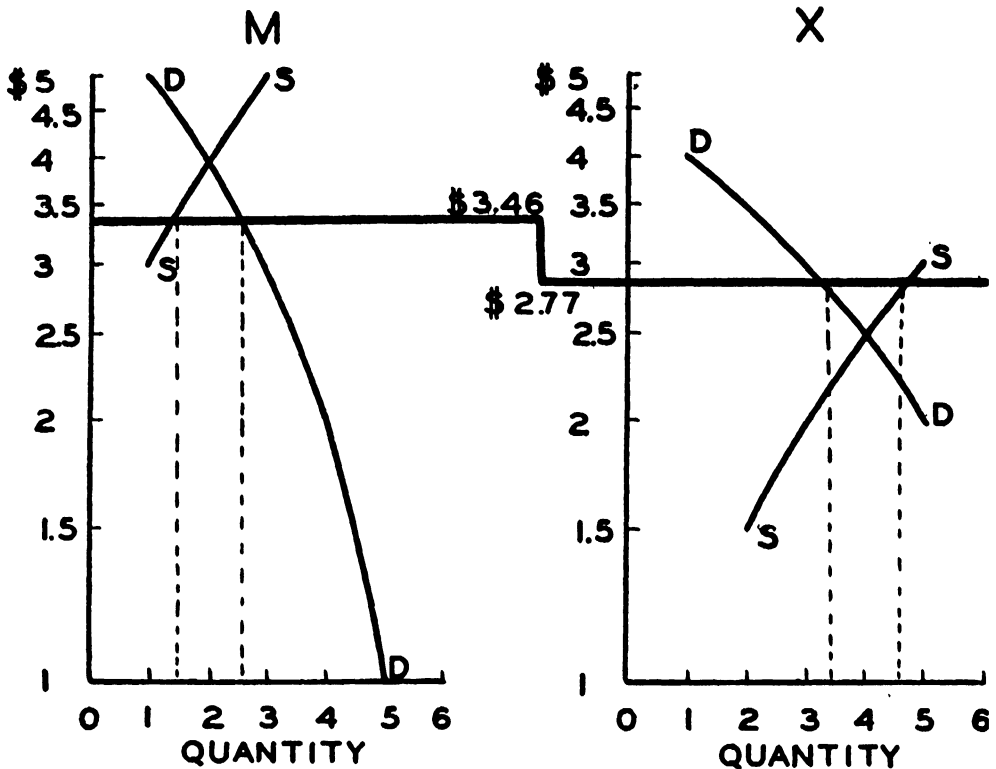


FIG. 3. \$1.00 Specific Duty.

These diagrams have been presented here primarily as a basis for a discussion of the diagrammatic method of determining price if an *ad valorem* duty is assessed. Such a duty, fixed as a percentage of the value of the imported commodity, becomes higher and higher in absolute magnitude as the commodity is sold at higher and higher prices. To determine the equilibrium position under such a tariff in the graphs in Figure 3 would require that the jog in the line connecting the two countries vary with the price, growing as the line is moved upward and shrinking as the line is moved downward. The value of the graphic method of price determination as presented in Figures 2 and 3 is that, given the demand and supply curves of each country, the analyst can slide this line, straight or jogged, up and down until a point is determined at which the excess demand in M is equal to the excess supply in X. However, this is not a very convenient method if the width of the jog has to be changed continuously as the horizontal line is moved up and down in search of a place where the excess quantity supplied in X and the excess quantity demanded in M are equal.

To avoid this difficulty, I have placed these demand and supply curves upon semi-logarithmic graphs in Figure 4. In this type of graph equal vertical dis-

FIG. 4. 25 Per Cent *Ad Valorem* Duty.

tances represent equal percentages instead of equal amounts.⁵ Now, when a jogged line is drawn connecting the demand and supply curves of the two countries, the jog of fixed width will represent a duty which is a fixed percentage of the value—an *ad valorem* duty. Anywhere this jogged line is set connecting the two graphs, the price in country M is a fixed percentage higher than the price in country X. With these same demand and supply curves from the preceding diagrams placed upon the semi-logarithmic scales in Figure 4 and with an *ad valorem* duty of, say, 25 per cent, let us determine the price of the commodity in each country, and the amounts produced, consumed, and internationally traded by the people of each. We slide the horizontal line with the jog equal to 25 per cent of the price in X up and down the graph, until we determine the point at which the excess supply in country X at the price represented by this connecting line is equal to the excess demand in country M at the price as represented by the level of the connecting line. At the equilibrium point the price in X is \$2.77, and at this price 1.08 units will be supplied in excess of the number of units domestically demanded. In M at the price of \$3.46 the excess units demanded over these supplied is again 1.08, and these units will be purchased from X where they are available. The cost of these imports in M will be \$2.77 (the cost in X) plus the duty of 69 cents (25 per cent of \$2.77), making a total of \$3.46.

⁵ It must be remembered that in a semi-logarithmic graph the areas under these demand and supply curves and the height of these curves cannot be interpreted in the same way as those areas and heights in the regular graphs.

Thus by making the simple transformation from an arithmetic to a logarithmic scale on the price axis, the problem of graphic determination of the price of internationally traded commodities subject to *ad valorem* tariffs is solved by the simple visual method that is employed under the assumptions of free trade or specific duties. However, under neither of these methods presented here is it possible to determine price graphically under the tariff system which the United States has at present for most commodities: one of both specific and *ad valorem* duties on the same commodity. While an algebraic solution gives no difficulties, I can see at the moment no diagrammatic method applicable to the combined specific and *ad valorem* tariff.

JOHN H. MYERS

University of Buffalo

A Study of Student Values and Inconsistent Reasoning

Students have unconscious biases and sets of values which act as barriers to the acquisition and habitual use of logical processes of thought and scientific procedures as methods of analysis. The particular biases are partial surface manifestations of a complex and deep-seated set of values which recognize no subject-matter boundaries. There are serious objections to uprooting such a scheme of values, or any major portion thereof, in such manner as to leave the student dangling without value guides. The task of the instructor, it appears, is to aid and encourage the student to become aware of his particular biases relating to the subject of study, to expose the inconsistencies, and to point the way in correcting them.

The accompanying diagnostic test for students of economics was designed for the purpose of ascertaining the nature of student biases or value convictions in certain policy areas and for discovering inconsistent thinking.¹ Each of the nineteen statements in this test relate to some matter of social economic policy upon which the student is asked to take a supporting or opposing position. For each of the propositions appearing in the test there is, in another part of the test, an assertion which is contradictory to the first. The pairs of contradicting statements which appear in the test are: 1-12, 2-18, 3-17, 4-16, 5-15, 6-17, 7-14, 8-13, 9-11, and 10-19.

DIAGNOSTIC TEST FOR STUDENTS OF ECONOMICS

1. Farmers as a group get less than their fair share of the national income even though it may be equal to agriculture's contribution to that income.
2. The government should guarantee to farmers prices for their products equal to parity, *i.e.*, equal to the prices received in the years 1910 to 1914.
3. The government should encourage and support a program designed to settle unemployed city workers on farms over the country.
4. Large government debts and deficits are undesirable and should be avoided except for the financing of war or rearmament.
5. Labor is generally underpaid since workers should receive a reward sufficient to enable them to maintain a living standard higher than that which now prevails.
6. The farm population is the backbone of the nation and should not be permitted to decline in numbers.
7. Tariff duties should be used to check the importation of any commodity from abroad if that commodity can be produced at home.

¹ This test has proved to have some ambiguities and limitations which will need to be corrected in future formulations.

8. Chain stores should be taxed relatively more than other concerns in order to check their expansion.

9. The wealth and the income of the nation should be much more nearly equally distributed among the population than at present and the government might advisedly take steps to bring this about.

10. To be truly equitable taxes should be assessed strictly on the basis of the relative benefits each taxpayer receives from the governmental disposition of these funds.

11. Any individual in our society should be permitted to receive, and in large part retain, as large an income as he can without the employment of fraud or violence.

12. A producing group, *i.e.*, farmers, should receive as its share of the national income that amount which it has contributed to the national income.

13. All legitimate business firms should be treated equally by governmental units, *i.e.*, be subject to common regulations and taxes in order that the more efficient firms may survive and provide goods and services to consumers at the least possible cost.

14. Each individual and each economic area should do that job or specialize in that economic function for which it is most efficient.

15. Labor should receive a reward equal to its contribution to the value of the goods it aids in producing.

16. It is a proper and desirable function of government to borrow money and to spend whatever sums are necessary to support the unemployed and to stimulate recovery in such ways as deficit financing and pump priming.

17. There are too many farmers and their numbers should be reduced by migration to urban areas as more jobs become available there.

18. The government should not tamper with the prices of commodities for such action is certain to disturb the normal functioning of the law of supply and demand.

19. Were each individual to contribute to the public revenue on the basis of his relative ability to pay we would have the most equitable system of taxation.

Assertion number 1 is contradictory to assertion number 12. A student who indicated his support for assertion number 1 and opposition to assertion number 12, or *vice versa*, would be consistent in his position. In cases of supporting both assertions, a striking contradiction is involved; but if both statements are marked false there may or may not be a contradiction or inconsistency and such responses must be labeled as doubtful.

Pairs of Statements	Per cent of Total Number of Students		
	Consistent ¹	Contradictory ²	Doubtful ³
1-12	49.2	38.4	12.4
2-18	51.3	4.9	43.8
3-17	28.7	0.5	70.8
4-16	57.8	14.0	28.2
5-15	54.0	27.0	19.0
6-17	80.4	0.5	19.1
7-14	38.4	60.5	1.1
8-13	59.0	33.0	8.0
9-11	57.8	34.6	7.6
10-19	50.8	36.2	13.0
Average	52.74	24.96	22.30

¹ Replies are consistent if one of the statements is checked true and the statement associated with it is checked false.

² Replies contradictory if both statements are checked true.

³ Replies of doubtful consistency if both statements are checked false.

The test was taken by 185 sophomore students enrolled in a course in the principles of economics at the opening of the quarter. The students were all enrolled in the division of agriculture and presumably had a relatively homogeneous social and economic background.

The nature and extent of confused thinking relative to these issues is shown in the table on page 558. The average consistency of reasoning is revealed as 52 per cent for sophomores. The "consistent" column can be broken down into those supporting and opposing each measure.

The results of this test were employed in the classes which had given the replies. The experience of being faced with the specific and striking contradictions stimulated widespread interest in analyzing the nature of the contradictions and the reason for their appearance. Further than this, it served as a point of departure in making explicit many of the values and biases which had strongly influenced the replies without the students being aware of them. This means of attacking the problems strongly suggests a succeeding step to be taken, namely, the evaluation of progress made with the same group of students at a later period.

CHARLES M. ELKINTON

Iowa State College

Incomparabilities in "Census of Manufactures" Data

When series which are not comparable are found in adjoining columns of a table under a common heading one has the feeling that the table was compiled with inadequate knowledge of the data or that the table was put together carelessly. In any case suspicion is thrown upon the data and upon the summary or conclusions drawn therefrom. If such incomparabilities are presented in the course of an argument for a point of view, let us say, of economic thought, then it may be disregarded by most persons who are not interested in that school or area of economic theory. However, if such incomparabilities are presented by one of the largest producers of secondary data, then it is extremely regrettable; for it cannot be overlooked or ignored by anyone who is interested in almost any aspect of the field of economics. Serious erroneous conclusions are thereby invited.

The *Census of Manufactures* has been doing just that in its releases covering the preliminary returns for 1939. At the date of writing, one-third or more of the releases have already been issued in this fashion. The releases cover employment of wage earners and wages for 1939 and 1937. The 1939 figures exclude wage earners (and their wages) who are engaged in construction or distribution activities. The figures for 1937 include such wage earners (and their wages) as were located at the plant. Comparability is implied by a common stub notation, and appears to be confirmed by a column presenting percentage changes between the incomparable figures during the two-year interval.

From the 1935 *Census of Business; Distribution of Manufacturers' Sales* (p. 23), we learn that manufacturing establishments making less than 50 per cent of the sales reported 190,000 distribution employees to the *Census of Manufactures*. The total number of such employees may have been 300,000 or 400,000. But we get no clue to the number of construction employees, except as indicated by the *Census of Occupations* (vol. v, chapter 7). Excluding the building tradesmen engaged in the lumber, timber, and furniture industries; auto manufacturing, shipbuilding, and carbuilding industries; etc., etc., there were in 1930 some 150,000 skilled building tradesmen attached to manufacturing establishments. The number would be larger if laborers and others engaged in construction were

added to the building tradesmen. These rough figures indicate that the total number of wage earners engaged in construction and distribution activities of manufacturing establishments which were reported in 1937, but not in 1939, was roughly 500,000. Some of the individual industries for which the Census Bureau gave percentage changes are probably only slightly affected by the 1939 understatement; but employment in other industries, such as bread baking, are probably understated by more than 15 per cent.

It must be recognized that the *Census of Manufactures* did not ignore the difference in the preliminary reports but qualified the figures only in the texts of the releases. The presentation of the data in tables, however, has ignored the differences. Economists are often careless in using published data. And it is so easy for an economist to read a table from one of the releases of the *Census of Manufactures* and note a significant "decrease" of employment and wages in 1939 from the 1937 figure, but without a corresponding decline in value of product or value added. The obvious conclusion is that there was a sharp increase in productivity and decline in unit labor costs.

Precisely that has happened. In the CIO *Economic Outlook* for September, 1940 (page 3), quoting the United Rubber Workers Union, it was claimed, in consonance with the figures in *Census of Manufactures* release for the industry, that "in the tire and tube factories the value added by manufacturing per worker has increased 30 per cent between 1937 and 1939 . . . while wages per worker have increased only 8 per cent in the same period." Consequently the "number of tires per worker increased 25 per cent. Labor costs per unit of output decreased 131½ per cent." This was reported in one of the New York daily newspapers (*PM*, October 8, 1940), which dramatized these sharp "changes" by a chart and the following significant comment: "The figures add up to a reduction in the number of workers—and a probable drive for an increase in wages." It is not difficult to conceive that incomparable data, presented as though they bear direct comparison, can lead to serious consequences.

The Census Bureau would have a good claim in placing the blame for the fictitious changes upon the economists of the United Rubber Workers Union because the change in coverage was noted in the text of the census release. On the other hand, the union would also have good grounds for placing the blame upon the Census Bureau since tables should be largely self-contained and should not have implied comparability by using a common stub, by omitting footnotes from the table on the change of coverage, and most of all by showing a percentage change of wage earners and wages in the two-year period.

DANIEL CARSON

Long Island City

Professor Lester's Questions on Gold: Two Replies

Mr. Richard A. Lester's comment¹ on the four papers on the gold problem which were presented at the December meetings² contains so many unanswered questions that some attempt to answer them may be of interest. As his comments on the stimulating secondary effects of exports relate entirely to the papers of the other three speakers, I shall not comment on that phase of the discussion.

Mr. Lester quotes me as saying that "the gold purchases are costless to the

¹ *Am. Econ. Rev.*, June, 1941, vol. xxxi, pp. 340-41.

² *Am. Econ. Rev.*, Suppl., Feb., 1941, vol. xxxi, pp. 1-51.

American public, except consumers of gold, and will continue to be so until we approach 'normally full employment' when the large gold output [in this country?] 'will necessitate a correspondingly curtailed output of useful goods' [in this country?]." What I actually said was that such transactions are costless "if it can be assumed that the labor which has gone into the production of gold would otherwise have been unemployed and the new capital that has gone into the industry would not have been invested productively elsewhere." This statement should have been limited to the purchase of the domestic output of gold. With regard to foreign goods paid for with exports, Professor Neisser's qualification concerning the export of natural resources must be included in the statement. My statement that in a period of full employment an inflated output of gold, stimulated by a monetary policy, will necessitate a curtailed output of useful goods, seems to me to be true both with reference to this country and with reference to the world at large.

Mr. Lester asks five questions which, he says, indicate qualifications to our conclusions on the costless character of the gold purchases. The nature of these qualifications, of course, depends on the answers to the questions. I should answer them as follows:

1. "If the United States Treasury had continued the 1936-38 gold sterilization program, would the gold purchases have been costless to the American public?" So long as the imported gold does not in fact become a basis for an expansion of credit the question whether it is sterilized by the Treasury has no bearing on the real cost of the program. Sterilization was merely a precaution to prevent the gold from having an expansionary effect.

2. "Have the higher required and excess reserves, as the result of gold imports, not cost the banks or bank customers something?" I do not see that the excess reserves have cost the banks or bank customers anything except bookkeeping expenses. If the raising of required reserves in 1936-37 is to be held responsible for the business decline of 1937-38, the action was costly. It is not apparent, however, that in the absence of gold imports credit restriction would have been deemed unnecessary.

3. "Would the gold already imported cost us more if we experience a marked price inflation, permitted and encouraged by the increased reserves that have arisen from huge gold imports?" Whether a possible inflation would involve cost to the economy as a whole would depend on how far it was allowed to run, and on the accuracy of official judgment as to appropriate control measures. Excessive inflation, followed by deflation, would be costly, but the gold holdings are only a minor factor determining the probability of such a sequence.

4. "Is it costless to this country if we exchange interest-bearing securities or profitable investments for barren and 'rather useless' gold imports?" It seems to me that if individuals elect to sell their securities for cash the transaction is costless to them in the sense that they get something which they prefer to the securities. Presumably one result of the inflow of funds is that sellers of securities get somewhat better prices than they could have got otherwise. From the standpoint of the sellers, the exchange of American securities for foreign gold or for any other form of money is a bear speculation. As in any speculation, the ultimate gains or losses cannot be known until the transactions are reversed.

5. "Is it costless if we exchange productive capital goods for non-productive gold which we could not use to buy the same amount of goods from foreign countries?" This is really the same question as number 4 in another form. The sales of capital goods have been voluntary on the part of sellers, and presumably the sellers believed that in the long run they would benefit from the transactions.

Any sale of a capital asset for cash involves a speculation on the future purchasing power of the cash.

Mr. Lester states that "presumably the silver purchases were as 'costless' as the gold purchases," which of course is correct. But I see no basis for his comment that our stock of silver is and will be more useful to us for both monetary and industrial purposes than the gold. I do not see that it serves any useful monetary purpose, and of course it serves no industrial purpose so long as it is hoarded by the Treasury.

Mr. Lester is right in arguing that as a means of stimulating domestic employment the purchase of domestic silver, or gold, is more effective than the purchase of foreign gold. Digging holes in the ground is not an ideal boondoggle, but if no better WPA projects can be found it is undoubtedly preferable from the standpoint of the American economy to have the holes dug in this country than abroad. It should be noted, however, that the shipment of British gold to this country to create balances to pay for airplanes and munitions was the 1939-40 substitute for the war loans of 1915-16. As a way of recording the subsidy for British defense, gold is more acceptable now than bonds; the future value of both is dubious.

CHARLES O. HARDY

The Brookings Institution

Professor R. A. Lester criticizes the speakers (including the present writer) at the meeting devoted to "Gold and the Monetary System" for serious omissions. He makes the following points:

1. "The speakers failed to indicate clearly that most of the proceeds foreigners obtained for imported gold . . . were used to acquire capital items. . . ." I quote from my paper¹: "It is true that . . . the bulk of the imports came in on capital account . . ." (p. 10, l. 25). "Public opinion hardly ever differentiates between gold imports on capital account and gold imports on income account. Even less does it take notice of the important stimulating effect exercised by gold imports (on income account at least!) . . ." (p. 12, l. 3).

2. "None of the speakers pointed out that in this respect our silver purchases were, dollar for dollar, more potent and beneficial to domestic employment than were our gold purchases. . . ." I mention silver purchases besides gold purchases as a source of demand for commodities (p. 10, l. 37). However, it was not the present writer's task to discuss the relative advantages of different monetary policies (public works, financed by the creation of purchasing power, are clearly superior to either gold or silver purchases), but, in a paper of ten thousand words, to render account of the influence of gold on the price level (this is the title of my paper!). Moreover, even if silver purchases were superior, "*dollar for dollar*," they were less significant *in toto*, because the value of the domestic gold output is much larger than the value of the domestic silver output.

3. "Is it costless if we exchange productive capital goods for non-productive gold . . . ?" Throughout my whole paper, I take the view that the private demand for credit has undergone structural changes which would not have permitted, during the thirties, a full utilization of American capital goods industries, unless the demand for goods was supplemented and stimulated by gold and silver purchases and public spending of other kind. Cutting out the gold purchases would, therefore, have implied, other things being equal, larger unemployment and not a larger production of capital goods for American use. This point is crucial.

¹ *Am. Econ. Rev.*, Suppl., Feb., 1941, vol. xxxi, pp. 1-17.

My opinions in this respect are shared by a great number of American economists. If Professor Lester disagrees, he should make clear his position concerning this crucial issue, instead of creating the impression that the speakers are a bunch of ignoramuses who do not know elementary economics.

HANS P. NEISSER

University of Pennsylvania

On the Significance of Another Production Function

A Comment

The latest presentation of a Douglas production function¹ contains some erroneous reasoning.

Miss Gunn and Professor Douglas established a multiple correlation between the logarithms of capital (X_3), labor (X_2), and production (X_1) over 556 manufacturing industries in 1919. In doing so they found themselves faced by the same troublesome circumstance that appeared in the earlier studies of this kind: the three variables, pairwise, are very highly correlated. As a consequence of this multicollinearity the scatter points in the three-dimensional space tend to arrange themselves along a line instead of a plane.

1. Even in the absence of a three-dimensional scatter diagram one can tell from the bunch maps shown in the article that there is multicollinearity; but the authors refuse to recognize it and resort to a faulty demonstration of its absence. After having cut up the total scatter into partial scatters of observations of X_1 and X_2 for several, relatively narrow ranges of X_3 , they argue (p. 75) that under conditions of high-degree multicollinearity the partial X_1X_2 scatters would each tend to cluster about a point.

The fact that instead of clustering about points these scatters seem to spread along lines (Chart III) does not disprove in the least the presence of high-degree multicollinearity. The linear spread could be reduced at will by reducing the width of the "capital groups."

Other features of Chart III, however, prove the presence of such multicollinearity. These features are: (a) the closeness of the group regression lines to each other and (b) their increasing order number with increasing size of X_1 or X_2 . Feature (a) points to the fact that by projecting the three-dimensional scatter into the X_1X_2 coordinate plane along the X_3 -axis, we obtain a long drawn-out linear arrangement of points instead of a broad scatter that could be reduced by the action of X_3 . Feature (b) indicates that low (high) values of X_3 can only be observed where X_1 and X_2 are small (large).

2. The authors believe that in a situation of this sort the selection of one minimization direction (X_1) and the neglect of the two possible alternatives present a way out. This reminds one of a man who stuffed his ears with wax in order not to be disturbed by the rattling of his alarm clock. The alternative minimization procedures are designed to demonstrate the instability of *any* plane fitted to the present observations of the three variables. They give a warning to the research worker that the choice of a direction in which to minimize deviations is exerting an excessive influence on the result, possibly a greater influence than can be ascribed to the data. The alternatives elucidate the dubious usefulness of *any* of the three possible regression equations for the purpose of describing the structural relationship between the variables, or of estimating the value of

¹ Grace T. Gunn and Paul H. Douglas, "The Production Function for American Manufacturing in 1919," this *Review*, March, 1941, pp. 67-80.

any one of them on the basis of new data for the two others, except where the new observations happen to be intercorrelated in the previously observed fashion. By discarding the alternatives one does not add anything to the stability of the selected regression plane, *i.e.*, to the reliability of its coefficients.

In a discussion of the original Cobb-Douglas function I showed that the omission of a few observations profoundly changes the coefficients obtained for the three-set with X_1 as dependent variable.² This was just another way of putting their instability into relief. I wonder whether the present study of Miss Gunn and Professor Douglas is not equally vulnerable to such a check.

HORST MENDERSHAUSEN

A Reply to Dr. Mendershausen's Criticism

The criticisms advanced by Mr. Mendershausen represent in two respects a significant retreat from earlier criticisms which he made in an article published three years ago in *Econometrica*.¹ Then he censured the previous studies on the ground that a too simple formula had been used which assumed the Euler Theorem by making the sum of the exponents of labor and capital equal unity, or 1.0, and because, after finding the exponent for labor, we did not independently determine the exponent for capital but instead made this merely equal to $1 - k$. This weakness had already occurred to one of the authors of this note and had also been pointed out by Mr. David Durand.² Studies were then made which employed the formula $P = bL^kC^j$ where j was freely determined. Interestingly enough, we have found that $k + j$ tends to equal 1.0 as shown by the following table:

TABLE I

	Economy	$k+j$
Time Studies	United States (1899-1922)	1.01
	Victoria (1901-1929)	1.07
Cross-Section Studies	United States (1909)	1.06
	United States (1919)	1.01
	Victoria (1910-1911)	.99
	Victoria (1923-1924)	.92
	Victoria (1927-1928)	.86
	Commonwealth of Australia (1934-1935)	1.00
	New South Wales (1933-1934)	.99

The closeness of $k + j$ to unity is startling (except in one of the nine cases) and this objection which Mr. Mendershausen had implied was crucial has therefore been met.

A second criticism of Mr. Mendershausen's rested on the fact that we had hitherto used only time studies in which we took historical series of Labor, Capital, and Product in our treatment of product as a function of labor and capital. During the time period, capital had increased more rapidly than labor,

² *Econometrica*, April, 1938, vol. 6, p. 150.

¹ "On the Significance of Professor Douglas' Production Function," *Econometrica*, April, 1938, vol. 6, pp. 143-53.

² "Some Thoughts on Marginal Productivity, with Special Reference to Professor Douglas' Analysis," *Jour. Pol. Econ.*, Dec., 1937, vol. xlv, pp. 740-58.

and Mr. Mendershausen declared that the values of k thus obtained merely expressed "the trend in the technical development."³ This criticism had also occurred to us many years before and we were already drawing up plans for testing it by launching a series of cross-section studies based upon census data for given years in which each observation represented an industry and not a year. This, as our table above indicates, has now been carried through for no less than seven different years, while more studies are in process. May we once again point out that the results obtained by this newer method are not only consistent with each other but also with the time studies?

Thus for the United States manufacturing in 1909, we found k (the exponent of labor) to have a value of .74, and for 1919, to have a value of .76. The value for the United States time study from 1899 to 1922 was .76. The value for the Massachusetts (1890-1920) time study, as made by Professor Cobb, was .74. These are virtually identical results. Similarly, in the case of Victoria we found with the k and $1 - k$ formula that the value of k for the period 1901-1929 was .71 and for New South Wales, 1901-1927, was .65. In our cross-section studies under the same formula we have found the following values of k :

TABLE II

Economy	k
Victoria (1910-1911)	.75
Victoria (1923-1924)	.61
Victoria (1927-1928)	.60
Commonwealth of Australia (1934-1935)	.64
New South Wales (1933)	.66

These values shown by Table III are not changed by more than one point (*i.e.*, .01) by the use of the k and j formula except in one case. No one can say that a particular value of k or j represents a time drift, since in each case time has been abstracted. Mr. Mendershausen is wise enough not to say it now. But we confess that we have looked in vain through his article for any mention of the fact that two of his three former criticisms have been removed by our recent studies. It is for this reason that we have felt it not unbecoming to call the attention of the readers to this fact.

Mr. Mendershausen now falls back to his last line of defense, namely the Frisch type of analysis. It is found that we get different results if we use labor or capital as the dependent variable than those which we get when we treat product as the dependent variable, and that since labor, capital, and product all have a tendency to increase together,⁴ our scatter of observations does not represent a production "surface" but rather a "line." Using Frisch's theory of confluence analysis, he therefore argues that we have not found a stable production surface or plane.

³ *Op. cit.*, p. 153.

⁴ May we point out, however, that one of the authors (Douglas) in his *Theory of Wages* (pp. 218-19) showed from the "contour" maps of Professor Cobb that the actual observations fell within a band? This was demonstrated as well by this method as by that of confluence analysis and bunch maps. Many critics of this work have apparently not noticed the explicit statement in the *Theory of Wages* (p. 220) that the observed values "covered only a relatively small range of all the possible combinations of labor and capital which might be made and that we do not have values for the large majority of potential combinations which lie outside the range covered."

To this we reply that we are justified in minimizing in the P-direction because, as we stated⁵ (and Mr. Mendershausen apparently did not note), "The problem might be approached from the point of view of elementary regressions. . . . This leads to the interpretation of our results as a description of the *average* change in production as a function of the changes in the factors of production." In this connection we should like to call attention to the penetrating analysis of Dr. John H. Smith in a recent monograph:⁶ "When the purpose of a study is to derive an estimating equation, it is irrelevant whether or not the available series have systematic parts which are perfectly correlated. The estimating equation should be derived in a manner consistent with its intended use; the methods of estimating the parameters⁷ should be the same as would be appropriate if there were no errors in the independent variables. An observed value of the dependent variable should be considered as a random sample from an array of values associated with a given set of observations on the independent variables. The research worker should specify that the mean of any array of values of the dependent variable is a single-valued linear function of the independent variables. When such arrays are normal, maximum likelihood estimates of the required coefficients are the elementary regression coefficients."

It is this method which we have employed, and certainly if there is any common-sense concept in economics it is that product (P) is a function of labor (L) and capital (C). To refuse to find the parameters of the regression equation merely because the quantities of labor and capital are also interrelated is to throw the baby out with the bath.

In conclusion, may we point out that if Mr. Mendershausen's criticism is valid, namely, the regression coefficients of L and C are indeterminate, and the plane highly unstable, we should expect that (1) the values of k and j would fluctuate widely between studies, and (2) there would be no tendency for labor's share of the total product, W/P, to equal k? Instead, we find that k and j tend to be approximately the same in the various studies, as we have shown above, while the values of k and W/P for a given economy have been as follows:

TABLE III

Economy	$P = bL^k C^{1-k}$	$P = bL^k C^j$	W/P
	k	k	
United States (1899-1922)	.75	.76	.74
Massachusetts (1890-1926)	.74		.74
New South Wales (1901-1927)	.65		.56
Victoria (1901-1929)	.71	.84	.61
United States (1909)	.75	.74	.68
United States (1919)		.76	.60
Victoria (1910-1911)	.75	.74	.64
Victoria (1923-1924)	.61	.62	.65
Victoria (1927-1928)	.60	.59	.68
Commonwealth of Australia (1934-1935)	.64	.64	.61
New South Wales (1933-1934)	.66	.65	.51

⁵ Gunn and Douglas, "Production Function: 1919," *Am. Econ. Rev.*, March, 1941, vol. xxxi, pp. 74-75. Italics ours.

⁶ John H. Smith, *Statistical Deflation in the Analysis of Economic Series*, privately printed, Chicago, 1941, pp. 78-79.

⁷ In this case the values of k and j.

We find it difficult to believe that the relative consistency in the results is due to chance.⁸ For the moment we rest our case. Forthcoming articles will deal with four cross-section studies for the Commonwealth of Australia and for the United States in 1914. While it is improper to state the results in advance of their publication, we can only say that our confidence in the formula has been strengthened by them.

University of Chicago

GRACE T. GUNN
PAUL H. DOUGLAS

A Rejoinder

My criticism of the new production function presented by Miss Gunn and Professor Douglas dealt with certain methodological mistakes. The first point concerning the interpretation of Chart III in their article seems to have been accepted by the authors; but they object against the second point concerning the evaluation of the marginal productivity coefficients.

In defending their position, the authors use a weapon which shares with outworn artillery the property of being more dangerous to the marksman than to the target. I am referring to the argument that "the problem might be approached from the point of view of elementary regressions." True, correlation between determining variables is not harmful in fitting equations that are designed to furnish *best estimates (safest forecasts) of some dependent variable*. In ordinary regression analysis, where such estimates are sought, we can neglect multicollinearity if we are ready to assume that the true degree of intercorrelation between the pairs of variables is the same in (a) the set of observations from which the estimating equation has been calculated and (b) the observations that are used in making the estimate (forecast). This has been mentioned in my former criticism.

As far as I am aware, these production functions have not been computed for the purpose of estimating the value of production on the basis of known capital and labor inputs. They are established for quite a different purpose, namely, the estimation of the structural relationship among the three variables. The new as well as the older functions are used in order to estimate marginal productivities of labor and capital and to compare these estimates with independently derived shares of labor and capital in the product of industry. Elasticities of demand for labor and other structural characteristics are derived from the functions. The authors fail to realize that this purpose does not justify the ordinary approach of regression analysis. What is correct procedure in setting up an *estimating equation for X_1* is not necessarily correct in evaluating the *structural relationship between X_1 , X_2 , and X_3* . The two purposes can be served by one and the same method only if all "disturbances" are concentrated in X_1 , while X_2 and X_3 enter into the computations with their "true" values.¹ Otherwise the computation of structural coefficients requires some different approach. Multicollinearity becomes troublesome as soon as

⁸ Dr. Max Brown made a study covering manufacturing in New Zealand from 1915-1916 to 1934-1935. He found the value of k to be .517 and j .483, and the share received by labor, the ratio of wages and salaries to product, to be exactly equal to the exponent of labor, namely, .517. (These results are from an unpublished thesis at Cambridge University.)

¹ "True" values are generally defined as the strictly related parts of the observed variables, "disturbances" as the remainder.

disturbances in the observed values of labor and capital are admitted at all.

A simple abstract example shows how multicollinearity may prevent the determination of structural coefficients while it does no harm in estimating the values of a certain dependent variable. Suppose there are three perfectly intercorrelated variables z_1 , z_2 , and z_3 between which the following relations hold:

$$\begin{aligned} z_2 &= 2 z_3, \\ z_1 &= 3 z_2, \text{ and consequently} \\ z_1 &= 6 z_3. \end{aligned}$$

Suppose we want to "estimate" z_1 on the basis of known values of both z_2 and z_3 . We may do that by way of

$$\begin{aligned} z_1 &= z_2 + 4z_3, \text{ or} \\ z_1 &= 2 z_2 + 2 z_3, \text{ or} \\ z_1 &= 2.5 z_2 + z_3, \text{ etc.} \end{aligned}$$

Obviously, each of the many possible ways of "estimating" z_1 is as safe as the other: each is 100 per cent correct. But the size of the coefficients of z_2 and z_3 is indeterminate. The first may be smaller or larger than the second, or the two may be equal. If they are meant to represent marginal productivities of two factors of production, we cannot say what these productivities are.

In the absence of *perfect* multicollinearity but with a high degree of multicollinearity, we can determine numerical values for the coefficients; but the result is strongly dependent on the nature of the assumptions made with respect to the disturbances. In an earlier paper, Bronfenbrenner and Douglas have indicated their belief that disturbances in the production figures are more serious than those in the labor data. A similar statement appears in the recent paper of Gunn and Douglas.² That assumption may be correct; but in order to arrive at a justification for the use of elementary regression coefficients (production: dependent variable) in determining structural coefficients the authors would have to go several steps farther and assume *absence of disturbances in the figures for capital and labor*. Furthermore, they should justify this assumption by an analysis of the series used and drop the consideration of the relative size of the coefficients which is entirely irrelevant in this connection.

If the authors are not willing to make and to justify such a strenuous assumption, the strong correlation between the labor and capital series renders their results highly uncertain.³ Moreover, if they have to admit that a few extreme sets of observations of the three variables do not agree with their general interpretation of the data, and if they drop these sets in consequence, the coefficients are likely to change considerably, no matter in which way deviations are minimized.

Finally, it seems that Professor Douglas draws too many conclusions from his results. On the one hand, he wishes to establish whether the two big factors of production receive shares of product equal to, or larger or smaller than, their

² M. Bronfenbrenner and P. H. Douglas: "Cross-section Studies in the Cobb-Douglas Function," *Jour. Pol. Econ.*, Dec., 1939, pp. 770 *f.* In the present paper of Gunn and Douglas (this *Review*, March, 1941, p. 77), it is said that the "disturbances in X_2 , or labor, are apparently much less than in X_1 " (or production). While this argument is employed against the use of an estimating equation involving labor as dependent variable, the alternative (capital: dependent variable) is rejected for another reason: smallness of the regression coefficient of production on capital.

³ See P. H. Douglas and Grace T. Gunn, "Further Measurements of Marginal Productivity," Table I, *Quart. Jour. Econ.*, May, 1940; and my own article in *Econometrica*, April, 1938.

relative marginal productivities. On the other hand, he tests the reliability of the marginal productivity coefficients by measuring whether or not they agree with those shares of the product (W/P). These two courses are alternatives; they cannot be followed simultaneously. Either the computed productivity coefficients are accepted as correct; then we may use them to find out whether there was "exploitation" of factors of production. Or the productivities are considered uncertain, while absence of "exploitation" is considered certain; then they can be checked against the independently derived shares W/P . It is the old story of the cake one cannot eat and have too.

So much about methodology. I do not fail to recognize the fact that the production functions based on cross-section studies have led to coefficients very similar to those obtained from time studies. In view of the nature of the data, the method used is somewhat dubious; but it has been applied with consistency in the various studies. The result obtained is certainly interesting. I do not think that the authors are right in the interpretation of the coefficients; but at any rate these studies seem to have led to the discovery of a noteworthy empirical relationship: both over time and over a series of different industries, the rate of change in the volume of output is accompanied by a greater rate of change in the volume of capital than in the volume of labor.⁴ If the relationship in time is to be considered as a relationship between trends, which seems perfectly possible, the fact remains that the connection between the time trends resembles the connection between the timeless, "inter-industrial" trends in the same country, and that is an interesting observation indeed.

HORST MENDERSHAUSEN

National Bureau of Economic Research

Professor Whittaker on Indifference Curves

In a recent work, *A History of Economic Ideas*¹ (reviewed in the March, 1941, number of this *Review*, pp. 113-114), Professor Edmund Whittaker uses the identical term *indifference curve* for two different graphic illustrations, and, therefore, leads to a misrepresentation of the historical development of indifference curve analysis. In the section on Value, indifference curves are traced, erroneously, from Alfred Marshall through Pantaleoni, Edgeworth, and Pareto, to Hicks and Allen. Marshall's curve, first printed in *The Pure Theory of Foreign Trade*,² and taken over by Pantaleoni in his *Principi di economia pura*, is not the same as the indifference curve of Pareto, Hicks, and Allen;³ in fact, in the widely accepted use of the term, it is not an indifference curve at all. The two curves differ both in mechanics and in underlying assumptions. The Marshallian curve rests upon a utilitarian philosophy; ordinates of the Marshallian curve measure total utility and quantities of the goods; in other words, they measure the areas of successive rectangles inscribed in a Jevonsian utility curve. The Paretian in-

⁴ One must not forget, however, that the variables are not always defined in the same way in the various studies of Professor Douglas.

¹ Longmans, Green and Co., New York, 1940, pp. 448-49.

² Reprinted in Alfred Marshall, *The Pure Theory of Foreign Trade and Pure Theory of Domestic Values* (London School of Economics and Political Science, London, 1930). A similar exposition may be found in Marshall's *Money, Credit and Commerce* (Macmillan Co., New York, 1938), pp. 162-63 and Appendix J.

³ See R. D. G. Allen and J. R. Hicks, "A Reconsideration of the Theory of Value," *Economica* (1934); R. D. G. Allen, *Mathematical Analysis for Economists* (Macmillan Co., New York, 1938), pp. 124-26; and J. R. Hicks, *Value and Capital* (Oxford Univ. Press, New York, 1939), pp. 12-16.

difference curve, however, is not based on the assumption that utility can be measured quantitatively, but requires only the assumption that an individual can tell whether he prefers one combination of goods to another. Ordinates of the Paretian curve also measure quantities of the goods, but they have no relation to total utility.⁴ Total utility would be measured by the height of the curve in the third dimension.

The ambiguity in Professor Whittaker's treatment leads students to assume that Marshall originated the *indifference curve*. Authorities seem to credit Edgeworth, not Marshall, with the first use of the true indifference curve.⁵ There exists a strong presumption that the difficulty arises from the use of both types of illustration in formulating theories of international values.⁶ It would be well, to avoid misleading, to select some other name for the Marshallian curve.

ARTHUR KEMP

Earlham College

Reply to H. G. Moulton and Associates

1. Whether the problem of "idle money, idle factories and idle men" is or is not a business cycle problem is a matter of definition. Whatever definition is adopted, my basic criticism of H. G. Moulton and Associates' *Capital Expansion, Employment, and Economic Stability* remains unaltered. That criticism is simply that the rôle played by restrictive government policies in preventing general recovery after 1933 can be appraised only in the light of a discussion of the various factors responsible for the failure of such recovery and a determination of their relative importance. No such discussion or determination is given by this volume. Hence, even if the authors are entitled to study such policies because "many have advanced" them as an explanation of the failure of recovery and even if as a result of their studies they are entitled to conclude that these policies, *taken by themselves*, were restrictive in their effect, they cannot demonstrate that the policies in question were responsible in any significant degree for the failure of recovery or even deny that other activities of the government—such as the spending program—may have made the government's contribution to recovery on balance favorable. In the sense, then, that responsibility for the failure of recovery cannot be determined until an analysis of the various factors involved is provided, the conclusion of the authors that restrictive government policies were in the main responsible remains undemonstrated.¹

⁴ Hicks, *Value and Capital*, pp. 13-15.

⁵ Henry Schultz, *The Theory and Measurement of Demand* (Univ. of Chicago Press, Chicago, 1938), p. 13.

⁶ Cf. Whittaker, *op. cit.*, p. 448; G. von Haberler, *The Theory of International Trade* (Macmillan Co., New York, 1937), pp. 150-155; Jacob Viner, *Studies in the Theory of International Trade* (Harper, New York, 1937), p. 522; and Wassily W. Leontief, "The Use of Indifference Curves in the Analysis of Foreign Trade," *Quart. Jour. of Econ.* (1933).

¹ My suggestion that *in the absence of analysis* the conclusion of the authors was no better than my then equally undemonstrated contrary conclusion is made to read in their reply that their conclusion is unsubstantiated *because* it disagrees with mine. Since then the reasons for my conclusions have been published in *Deficit Spending and the National Income*, but for a long time there has been in existence a considerable literature on the favorable effects of public deficit spending which the authors ignore.

2. In my review I suggested that the authors' discussion of the distinction between security issues and capital formation was not sufficient to clarify the meaning of "outlets for investment funds." The authors reply "that every chart dealing with this phase of the problem bears the specific label '*security outlets for investment funds*'." This is not so.² The charts on pages 17 and 35 are not so labeled because they include mortgages among the "outlets for investment funds," making it quite clear, as does the text, that "outlets for investment funds" are not confined to securities. The meaning of the concept is by no means clear from the context in which it is used. The discussion starts on a real level with the statement (p. 5) that "shipping and foreign trade"—not the securities issued by these industries—"were [once] the most important outlets for funds," while the sources of such funds include the expansion of bank credit and corporate saving, much of which, of course, never goes to purchase securities or mortgages.

What is included in the concept the authors do not attempt to make clear even in their reply. Research in the appropriate appendix leads to the conclusion that the statistics start with the volume of newly issued securities and mortgages. Refunding issues within any one field are excluded, but "in calculating the aggregate volume of issues . . . minus quantities in any field are not subtracted from the total . . . because repayments should be looked upon as an addition to the supply of available investment money rather than as a decrease in the volume of securities offered for sale" (p. 32, n. 1). Issues of investment trusts are also excluded, though the text states that "such issues have to be included as outlets for money savings of individuals" and, therefore, presumably among the "outlets for investment funds" (p. 15). Securities used to retire bank loans or acquire other securities or assets (except for securities acquired through refunding or by investment trusts) are included, although repayment of bank loans by foreigners is treated as a negative investment outlet in 1918 (p. 13). No attempt is made to explain the economic significance of the resulting estimate.

3. No reference is offered to substantiate the charge that I have confused "investment" with "capital formation." If "investment" is defined as the purchase of currently produced finished capital goods, they are of course the same. From the phrases "investment in securities" and "security outlets for investment funds," I take it that the authors mean by "investment" the purchase of securities.

4. The reference for my statement that Dr. Moulton believes that savings have been excessive since the World War should have been, not to pages 190-191, but to page 30, where it is stated that "after the World War . . . the annual savings of the American people" led to a "volume of available investment money . . . much more than sufficient . . . to provide all of the funds required for productive capital expansion."

5. There seems to me a vast difference between contending that Professor Hansen "believes that population growth has been a *controlling factor* in economic expansion, or is the *only impetus to economic growth*"—which is the way Hansen's position was presented by the authors—and his own summarizing statement that "'growth and expansion dominated the whole of economic life" in the nineteenth century—which the authors offer in their reply as proof that they have treated Hansen fairly. The difference is made even clearer by the fact in his one quantitative estimate Hansen suggested that population growth and

² The phrase "security outlets for investment funds" is never used in the text.

territorial expansion were responsible for only a half of capital formation up to 1929.³

HENRY H. VILLARD

Amherst

Professor Brady's Review of Munk's "Economics of Force"

I have just read Robert Brady's review of Munk's, *The Economics of Force* (June, 1940, issue, this *Review*, p. 409) and I must say that it seems grossly unfair. There should be some way to get another appraisal of Munk's book before the readers. Perhaps I am also "muddled" and have an "intense emotional bias"; but I think Munk's is one of the best books on fascism I have seen and very well written.

JOHN ISE

University of Kansas

Permit me to remark that I think Dr. Robert Brady struck a wee bit below the midriff—inadvertently, I am sure—in his review of Dr. Frank Munk's *The Economics of Force*, published in the June issue. It seems to me that in his review Dr. Brady applied, at least by implication, standards of criticism which are irrelevant. Dr. Munk makes no pretension that his is a closely worked scientific treatise. He says in the preface that it "is designed for the interested, non-technical reader who is trying to find a foothold in the maze of conflicting theories," etc. For many such readers I know that Dr. Munk has developed a decidedly illuminating set of ideas in contrasting what he roughly, but none the less revealingly, characterizes as the economics of force and the economics of welfare.

DEXTER M. KEEZER

³ I stressed expansion into new territories in my review, in addition to population growth, not because I thought Hansen considered them as necessarily separate factors, but because the authors in their statement of Hansen's position omitted territorial expansion, making Hansen argue that population growth alone explained economic growth.

TEMPORARY NATIONAL ECONOMIC COMMITTEE: REVIEWS OF MONOGRAPHS

EDITOR'S NOTE:—The reviews of a number of T.N.E.C. monographs are collected here in one place for convenience, instead of being distributed through the review section. The remainder of the monographs will be reviewed in the December number. The T.N.E.C. record will be further explored in analytical and interpretative articles to be issued as a supplement to either the March or June number, 1942.

- No. 10: *Industrial Concentration and Tariffs*. By CLIFFORD L. JAMES, EDWARD C. WELSH, and GORDON ARNESON. 1940. Pp. 326. 35c.
- No. 11: *Bureaucracy and Trusteeship in Large Corporations*. By MARSHALL E. DIMOCK and HOWARD K. HYDE. 1940. Pp. 144. 30c.
- No. 13: *Relative Efficiency of Large, Medium-Sized, and Small Business*. By THE FEDERAL TRADE COMMISSION. 1941. Pp. 449. 50c.
- No. 14: *Hourly Earnings of Employees in Large and Small Enterprises*. By JACOB PERLMAN. 1940. Pp. 94. 15c.
- No. 15: *Financial Characteristics of American Manufacturing Corporations*. By CHARLES L. MERWIN, JR. 1940. Pp. 442. 40c.
- No. 17: *Problems of Small Business*. By JOHN H. COVER, NATHANAEL H. ENGLE, EARL D. STRONG, PETER R. NEHEMKIS, JR., WILLIAM SAUNDERS, HAROLD VATTER, and HAROLD H. WEIN. 1941. Pp. 412. 40c.
- No. 18: *Trade Association Survey*. By CHARLES A. PEARCE (assisted by others). 1941. Pp. 501. 50c.
- No. 21: *Competition and Monopoly in American Industry*. By CLAIR WILCOX. 1940. Pp. 344. 40c.
- No. 27: *The Structure of Industry*. By WILLARD L. THORP, WALTER F. CROWDER, and associates. 1941. Pp. 759. \$1.00.
- No. 35: *Large-Scale Organization in the Food Industries*. By A. C. HOFFMAN. 1940. Pp. 174. 20c.

These ten monographs bear on various aspects of the problem of concentration of output and market control, particularly in manufacturing. They will be taken up on the general plan of first measuring the extent of concentration (including various types of monopoly control), and then examining certain explanations for this concentration. The reviews are designed primarily to summarize the contents and to indicate the nature of the findings of these monographs. The reviewer reserves for another and more appropriate occasion a critical evaluation of all of the evidence provided by the T.N.E.C. concerning competition and monopoly in the American economy.

In *Competition and Monopoly in American Industry* (monog. no. 21), Professor Wilcox classifies our industries and products into the following four groups:

1. Workable competition, characterized by "the availability to buyers of genuine alternatives in policy [with respect to prices, qualities, etc.] among their sources of supply" (p. 8).
2. Monopoly and duopoly, where one or two firms control nine-tenths or more of the supply.¹

¹ Professor Wilcox states that "in their essential character and in their ultimate effects, duopoly and monopoly are the same" (p. 10, also p. 98), but this dubious generalization

3. Oligopoly and market dominance, where few firms control all of the supply and one or a few firms control most of the supply.²
4. Pursuance by numerous firms of a common policy, chiefly through cartels and trade associations.

In virtually all of the cases in which information is available, the larger national industries and many of their specific products are treated in the monograph, and short sections (averaging one or two pages) are devoted to the market situations and policies in selected important fields.

There are obvious difficulties in carrying through a systematic classification of this sort. Whether a given industry is workably competitive or is so organized as to possess "an appreciable degree of monopoly power" cannot be ascertained by the objective use of any easily available index (such as number of firms). Personal judgment must be used extensively so that the classification of one economist will differ materially from that of another with a divergent view of the economic world, and this subjectivity is enhanced by the fragmentary nature of the data. Professor Wilcox lists variety chain stores under group 1 (p. 56), for instance, although in local markets the concentration must frequently be very high and net return on investment has averaged over 15 per cent even in bad years;³ many of the trade associations discussed under group 4 probably possess less monopoly power. Where few producers control the output the industry or product is put in group 3, but where supplementary information reveals competition it is placed in group 1 (e.g., tires, p. 48)—this might happen much more frequently if we had more such detailed information.

Yet even a relatively subjective classification can be done well or badly, and Professor Wilcox has done it very well. He has collected an enormous amount of information—more extensive in scope than that contained in any other individual study of our economy; he has utilized this information with judgment; and he has compressed his more important findings into a remarkably small space. It is not possible here to do more than quote his very cautious conclusion: "The most that can be said today is that competition is far too common to justify the thesis that the competitive system is approaching extinction, and that monopoly is far too common to justify its treatment as an occasional exception to the general rule" (p. 308).

The Structure of Industry (monog. no. 27), prepared under the direction of W. L. Thorp and W. F. Crowder, contains six related but essentially independent studies of the degree of concentration in manufacturing. These studies may be summarized briefly:

1. As measured by certain characteristics of the frequency distribution of employment per establishment (roughly, plant), there has been a general increase in concentration. Thus in the industries sampled, half of the workers were employed in 5,950 establishments in 1914 and by 4,885 in 1937. Simple indices of concentration are presented for 195 industries.⁴ The study eschews all eco-

is contradicted by his own evidence on tires (p. 48) and automobiles (p. 197), for instance.

² Here the discussion is on the basis of type of control: price leadership, price agreements (including delivered-price systems), patents, market sharing, inter-corporate relations, etc. Analytically, of course, this group merges imperceptibly into groups 2 and 4.

³ *Survey of American Listed Corporations* (New York, 1940), II, pp. 340 ff.

⁴ The precise indices of concentration are two: an absolute index, equal to the reciprocal of the number of plants employing half the workers in the industry, expressed as a per-

conomic analysis; it raises few significant questions and answers none.

2. The establishment structure of firms (called "central offices") is subjected to considerable statistical analysis, on the basis of Census records for 1937. An initial chapter provides a survey of the importance of multiple-plant firms in various industries (ranging from ownership of 48.3 per cent of plants in "products of petroleum and coal" down to 4.0 per cent in printing and publishing); a frequency distribution of plants per firm on an industry basis (over half of the firms operated only 2 plants, while 11 operated 100 or more plants); and diversity of operations (63.5 per cent operated in only one industry, while 34 operated in 10 or more industries). As compared with one-plant firms, central office establishments employed six times as many workers, paid \$199 (or 18.5 per cent) more wages per worker, and secured 20 per cent more value added per worker. The central offices are then classified into five groups, each of which receives a short chapter:⁵

- a. Uniform functions: several establishments in each of one or several industries (85 per cent of central offices fall in this group).
- b. Divergent functions: establishments using the same materials for different products, those utilizing by-products, or those engaged in parallel processing of different materials (*e.g.*, cotton and woolen textiles).
- c. Convergent functions: establishments producing complementary products and those whose products have closely related markets (*e.g.*, radios and pianos).
- d. Successive functions: vertically integrated plants.
- e. Unrelated functions: for example, automobile bodies and sheets and pillow cases.

Each of these chapters contains a few additional statistics and brief discussions of important industries, and an appendix (pp. 211 *ff.*) gives details for several hundred industries. The entire section is a most useful addition to our meager knowledge of the multiple-plant firm.

3. On the basis of a very brief statistical survey of the merger movement, Dr. Thorp suggests that mergers "were brought about to a large extent by promotional activity during periods favorable to new security issues" (p. 234).

4. The history of concentration in seven important industries is sketched so briefly as to be relatively uninformative. In only one of the industries (automobiles) have the dominant firms succeeded in maintaining their share of sales.

5. The concentration of production (percentage of output produced by the four largest firms) is studied for 1,807 products, and the concentration is related to type of product, price and output changes, and other less important variables. It is impossible to summarize these results here, but a few samples may be given.⁶ In 1937 half of the products had concentration ratios of less than 73 per cent, but half of the value of products had a ratio of less than 60 per cent. Concentration was higher for producers' goods than for consumers' goods, and for durable goods than for non-durable goods. Concentration is not correlated with output or price changes from 1929 to 1933 or from 1933 to 1937, but these latter two

centage of 1914; and a proportionate index, similar in all respects except that it utilizes the proportion of plants so situated.

⁵ See the graphic illustrations (p. 148); frequencies are given in Table 22 (p. 168).

⁶ Some results were presented by W. L. Thorp and W. F. Crowder, "Concentration and Product Characteristics as Factors in Price-Quantity Behavior," *Am. Econ. Rev.*, Suppl. vol. xxxi, Feb., 1941, pp. 390-408. In the monograph the authorship is attributed to W. F. Crowder, with the assistance of G. B. Wimsatt.

types of changes (prices and outputs) are negatively correlated (especially for consumers' goods) and are more highly correlated, the less the concentration ratio.

Some of the results of this study are very interesting, but a few cautionary remarks are in order. Concentration is not equivalent to monopoly power. The extent of monopoly is in part understated because physically similar commodities are treated as single products, collusion between firms is not recorded, and many commodities have local or regional markets.⁷ On the other hand, all inter-commodity competition is ignored. On the statistical side, too heavy reliance is placed on scatter diagrams; very few readers can accurately read such diagrams. This point may be generalized: all of the statistical monographs considered in this review have made inefficient use of the data because of an unwillingness to use refined statistical techniques, and sometimes positive errors have been committed.⁸

6. The product structures of the fifty largest manufacturing companies are examined with special reference to the concentration question. These companies have over 2,000 products (as defined by the Census Bureau). The product structures are analyzed on a plant and firm basis (half of the companies produce more than 55 products); importance of products to the companies (94.7 per cent of the products individually yielded less than 5 per cent of the total receipts of their companies); and concentration (57.8 per cent of the products of individual companies amount to less than 10 per cent of the national output of these products). A last statistical chapter surveys the positions of these companies with respect to leadership in various product lines. The study concludes with two chapters on the causes and significance of multiple products, the former being based on twenty-seven interviews. Neither chapter makes any important contribution to our knowledge of the subject. The multiple product firm is so interesting that many economists will regret the emphasis on concentration in this study, but in any case the information is welcome.

The two previous monographs contain broad surveys of monopoly or concentration; Dr. Hoffman's *Large-Scale Organization in the Food Industries* (monog. no. 35) is a more detailed investigation of one important sector of our economy. A general setting is provided by five chapters summarizing trends in large-scale organization in retailing, meat-packing, dairy products, flour-milling, baking, and other food industries. In general it is found that the growth of large companies has slowed down or stopped in the last two decades.

The most important explanation of this concentration, according to the author, lies in the economies of production and more especially of distribution, and indeed his thesis is that the concentration was due primarily to the "natural and inevitable adjustment of economic institutions to the basic factors which condition them" (p. 4). This is argued with some persuasiveness for the case of chain stores *vs.* independents, but for the rest he relies on a listing of economies

⁷ Thus the national concentration ratio for bricks was 7 per cent; those for Los Angeles and New York City were so high they could not be disclosed (p. 321 n.). The brief section on regional markets (pp. 321-23) is of little assistance on this point.

⁸ For example, it is said that "table 16 indicates that the 392 products [a sample used for an inconclusive 1935-1937 comparison] offer a fairly representative cross-section of the concentration picture of the larger group" (p. 332). If the χ^2 test is applied to the number of products in that table, it is found that only 35 times in 10,000,000 would such a discrepancy as exists between the two distributions occur with random sampling. In the case of the value of product figures, the probability is very much smaller!

of horizontal and vertical integration (chap. VII). Such proofs are notoriously unconvincing; with a little ingenuity it is usually possible to list as many diseconomies. No real progress can be made in the absence of quantitative measurement of the economies under consideration, and Dr. Hoffman makes little use of this approach.⁹ A very good chapter on patents in food processing industries offers a more definite explanation of concentration for only a few industries. It is regrettable that financial motives for mergers were not investigated, since they are known to have been important in certain industries (*e.g.*, baking).

The remainder of the monograph is devoted to an analysis of the extent of monopoly. After a routine summary of the theory of imperfect competition,¹⁰ several well-known tests of monopoly are applied to certain food industries. On the whole the evidences of monopoly power are found to be few: concentration ratios are still relatively low; profits rates have usually been high, but not sensational, and they have been declining; monopsonistic exploitation does not explain the low prices of chain stores; prices have been flexible; and processors' margins have varied with wage rates. In the case of chain stores the evidence is fairly convincing, but many important fields (*e.g.*, milk markets) are not mentioned and the investigation of the remainder is scarcely exhaustive; for instance, the author does not mention the possibility of over-investment when discussing the low rate of return in meat-packing.

The most popular explanation of the appearance of large companies is examined by the Federal Trade Commission in *Relative Efficiency of Large, Medium-Sized, and Small Business* (monog. no. 13). The presentation is not very coherent, but the contents may be summarized under three heads.

1. Using the results of previous government investigations, 128 tests of production costs and 105 tests of rate of return on invested capital are applied to 18 important industries (which accounted for one-fourth of the value of product in the 1937 Census of Manufactures). "The results of the total tests reveal that the largest companies made, on the whole, a very poor showing . . . on the average, over one-third of the companies in every array had costs lower than that of the largest company" (pp. 10, 12). The recapitulation in the table on page 578 may be of interest. It is emphasized that these cost and return figures have been checked in detail, and presumably standardized, by government accountants (pp. 5, 11). The data are an illuminating contribution to a topic which has very important policy implications.

2. There follow fifteen sections (many only a page in length) on vertical integration, disadvantages of large size, case studies of selected mergers, etc. Most of these sections cover familiar ground very sketchily. Special mention may be made, however, of a brief survey of the merger movement by Professor Myron Watkins (pp. 133-39) and of the principle of efficiency in mass production by Professor Frank Fetter (pp. 398-415).

⁹ Quantitative data are presented only for the chain store chase (pp. 60 ff.), and here there is no examination of the effect of the size of the chain on cost per establishment.

¹⁰ The summary, however, contains numerous errors. In the case of the dominant firm it is said that "at any given level of prices, the small firms (acting competitively) will offer a supply based on the curve of average costs for the marginal producer" (p. 83). This statement has no merit other than novelty; for the correct short-run theory see my "Notes on the Theory of Duopoly," *Jour. Pol. Econ.*, Aug., 1940. The author, who is apparently unaware of the long history of the theory of bilateral monopoly, has made several errors in the appendix in which he independently reconstructs the theory; in particular the range of indeterminacy is greatly exaggerated (p. 163); see J. R. Hicks, "The Theory of Monopoly," *Econometrica*, Jan., 1934.

RECAPITULATION OF THE FEDERAL TRADE COMMISSION FINDINGS ON EFFICIENCY AND SIZE

	Lowest average costs	Highest rate of return
1. Individual Companies: Tests	59	84
Largest Company	1	12
Large Company	0	2
Medium-sized Company	21	57
Small Company	37	13
2. Groups of Companies: Tests	11	21
Large Companies	1	3
Medium-sized Companies	10	14
Small Companies	0	0
3. Individual Plants: Tests	53	—
Largest Plant	2	
Large Plant	4	
Medium-sized Plant	21	
Small Plant	26	

3. Two case studies are presented of mergers of cement and steel companies. In the cement case (Pennsylvania-Dixie), an original investigation for the T.N.E.C., it was found that the merger was effected by banking syndicate (which doubled the book value of the fixed assets and made a gross profit of \$5,400,000 from the venture); that the rate of return on tangible investment declined after the merger (although part of this decline may have been due to depression of the industry); and that no important economies were secured by merger. The review of certain Bethlehem mergers is in large part a devastating refutation of the 1922 report to the Senate by Attorney General Daugherty which argued that these mergers were innocuous. The mergers were found to be motivated largely by a desire to restore the basing-point system and to reduce competition. Both of these excellent studies are supplemented by exhibits of much source material.

Financial Characteristics of American Manufacturing Corporations (monog. no. 15) is a survey of the following aspects of corporation statistics; profits; dividends; working capital; fixed capital and its expansion; and source and disposal of funds. In each case various influences (size of firm, liquidity position, etc.) was examined in a variety of statistical series.¹¹ It was discovered that the rate of earnings is positively correlated with size of company (measured by assets),¹² but the rate of earnings-plus-interest-plus executive salaries is negatively correlated. The ratio of cash dividends to income in the period 1926-30, 1933-36 was 150 per cent for all companies; for income companies (whose ratio was of course less than 100 per cent), the ratio increased steadily with the size of company. The remaining chapters will be of interest chiefly to accountants and investment analysts. The reliance on asset-size deprives the

¹¹ The series are four: for all corporations, *Statistics of Income*; for 400 large corporations, *Standard Statistics*; for 1,300 small companies, a sample of income tax returns; and 525 corporations registered with the S.E.C. The period varies, but in all cases falls between 1926 and 1938.

¹² The contrary findings of Epstein and Paton are attributed to sampling bias (pp. 28 ff.).

monograph of any great relevance to the monopoly problem, for asset-size is almost meaningless with reference to concentration, let alone monopoly.

In *Hourly Earnings of Employees in Large and Small Enterprises* (monog. no. 14), Dr. Jacob Perlman examines sixteen industries to discover what relationships exist between average hourly earnings and the size of firms and plants. Size of firm seems to have a significant independent relationship to hourly earnings in the eight industries in which a few firms dominate (e.g., steel, cigarettes), but not in the eight industries in which concentration is low (e.g., textiles).¹⁸ The following figures are typical: in meat-packing, the hourly earnings (in December, 1937) of skilled male laborers in the "Big Four" was \$0.887, in intermediate companies, \$0.781, and in small companies, \$0.733. Size of plant is also correlated positively with hourly earnings in most manufacturing industries (pp. 43 ff.), but this correlation disappears in all but one of the industries (bituminous coal) investigated in detail after location and similar factors are eliminated. Five appendices give more detailed information on individual industries, and a sixth investigates the cyclical stability of employment in large and small companies in ten industries. In this latter study the data are so fragmentary and the hypotheses so ambiguous that there is little justification for the conclusion that "the stability of employment and earnings are not related either to the degree of concentration in the industry or the nature of the products produced" (p. 83).

A few suggestions are made but not explored by Dr. Perlman in explanation of these findings, which are at least superficially contradictory to the usual conclusions of theoretical analysis. Two related factors do seem important: large companies can obtain the best employees through higher wages, and these companies more frequently use piece rates and production-bonuses, so in both cases high wage rates may not mean high labor costs. The dismissal of unionization as an explanation may be too hasty (p. 8); certainly the evidence here presented shows only that it is not a complete or universal explanation (see pp. 23, 72). The differences in quality of products also deserve more attention (pp. 19 f.). A final and intriguing suggestion, that large companies pay high wages because they can better afford them (p. xiv), opens vistas of non-Euclidean economics of which, it is hoped, the B.L.S. will some day give us additional details.

Problems of Small Business (monog. no. 17) contains three independent studies:

1. The first section deals with the mortality of small business. Five chapters are devoted to a rather tedious recapitulation of individual studies which have been made in various localities, with classifications according to type of business, form of organization, size of assets, etc. The remaining nine chapters examine the possible influence on mortality of migration, managerial competence, adequacy of capital, control of assets and liabilities, control of costs, control of sales, credit extensions, personal affairs, and governmental regulation. The study summarizes a large number of individual investigations, and it may be useful for that reason. But there is little critical comment, concepts are not clearly

¹⁸ By independent relationship is meant that location (section of country and size of community), composition of the labor force, and unionization were eliminated. We cannot be certain that the elimination of these factors was complete for the data, as here presented, are not sufficiently detailed (e.g., only three grades of skill are sometimes considered), nor are all of these factors eliminated simultaneously. But the main conclusion would probably survive more refined analysis.

defined (see, for example, the section on "competition," pp. 122-23), and the conclusions (pp. 136-37) are trite.

2. Market security and price stability are treated in the second section. Dr. N. H. Engle contributes an interesting and informative survey of recent trends in marketing, with considerable attention to the changing importance of traditional marketing channels and the emergence of new types of marketing. Dr. E. D. Strong has concisely summarized and appraised the arguments for and against retail price maintenance; he concludes that "resale price maintenance is bad in principle and practice" (p. 203).

3. The third section, financing of small business, also consists of two separate studies. On the basis of asset size a large number of financial ratios are presented to suggest that "the financial position of [incorporated] small business has weakened since 1929" (p. 207). A considerable amount of the material overlaps other T.N.E.C. studies, but the chapter also summarizes a miscellany of information on expenses of security flotation, borrowing rates, availability of bank credit, and the (unsuccessful) attempts of government agencies to meet credit needs of small business. The second study, by P. R. Nehemkis, Jr., presents the results of an S.E.C. investigation of financing of small business in nine urban centers. These very interesting studies are reported in detail (Appendix 2), and a good summary of the findings is also provided (pp. 261-79).¹⁴

Economists are in uncommon agreement that growing managerial problems are a fundamental deterrent to the expansion of businesses. In *Bureaucracy and Trusteeship in Large Corporations* (monog. no. 11) this problem is addressed by two political scientists. The monograph opens with a survey of the size, diffusion of ownership, and separation of ownership and control in very large corporations. This secondary information is familiar to most economists, and requires no further attention here.¹⁵ The nature, structural and personnel causes of, and remedies for bureaucracy are then examined. The discussion is comprehensive and balanced, but the economist will regret the absence of economic categories (*e.g.*, in terms of stability of output, number of plants, diversity of products, etc.) and the almost complete absence of quantitative data.¹⁶ The final section deals with the trusteeship rôle of management. It is shown that executives have been well cared for and that the reciprocal treatment of stockholders of large corporations has been satisfactory, but that labor and customers have more reason for complaint. The latter portions of the monograph offer many specific and sensible suggestions for changes in corporate management.

In *Industrial Concentration and Tariffs* (monog. no. 10), Professor James undertakes several investigations of the relationships between tariffs and

¹⁴ There is also a statistical summary of the status of small business (pp. 248-59, Appendix 1), which again is duplicated in part elsewhere in this and other monographs. It is particularly difficult to understand why these two studies of section 3 were not combined into one.

¹⁵ Superior information on diffusion of ownership and officer holdings is now available in monog. no. 29, *Distribution of Ownership in the 200 Largest Nonfinancial Corporations*.

¹⁶ The chief exception is the measurement of morale by replacement rates (pp. 56 ff.), which leads to the premature conclusion that "the level of morale in large companies is at least as high as in small ones and that in all probability it is somewhat higher" (p. 58). The generalization is based on 20 industries in 1938, no attention is paid to the level of activity in various industries, or to the location of plants (one-company steel towns *vs.* metropolitan manufacturing centers), or to the level of wages in various lines, etc.

monopoly, as well as a study of the costs to consumers of the tariffs on sugar and rayon. He first compares the concentration ratios for 1,807 manufacturing products (see monograph no. 27) with their *ad valorem* tariff rates, and discovers that the lower concentration ratios accompany more restrictive rates (pp. 8-9). This is left unexplained; it may be due in part to the fact that the products with low concentration ratios are relatively more valuable and there is pressure from many producers for protection. Next, 317 products with concentration ratios in excess of 75 per cent are examined in more detail to discover whether tariff reductions would "partially offset monopolistic elements in domestic industries."¹⁷ It is found that this would occur in 27.7 per cent of the products (by value); the percentage varies by industries from 81.8 (nonferrous metals) to .37 (agricultural and automotive machinery). Finally, three chapters are devoted to specific industries (gypsum, flat glass, and borates). The choice of particular industries does not seem inspired.

Despite the discussion in the text and the 220-page appendix which describes certain characteristics of the 317 products, it is impossible to assess the validity of Professor James's findings. The data necessary for a rigorous analysis are obviously non-existent:¹⁸ the foreign and domestic supply and demand curves; the appropriate assumptions for cases of oligopoly; etc. And indeed we are not given even foreign and domestic prices, transportation rates, and similar more or less available data. The results are in any case only approximate,¹⁹ but the absence of supporting evidence makes this study much less valuable than it would otherwise be.²⁰

The last two chapters of Professor James's monograph are interesting digressions from the question of monopoly. The effects of the trade agreements program on the softwood lumber industry were analyzed in response to a senator's request, and it is concluded that these effects were adverse but small. The cost to consumers of the duties on sugar and rayon (together with the quota, in the former case) are estimated to be 274 million dollars and 70 million dollars per year, respectively (but customs revenues averaged 59 million dollars per year on sugar imports). The estimate for sugar seems fairly reliable, but that for rayon may be considerably exaggerated because of such factors as the lower quality of the imported goods.

Trade Association Survey (monog. no. 18) contains the most extensive study of American trade associations that we possess. The survey, which was based on questionnaires, covers more than thirteen hundred of the fifteen hundred national and regional associations (as of 1938), ranging from powerful industrial groups down to the defunct Mechanical Egg Beater Institute. Two introductory chapters and numerous tables (pp. 359-425) present information on

¹⁷ Three other classes are also considered: duties restrictive but monopolistic elements not significant, a small group; duties not restrictive, which contains two-thirds of the products by value; and free of duty, a very small group.

¹⁸ And, for that matter, are not even referred to in the monograph. A good introduction to the subject will be found in D. H. Macgregor, *Industrial Combination* (London, 1906), pp. 127-37.

¹⁹ And some are of course now obviously out of date: see copper (p. 212) and aluminum ware (p. 215).

²⁰ On the evidence, however, it is also impossible to reject these findings categorically, as the memoranda of the American Tariff League and the Home Market Club allege. For these memoranda and the authors' reply, see T.N.E.C. *Hearings*, Part 31A, pp. 18081-97, 18197-210.

industrial distribution, income, membership, activities, and staffs of these associations. The direct attempts to repress competition are twice treated, first in a disappointing running summary of 125 governmental prosecutions (chap. III) and then in a more detailed study of the once-powerful Sugar Institute. Indirect attempts to eliminate price competition by collecting and disseminating trade statistics in suggestive forms and by promotion of uniform accounting systems and cost studies are then discussed in almost exhaustive detail. A final chapter is devoted to other activities: technical research; standardization and simplification; trade promotion; labor relations; and governmental relations. This last section unfortunately does little more than mention the lobbying activities of trade associations. Readers who wish only a broad view of the subject will appreciate an excellent summary (chap. VIII).

The authors of this monograph are to be congratulated on providing a mine of information in a well-organized fashion. But it is unfortunate that no attempt was made to measure the effectiveness of these associations in restricting competition. At best this could have been done in only a very limited number of cases, but most of the assembled details will hang in air until this is done. The monograph has not contributed to our knowledge on such points as whether effective control requires large firms to police the industry, whether geographical localization of producers is necessary, or what degree of product heterogeneity is compatible with joint action. The authors, who show some sympathy with trade association objectives,²¹ wish to answer such questions, and to safeguard the public interest, by establishing another governmental bureau (pp. 354-58). The solution is not infallible.

GEORGE J. STIGLER

University of Minnesota

- No. 1: *Price Behavior and Business Policy*. By SAUL NELSON and WALTER G. KEIM. 1940. Pp. 419. 45c.
 No. 6: *Export Prices and Export Cartels (Webb-Pomerene Associations)*. By MILTON GILBERT and PAUL D. DICKENS. 1940. Pp. 310. 35c.
 No. 32: *Economic Standards of Government Price Control*. By BEN W. LEWIS, WARREN C. WAITE, DON S. ANDERSON, R. K. FROKER, ELLERY B. GORDON, WILLIAM Y. WEBB, DONALD H. WALLACE, ARYNESS JOY, and EDWARD S. MASON. Pp. 514. 55c.
 No. 33: *Geographical Differentials in Prices of Building Materials*. By WALTER G. KEIM and associates. Pp. 459. 55c.

The well-known reports of the Industrial Commission and the Bureau of Corporations of a former day were made in an intellectual and social climate represented by "contracts in restraint of trade," by a sharp division between competition and monopoly, and by a theory of monopoly price such as was diagrammed in elementary texts until recently, when newer approaches compelled a revision. The emphasis in those reports was on the history of great combines, the various types of collusion, and the resulting prices. The above publications,

²¹ This sympathy rests in part on the erroneous view "that competition, however initiated, encounters no natural force or circumstance that halts the movement [downward of price] at the level of cost and from the fact that there is no characteristic of the market that automatically corrects a competitive situation in which the members of an industry fail to cover their costs" (p. 346, also p. 46). Surely marginal cost offers a lower level to the price competition referred to in the first part of this sentence, and liquidation or bankruptcy is usually necessary to eliminate over-investment, the only condition under which the second "fact" arises.

identified with the Temporary National Economic Committee, reflect at least a twofold change: a new theoretical framework epitomized by monopolistic competition and an emphasis on general price patterns and the business cycle.

The monograph on *Price Behavior and Business Policy* deals alike with general principles and specific price investigations. After a brief chapter on the nature of pure and monopolistic competition comes a judicious discussion of the recent issues concerned with the rigidity and flexibility of prices, and then a fine chapter on non-price competition. Concluding Part I is a chapter on household electric appliances, illustrating some of the ideas of the preceding chapters and exemplifying an industry in its infancy only twenty years ago and now already confronted with the problems of a saturated market. Part II treats of the geographical price structure, outlining a variety of practices including the basing point system. Part III explores retail prices in the drug trade. It presents a wealth of data and throws light on non-price competition, resale price maintenance, and margins.

Apparently intended as a general introduction to the series or as a general account of the pattern of non-regulated prices, this monograph would probably have realized its purpose more fully if it had included a discussion of costs in relation to price behavior, of the impact of advertising on demand and costs, and of markets dominated by a few sellers. It is to be noted, however, that the study is of high quality, without simplifications or hasty generalizations, and with due regard to existing legislation.

Export Prices and Export Cartels deals first with general principles, stressing comparisons between export and domestic prices. The discussion is extended and illustrations are abundant, with the data based on a field investigation of seventy-six cases. The analysis does not break new ground. Part II gives in brief ten pages a useful account of foreign investments in this country. Part III, consisting exclusively of reproductions of relevant reports by the Federal Trade Commission (with needless repetition of the Webb-Pomerene act and of anti-trust laws in foreign countries), offers a wide miscellany of desirable information, ranging from existing legislation, proposed amendments, procedure, commodities exported, to a complete list of 120 export associations and their members.

The report on *Economic Standards of Government Price Control* examines the price-setting practices in three fields—electric utilities, milk and bituminous coal. The study is oriented to three basic questions: the underlying considerations governing the scale of prices set for the service; the pattern of prices for different categories of consumers and products, a subject that has received singularly little attention heretofore (see chapter VIII); and the relation of price policy to the business cycle.

Part I examines the work of three of the most effective public service commissions, in Wisconsin, Illinois, and New York, and, very briefly, the policies of the T.V.A. Some of the highlights are: the indisposition of commissions to experiment with lower rates as an inducement to a greater demand; insufficient effort to vary the rates with the movement of the business cycle; general uncertainty of what the courts will do; and a reluctance to indulge in theories of capitalization, of new objectives of rate making, or of the impact of policy upon the economy as a whole. To the commissions, evidently, sufficient unto the day is the evil thereof.

Part II traces the regulation of milk prices by the federal government and in five states—Oregon, California, Indiana, Wisconsin, and New York. The

reader gains a cumulative appreciation of the complexity of costs, prices, differentials, the interplay of group interests, the repercussions of policy in all directions, and the painful slowness of adjustments during which serious political reactions are possible. It is indicated that the regulation has generally benefited the farmers.

Part III gives a detailed account of federal legislation and techniques in the regulation of production and prices of bituminous coal. The conclusion is that the industry needs regulation, but that the legislation must be amended inasmuch as the process of price determination is too slow for adjustments to changing costs without a prejudicial lag. Part IV, written by Dr. D. H. Wallace, is an excellent 100-page résumé of the whole study, compact, clear, and marked by fresh viewpoints, by easy familiarity with issues, and by cogent discussions of points in theory.

Geographical Differentials in Prices of Building Materials offers for the first time an exhaustive account, based on a laborious field survey, of wholesale and retail prices of thirty-seven residential building materials in fifty representative cities throughout the country, for the period between January, 1935, and September, 1939. A separate chapter is given to each of the thirty-seven commodities, from asphalt to turpentine, with arrays of prices and monthly index numbers.

Many a use will be made of these and the other documents. It is hoped that one paramount use will not be neglected—a careful exploration of this abundant material for the formulation of social policies and controls superior to what we have at present.

M. M. BOBER

Lawrence College

No. 41: *Price Discrimination in Steel*. By JOHN M. BLAIR and ARTHUR REESIDE. Pp. 54. 10c.

No. 42: *The Basing Point Problem*. By THE FEDERAL TRADE COMMISSION. Pp. 151. 30c.

The two monographs on the pricing of steel are part of an elaborate treatment of the industry in the T.N.E.C. record, which includes five parts on steel in the official *Hearings* and nine studies presented by the United States Steel Corporation. The present review, though devoted primarily to the monographs, will make incidental references to these other materials.¹

To speak of the price of a ton of steel is similar to commenting about the price of weapons of warfare. Neither is sufficiently specific to have meaning. On the other hand, the pricing *policy* for steel products is something quite definite and amenable to general statement, despite the fact that there are thousands of different products of the many and geographically dispersed steel mills in the United States. Steel is sold on a delivered price basis, the quoted price for a particular quantity and quality of steel ordered by a particular customer being identical from all shippers to a particular location. The price is determined by the base price at the governing basing point, plus or minus the

¹ The materials presented at the hearings of the T.N.E.C. are available in two forms, (1) in Parts 18, 19, 20, 26, and 27 of the official *Hearings* issued by the Superintendent of Documents, together with additional materials in Parts 5 and 31, and (2) in vols. 2, 9, and 11 of the *Verbatim Record of the Proceedings of the T.N.E.C.*, published by the Bureau of National Affairs, Inc. Footnote references will be to the latter source under the form *Verbatim Record*.

uniform premiums or deductions for "extras."² As distinct deviations from the general practice, occasional price differences occur even within this uniformly followed system,³ and whenever such evidences of a lack of exact collaboration between all steel producers occur, there is lamentation on the part of the steel men who have lost sales to the price cutter,⁴ and even public censure of the guilty party for his practices of injecting a bit of price competition into the steel market.⁵

There is, therefore, no reasonable debate concerning how the basing point price system works in the steel industry, so far as its mechanical features are concerned. The basis for debate, for analysis, and for investigation lies within the realm of social values. The problem is one of determining whether this rigid, uniform delivered pricing system, with its identical quotations⁶ and its unwieldiness in the face of business fluctuations, is the best pricing system, if judged from a social point of view.⁷

For this debate to take the form of assuming that competition is good and that, therefore, the proponents of the system should prove the existence of competition and the opponents must prove its non-existence, is largely comparable to two belligerents diligently attacking two different straw men. The critics of the steel pricing policy carefully label their straw man "Competition" and then interpret such a term to mean price competition, and easily knock him over.⁸ The advocates of the steel pricing policy just as carefully, if threateningly encouraged, set up their man with a "Monopoly" label, then consider any effort to get business from another steel producer by means other than price differentials to be competition, and thereby dispose of the scarecrow.⁹

From a social point of view, the pertinent analysis of the pricing policy in steel should obtain answers to the following questions:

1. Does the cross-hauling which the system encourages cause economic waste?¹⁰
2. Does the practice of charging the government higher prices than are charged other large purchasers do the taxpayer an injustice?¹¹
3. Does the fact that the price system enables the large steel producers to determine the amounts of the various factors which go to make up the price of delivered steel permit socially undesirable concentration of power?¹²

² Cf. *Verbatim Record*, vol. 9, pp. 218 ff., pp. 288-89, pp. 309-10; *The Basing Point Problem*, T.N.E.C. monog. no. 42, pp. 101-02.

³ Cf. *Verbatim Record*, vol. 11, p. 387, pp. 390-91; vol. 2, p. 310; also *Price Discrimination in Steel*, T.N.E.C. monog. no. 41; monog. no. 42.

⁴ Cf. *Verbatim Record*, vol. 9, pp. 278-79 (Mr. Grace's testimony); vol. 11, p. 379 (Mr. Fairless' testimony); also vol. 2, pp. 312-13.

⁵ Cf. monog. no. 42, pp. 120-130; also *Verbatim Record*, vol. 2, Exhibit no. 358.

⁶ *Verbatim Record*, vol. 2, pp. 311-312; vol. 11, p. 387; monog. no. 42, pp. 50 ff.

⁷ An efficiency standard of maximizing output is the basic principle for the "social point of view" as employed in this connection.

⁸ From a strictly legal point of view *re* antitrust legislation, this problem of the existence of competition is of special importance.

⁹ For statements indicating the steel men's ideas of competition, cf. *Verbatim Record*, vol. 2, pp. 310, 315, 319, 347, and vol. 9, pp. 281, 283, 290.

¹⁰ For examination of the existence of "phantom freight," cf. *Verbatim Record*, vol. 2, pp. 316, 327, 342, 318; vol. 9, pp. 378-80; vol. 11, pp. 305, 320, 363, 365, 398-99, 377; monog. no. 42, pp. 34-36, 43, 63-74, 110-14, 116.

¹¹ Cf. monog. no. 41, pp. 28-29; *Verbatim Record*, vol. 2, p. 325; vol. 11, pp. 390-91 (Federal Trade Commission Study).

¹² Cf. monog. no. 41, pp. 25-28; *Verbatim Record*, vol. 9, p. 78; vol. 2, pp. 181-82 (testimony of Mr. de Chazeau).

4. Is the maintenance of a rigid price policy, with its attendant restriction of output and increased unemployment during the depression phase of the business cycle, defensible? Does this practice tend to accentuate the seriousness of the depression?¹³
5. Is there a net economic loss from the fact that the basing point system tends to offset the efficiency advantages of location?¹⁴
6. Does the fact that the delivered price of a ton of steel includes a railroad freight charge, even when it would be cheaper for other means of transportation to be used, cause justifiable increases in construction costs and justifiable discriminations against those who would wish to haul the steel in their own trucks or barges?¹⁵
7. Can the existence of "phantom freight" and switching charges in excess of the actual railroad revenues for such switching be justified through the process of balancing "freight absorption" and switching charges less than the actual railroad revenues against them?¹⁶
8. Can the fact that the present pricing system tends to prevent the elimination of the least efficient and most obsolete plants and equipment, and the expansion of the more efficient and modern, be justified on the count that it is well to have a certain capacity for emergencies?¹⁷
9. Is the demand for each steel product so inelastic as to justify a rigid price policy in the face of generally declining prices? Is the supply of steel produced at decreasing, average, or constant costs within the range of existing capacity?¹⁸

Much of the factual knowledge assumed in these questions, as well as bases for reasonable answers to the questions, can be obtained from the studies of the Federal Trade Commission, of the U. S. Steel Corporation, and of the various experts appearing before the Temporary National Economic Committee at the hearings on the steel industry.¹⁹ Two monographs²⁰ have been published in which is available a judicially chosen portion of these materials. Although it would be impossible to make a useful summarization or evaluation of these relatively brief synthesizing studies, there is point to a few statements regarding their contents.

In the monograph entitled *Price Discrimination in Steel*, a statistical and analytical study was made of a particular phase of the steel pricing system, namely, "the actual extent to which prices on particular items vary according to the size of the shipment."²¹ Although there is no pretense made by the authors that the study does more than present data concerning the "relationships be-

¹³ Cf. monog. no. 42, pp. 55-58, 48; *Verbatim Record*, vol. 9, pp. 206, 279, 311; vol. 11, pp. 239-41, 252 ff.

¹⁴ Monog. no. 42, pp. 16, 86, 121 ff., 133.

¹⁵ *Verbatim Record*, vol. 2, pp. 310, 313; vol. 9, p. 341; vol. 11, pp. 348, 354-55, 364, 368-69, 371, 399; monog. no. 42, pp. 34-36.

¹⁶ Cf. *supra*, references to "phantom freight." For examination of switching charges, cf. *Verbatim Record*, vol. 11, pp. 320, 363, Exhibit no. 2206.

¹⁷ Cf. monog. no. 42, pp. 130-33; *Verbatim Record*, vol. 11, p. 272 (testimony of Mr. Ezekiel).

¹⁸ Cf. monog. no. 42, pp. 11-28, 134-38; monog. no. 41, pp. 30-35; *Verbatim Record*, vol. 11, pp. 231-74.

¹⁹ Cf. monogs. no. 41 and no. 42. For more complete coverage, cf. *Verbatim Record*, vols. 2, 9, 11 (Iron and Steel Industry).

²⁰ Monog. no. 41, *Price Discrimination in Steel*; monog. no. 42, *The Basing Point Problem*.

²¹ Cf. monog. no. 41, Preface.

tween price concessions, size of shipment, and concentration of buying power" and point out "certain types of significance which they may have,"²² the findings are extremely useful to those who may wish to recognize readily a few of the contradictions in the elaborate report²³ of the U. S. Steel Corporation, as well as to obtain material for an objective answer to the question of price discrimination in steel sales. The study also emphasizes the desirability of examining the market situation for separate steel products rather than theorizing concerning steel products in general or using the technique of a "representative ton" of steel.²⁴

This monograph, after showing graphically the relationships of mill nets, net extras, and base prices to the size of the shipments, gives a brief exposition of the significance of these relationships to (a) the concentration of economic power, (b) the government, and (c) the economic arguments as presented by the steel industry. This statistical study reveals the tendency for steel companies to grant price concessions from the published base price to large buyers, with the significant exception of the government.²⁵ Such a policy tends to increase the concentration of economic power in those steel-consuming fields already dominated by a few large buyers, such as the automotive industry or the agricultural machinery industry. In addition, this practice places small purchasers at a competitive disadvantage with the large purchaser.²⁶ The federal government, on the other hand, even though it is one of the largest purchasers of certain steel products, is placed in a position of the "least favored buyer."²⁷ Not only does this discrimination against the government penalize the taxpayer through its direct or indirect effects upon the amount of funds needed for governmental projects, but it likewise makes governmental planning during an emergency period more difficult as published prices fail to reflect accurately the movement of actual prices paid.²⁸

This analysis of the price discrimination picture in the steel industry reveals the existence of several weaknesses in the elaborate study made for the U. S. Steel Corporation under the direction of Mr. Yntema.²⁹ Evidence that "sizeable price concessions for the apparent purpose of obtaining large orders"³⁰ are granted by steel companies tends to weaken Mr. Yntema's highly significant proposition that the steel industry operates under conditions of constant operating costs per unit.³¹ Likewise, the contention that freight absorption proves the

²² *Ibid.*

²³ Nine studies form parts of the report and are on file with the T.N.E.C. as Exhibits nos. 1410 to 1418, inclusive.

²⁴ Cf. reference to "ton of steel," *infra*, p. 589.

²⁵ Cf. monog. no. 41, pp. 28-30.

²⁶ *Ibid.*, pp. 25-28.

²⁷ *Ibid.*, p. 29.

²⁸ For range of concessions, cf. *ibid.* Also, *Verbatim Record*, vol. 2, pp. 309, 337; vol. 9, pp. 278, 303, 331-32.

²⁹ Just what portion of the credit and censure which this study calls forth is due Mr. Yntema is not clear. He was, however, the research spokesman for the industry at the T.N.E.C. hearings.

³⁰ Monog. no. 41, p. 31.

³¹ "On the basis of the assumption that variable costs are constant, the month of February 1939 saw large price concessions being made for the sole purpose of spreading fixed costs, amounting during that month to less than 25% of total costs, over a larger number of units. It seems at least questionable whether this greater diffusion of the distinctly minor element of fixed costs would constitute sufficient justification for the granting of price concessions so large that mill nets were reduced by amounts up to 50%."

existence of competition within the industry³² is thrown into a somewhat different light when it is revealed that large buyers get substantial price concessions from nearby mills, while small buyers who cannot get such concessions "shop around."³³

The monograph entitled *The Basing Problem* is a "compilation of exhibits offered as testimony by the U. S. Steel Corporation and the Federal Trade Commission on the basing point problem,"³⁴ prepared by the Federal Trade Commission. Although the letter of transmittal³⁵ from F.T.C. indicates that this study directs itself primarily to the question, "Does the basing point system eliminate price competition or doesn't it?", the contents of the monograph afford cogent information valuable as a source of answers to the basic social questions mentioned at the beginning of this manuscript. It is interesting to note that, while the U. S. Steel Corporation study maintains the thesis that the basing point system does not destroy, but rather implements, competitive practices,³⁶ some of the spokesmen of the steel industry claim that price concessions, price cutting, etc., from the base prices give evidence of the existence of competition, admitting that if such practices did not exist there would be monopolistic practice within the industry.³⁷ Although such contradictions are interesting, and may be a measure of the relative understanding or relative honesty of the various parties, the main contributions of this monograph are more basic than these eristics.

The final sentence in Exhibit no. 1410 of the U. S. Steel Corporation's study³⁸ reveals the stand taken on one of the basic issues: "In brief, the steel industry has efficiently performed its function in the national economy, has materially assisted in the development of this country and has ever been prepared to meet the needs of the nation in each forward surge of prosperity as well as in times of national emergency." It is this latter point, *i.e.*, "in times of national emergency," to which Mr. Yntema directed his efforts in an unconvincing fashion. As he stated, "It has been charged that steel prices have remained firm in the face of falling demand, and as a result production and payrolls have declined drastically. This is a serious indictment."³⁹ It is an established fact⁴⁰ that production and payrolls in the steel industry did "decline drastically" in the face of rigid prices and falling demand. Mr. Yntema's defense was simply that the

Cf. monog. no. 41, p. 31; monog. no. 42, pp. 22-24; also p. 32 for graphic presentation of effect of variations in capacity utilization upon man-hours required per unit of output. Also, p. 49, Table 6, for data used in charts. (These last two references compare the man-hour variations in steel, cement, and brick and tile industries.)

³² Cf. *Iron Age*, August 22, 1940.

³³ Cf. monog. no. 41, p. 33.

³⁴ Monog. no. 42, p. III.

³⁵ Monog. no. 42, pp. XI ff. Transmittal by W. J. Ballinger, Director of T.N.E.C. Studies for the Federal Trade Commission.

³⁶ *Ibid.*, pp. 6-8 and 50-58.

³⁷ Cf. *Verbatim Record*, vol. 2, p. 311, (testimony of Mr. Irvin); vol. 9, p. 278, (testimony of Mr. Grace); vol. 11, p. 379, (testimony of Mr. Fairless); *New York Times*, October 28, 1938, (testimony of Mr. Grace); also monog. no. 42, pp. 141-48.

³⁸ Monog. no. 42, p. 30.

³⁹ *Ibid.*, pp. 11 ff., 48; *Verbatim Record*, vol. 11, pp. 309 ff.

⁴⁰ Even though posted prices cannot be taken as the sole criteria for judging the stability of steel prices, these prices have remained stable relative to most other prices and the fluctuations in the industry's production and employment have been remarkably great. Cf. statistics of steel industry, *Verbatim Record*, vol. 9, pp. 206, 279; vol. 11, pp. 239, 241; U. S. Steel Corporation, *Steel Prices, Volume and Costs, Summary*, October, 1939, p. 5.

steel industry could not help it, and used that as a denial of its validity. If the contention that the steel industry could not do anything about a rigid price and output reduction policy and still operate on a profit basis is sound, the conflict between scarcity economics and efficiency economics is clearly joined.

Since the basis for much of the conclusions of the U. S. Steel Corporation's study is the nature of the demand and supply for steel, a few salient points of evaluation might be listed as evidence of the need for careful analysis before using this study as a point of reference:

1. Even if one recognizes the difficulty of a separate demand and supply analysis for each of the various major steel products, it is nevertheless doubtful whether an analysis based on a representative "ton of steel," which treats the demand for steel rails and the demand for tin plate as parts of a homogeneous mass demand, can be considered valuable. One T.N.E.C. expert refers to this "ton of steel" as a "heterogeneous . . . non-descript . . . theoretical hash of varying composition. . . ."⁴¹
2. It may be assumed that the demand for practically all of the various steel products is a derived demand and also that the price of steel forms, in most cases, a relatively small portion of the cost of the finished product of which it is a component part. Likewise, Mr. Yntema's contention that the demand for this "ton of steel" is inelastic may also be considered valid, even though his measure of elasticity applies only to the hypothetical "ton" and not to any particular steel product. However, for Mr. Yntema to use this measure of demand for the industry as being the same for one firm (U. S. Steel Corporation) in the industry is questionable tactics, especially since he denies the monopoloid situation and insists that U. S. Steel is but one of many competitors in the field.⁴²
3. Certainly the inelasticity of demand for steel cannot justify or explain a pricing policy of a single corporation in a competitive industry, unless that corporation wishes to maintain rigid, uniform prices and thereby avoid price competition.
4. In this treatment shifts in demand curves were ignored, thereby vitiating the practicability of considering the analysis as suitable to a dynamic situation. Likewise the study failed to take into consideration the extent to which the activity of the steel industry in production and prices would influence and even determine the activity of industry in general.⁴³
5. In the elaborate examination of the costs of producing steel, there is a contribution in making available data on actual mill-nets and in the recognition of the unimportance of published prices so far as individual transactions are concerned.⁴⁴
6. The contention that distribution costs in steel are proved not excessive by the fact that freight absorption, plus selling expenses, plus advertising and promotional costs for steel are less than just the selling expenses and advertising and promotional costs of nearly every other industry,⁴⁵ does not give any evidence concerning whether steel distribution costs are excessive or not. Incidentally, the study revealed that actually over one-fourth of the industries examined showed lower costs of this type and the

⁴¹ *Verbatim Record*, vol. 11, p. 261.

⁴² Cf. Exhibit no. 1411 on file with the T.N.E.C.; monog. no. 42, pp. 12-16, 124.

⁴³ *Verbatim Record*, vol. 11, p. 237.

⁴⁴ *Ibid.*, p. 241.

⁴⁵ Monog. no. 42, p. 29.

bulk (70 per cent) of those higher were consumers' goods industries where advertising is of major significance.

7. As in the case of the demand analysis, Mr. Yntema makes a study of the costs of the U. S. Steel Corporation and then treats the figures as representative of the cost conditions of other firms in the industry. Also, no actual costs of an actual individual plant for an individual product were used.
8. Mr. Yntema's contention that the inelasticity of demand for the products of the U. S. Steel Corporation, plus the fairly constant costs of producing at various degrees of capacity, leads him to recommend that the U. S. Steel Corporation maintain prices and drastically reduce wages during a depression. One of the tables in the study shows that when output is almost quadrupled, total costs are slightly more than doubled. It would seem that such figures might warrant another policy recommendation.
9. Despite the contentions of Mr. Yntema, it seems merely an illusion to maintain that, at any stage of output, the great bulk of U. S. Steel costs varies directly with the number of tons of steel produced.⁴⁶

These points of criticism of the U. S. Steel Corporation study are but a few of the many that can be made. In fact, the analysis by the experts of the Federal Trade Commission⁴⁷ in monograph no. 42 is composed of a more detailed exposition of some of these, as well as of others.⁴⁸ In all fairness, however, it should be stated that the lack of objectivity and/or the remote relationship between the facts as presented and the conclusions deduced from these facts in the U. S. Steel Corporation study should not blind the student of the steel industry to the valuable contribution that has been made to statistical and general pricing (monopoloid) literature.

EDWARD C. WELSH

Ohio State University

No. 37: *Saving, Investment, and National Income*. By OSCAR L. ALTMAN. 1941. Pp. 127. 20c.

No. 12: *Profits, Productive Activities, and New Investment*. By MARTIN TAITEL. 1941. Pp. 180. 35c.

No. 25: *Recovery Plans*. By ARTHUR DAHLBERG, HON. ROBERT G. ALLEN, HON. THOMAS R. AMLIE, HON. JERRY VOORHIS, GEORGE B. GALLOWAY, IRWIN S. JOSEPH, JOSEPH M. LURIE, STERNE MORSE, and SAM D. SCHEARER. 1940. Pp. 251. 30c.

Saving, Investment, and National Income is in large part a summary of the hearings on this subject before the T.N.E.C. during May, 1939, though its author has used some other materials and has altered the emphasis somewhat.¹ The analysis is cast in a form that has recently become familiar. The problem of attaining and maintaining full employment is the problem of securing sufficient investment outlets for all the savings that would be made out of the income

⁴⁶ *Verbatim Record*, vol. 11, pp. 274 ff.

⁴⁷ W. B. Wooden and H. E. White of the Federal Trade Commission prepared that portion of monog. no. 42 which constitutes a criticism of the Exhibits nos. 1410 and 1418. This criticism, although of necessity brief and somewhat disconnected because of the scope of the treatment, is ably done and more pertinent than some of the evaluation presented by experts in the T.N.E.C. hearings themselves.

⁴⁸ Monog. no. 42, pp. 91 ff.

¹ See Part 9 of the *Hearings*.

produced under full employment. And the greater the propensity to save, the greater is the problem of maintaining adequate investment outlets. "The intoxication of a national defense program must not obscure the fact that the United States did not solve this peacetime problem. The problems of attaining full employment, an unbroken circulation of income, and a stabilized, high level of economic activity have been shelved, not solved. They will reappear" (p. ix).

After stating the problem in terms of saving and investment, Mr. Altman presents qualitative and statistical analyses of savings, the rôle played by financial institutions through which savings flow, and investment outlets in the United States. In analyzing savings, he finds that the propensity to save is greatly increased by the concentration of individual wealth and income, by liberal business allowances for depreciation, obsolescence and depletion, and by corporate policies of retaining large amounts of net earnings in periods of prosperity. To an increasing extent savings are being entrusted to financial institutions rather than invested directly. This is likely to have several important consequences. One is to place increased control over the flow of savings in the hands of a few managers of great financial institutions, such as the insurance companies. Another may be to decrease the supply of venture capital, owing to the conservatism of the managers of these institutions and to government limitations on the types of securities eligible for purchase by trust funds, insurance companies and savings banks.

After analyzing savings, Mr. Altman turns his attention to investment and the other ways in which savings can be utilized to maintain national income. In the first part of this section he sets forth Lauchlin Currie's classification of outlets for, or offsets to, savings and presents the best available statistics relating to their magnitude and variations since 1920. In the second part he discusses the principal factors governing the level of investment. These, he believes, are the growth of new industries, the growth and migration of population, changes in the productivity and prices of capital goods, monopoly and restraint of competition, and the organization of the capital markets.

On the question of the adequacy of investment outlets in the future Mr. Altman's emphasis in this monograph differs somewhat from that in Part 9 of the T.N.E.C. *Hearings*. In the *Hearings* the examiners and witnesses were very pessimistic, contending that the propensity to save promised to remain high while the demand for savings was likely to be low, owing principally to the decreased rate of population growth, the passing of the frontier and of opportunities for large foreign investment, and the probable inadequacy of important new inventions. They agreed that we face "secular stagnation" in the absence of an active government program designed to take up the slack. Mr. Altman agrees that this is a real possibility and even a probability, but he is much more cautious and admits that investment outlets may prove to be sufficient.²

The monograph presents an excellent general survey of the interrelations among savings, investment, and national income. It brings together the best statistics available on these subjects, states clearly the necessary relationship between savings and investment if full employment is to exist, and discusses some of the most important determinants of savings and investment. It should

² Mr. Altman's statements here are somewhat more guarded than were his statements in the *Hearings*. A footnote to p. 94 suggests that this shift of emphasis may be traceable to the criticisms that have been levelled against the views presented in the *Hearings*. For these criticisms he refers his readers to Machinery and Applied Products Institute, *Saving and Investment in the American Enterprise System*, Chicago, 1939; and H. G. Moulton, G. W. Edwards, J. D. Magee, and Cleona Lewis, *Capital Expansion, Employment, and Economic Stability*, Washington, 1939, especially chap. IX.

prove useful to economists who are not specialists in this field and as supplementary reading in business cycle courses. But specialists in the field will find here almost no points that have not been made before and will note the omission of several points that would have enlightened the analysis, especially the analysis of investment. Those who retain their faith in the efficacy of interest-rate changes will be struck by the failure to mention the possibility of maintaining investment by lowering interest rates.

Monograph no. 12, *Profits, Productive Activities, and New Investment*, deals with corporate profits and corporate absorption of savings and is largely statistical in nature. Here are assembled large amounts of valuable factual material relating to total corporate profits, rates of profits, profit margins, the proportion of profits saved by corporations themselves and by the receivers of dividends, corporate dissaving in depression periods, the relative magnitude of savings out of corporate profits and of corporate "absorption" of savings, and the relationship between the height of current corporate profits and the rate of absorption of savings by corporations. Mr. Taitel has performed a useful service in bringing together this material. Much of it can be used by economists to shed light on many types of economic problems, including those of saving and investment.

The significance, and even the validity, of some of the discussion in this monograph is subject to question, however. Many economists will not agree that, "In brief, expansion has at no time since 1913 been limited by shortages of funds" (p. 130). Nor will they accept the statement that, "The important point, however, is that, under the existing pattern of income and wealth distribution, the national income must rise at a fairly rapid rate or decline. There are no intermediate positions" (p. 133). And the long discussion (pp. 81-122) of the relationship between rates of corporate profit and the rate at which a corporation "absorbs" savings in investment is of doubtful value. Since new investment goods are demanded (for replacement or expansion) for the revenue that they are expected to yield in the future, one would not expect to find a high correlation between rates of new investment and current profit rates on capital already invested. There is need in analyzing the effect of profits (and also decisions about price policy) to distinguish the immediate conditions which control the timing of action from the conditions which give rise to long-run policies and control the amount and direction of action. Mr. Taitel misses this distinction.

As its name indicates, monograph no. 25, *Recovery Plans*, deals with the many types of plans that have been proposed for inducing and then supporting business recovery. Some of these are already well known; others were selected from among the more than two hundred recovery plans submitted by their authors to the T.N.E.C. and are here given a wide circulation for the first time.

The monograph is divided into seven parts. Part I, which was written by Arthur Dahlberg, contains brief descriptions and briefer evaluations of the major types of recovery plans that have been proposed. Here are discussed various types of government spending programs, government lending and insurance of loans, the Townsend and other similar plans, the issue of "costless money," social credit, "dated money," incentive taxation, restoration of "confidence," and abolition of debt contracts which are alleged to be a "burden on the economy." In Parts II-VII, inclusive, six recovery plans are described and recommended by their authors. Two of these would promote recovery and maintain prosperity by central economic planning, one by the abolition of long-

term debt contracts, one by the redistribution of purchasing power through taxation, one by the establishment of dual or parallel economic systems, and one by government ownership and operation of utilities.

This monograph succeeds in presenting a general survey and classification of the various types of recovery plans that have been proposed and in suggesting the types of business cycle theory on which they are based. But it will not be of much assistance to public officials seeking expert guidance in policy formation. Part I is too brief to allow an adequate description or careful evaluation of the many plans reviewed, and most of the plans presented in the latter part of the monograph are based upon very incomplete understandings not only of business cycles but also of economic processes in general.

LESTER V. CHANDLER

Amherst College

No. 22: *Technology in Our Economy*. By H. DEWEY ANDERSON, LEWIS L. LORWIN, JOHN M. BLAIR, assisted by RUTH AULL. 1941. Pp. 313. 35c.

In this monograph, the authors—Dr. Lorwin, by way of an historical survey of the literature on the subject of technological unemployment; and Mr. Blair, through a study of "technological advance and the compensatory forces"—seek to provide a basis for economic interpretation of the testimony given before the T.N.E.C. in its hearings on technology (Part 30).

Lorwin's review is of rather uneven quality. The sections on nineteenth century thought (pp. 5-33)—containing, *inter alia*, a cogent, though somewhat recondite, proof that Marx's cycle-theory *was* his displacement-theory—are quite well done. But chapters II and III (pp. 33-83), covering the literature since 1900 (mainly, since 1920), are less satisfactory. Of these 50 pages, he devotes 75 per cent to a tedious discussion of recent "productivity" studies; and, beyond noting their existence (p. 43), utterly disregards the really important contributions—*viz.*, the combined theoretical and statistical analyses made by various economists (Hansen, Lowe, Neisser, and, especially, Schumpeter) of the rôle played by technical progress in the post-war cyclical movements. He might with justice have given most of his space to an appraisal of these analyses. Its omission constitutes a serious defect in his work.

A similar neglect partly vitiates Mr. Blair's study. Blair is really concerned to present (in so far as they relate to technological matters) the evidence and, so he believes, the logic which tell on Hansen's side in the great debate about "secular stagnation." The fact-gathering is an excellent job. Representative samples of all pertinent types of data have been assembled and presented in readable form; and I have little doubt that—at least, when interpreted in the light of certain plausible views on the workings of present-day economies, some advanced by Hansen, some by those who ultimately disagree with him, *e.g.*, Schumpeter—they lend some support to the thesis of stagnation. But I question whether, on his own reasoning, Blair is entitled to think so.

His argument comes to this: The steady introduction of labor-displacing techniques and the high (aggregate) propensity to save which characterize our economy will lead to chronic depression unless they are offset by increases in: (1) the stock of "industry-creating" inventions; and/or (2) the rate at which the latter are exploited; and/or (3) the level of consumption-demand.

But, the argument runs, with respect to (1): Although a vast number of new techniques seem to be "in the making," business men expect few to emerge in the immediate future, and the rest, whenever they do so, may well be innovated

with relatively small capital outlays; while—this relates to (2) and (3)—the widespread growth of monopoly (itself a product of past technological trends), by fortifying entrepreneurial resistance to capital obsolescence, eliminating price competition, and depressing wages, will check the pace of innovation and impede compensatory, *i.e.*, demand-stimulating, adjustments to the few which are made. On all counts, therefore, "it seems likely that . . . unbalance will continue and become even more pronounced" (p. 220).

Several questions might be raised about the theoretical premises of this argument. For example, will laws binding upon monopolistic units in a competitive universe still hold in a "world of monopolies"? and is perfect price-flexibility always a good thing? But let us assume the author is correct; that the anticipated rate of invention is declining; that monopolists will suppress whatever inventions they can corner; etc., etc. Does it follow that stagnation is in the cards?

Not necessarily. In the first place, as Hansen and most "Keynesians" have emphasized, decreases in the anticipated rate of invention (= decreases in the anticipated rate of obsolescence) tend to *increase* the rate of investment, increases tend to reduce it. What stimulate expansion *via* new industries are increases in the number of unforeseen (or dimly foreseen) inventions; exactly the development one might expect from Blair's evidence. Since these are also the inventions least likely to fall into a monopolist's hands, one might even conclude that his report on the prospects for "industry-creating" innovations is quite encouraging.

And, secondly, given—what Blair suggests time and again (pp. 179, 181, 219)—that such innovations will (generally) save capital in the Hicksian sense (*Theory of Wages*, pp. 121-22) the while they reduce the optimal scale of operations in various industries, they will also act to eliminate his other causes of "unbalance"; restoring price-flexibility by facilitating a return to free competition at the same time that, through shifting factorial productivity-ratios to the benefit of labor and decreasing the degree of monopoly, they raise the share of the national dividend going to the low-income groups, and thus reduce the rate of investment needed to maintain any given level of economic activity.

I do not myself think that the emergence of such technological changes would necessarily make for "balance" in economic relationships. But on Blair's showing it ought to do so. That his analysis does not "conclusively prove the thesis of imbalance" seems less "due . . . to the paucity of data available" (Kreps, Letter of Transmittal, p. xiii) than to an inadequate theoretical treatment.

ROBERT J. LANDRY

Amherst College

No. 3: *Who Pays the Taxes?* By GERHARD COLM and HELEN TARASOV. 1940. Pp. 55. 10c.

No. 9: *Taxation of Corporate Enterprise*. By C. J. HYNNING and GERHARD COLM. 1941. Pp. 216. 60c.

N. 20: *Taxation, Recovery, and Defense*. By H. DEWEY ANDERSON. 1940. Pp. 374. 35c.

The authors of the first of these monographs have attempted, through an analysis of the shifting and incidence of the various federal, state, and local taxes, to ascertain their allocation among the ten consumers income groups into which they have divided the American public. The over-all picture thus recorded supplements such inquiries into the impact of the tax system as are to be found

in, say, the Twentieth Century Fund *Studies in Current Tax Problems*. In estimating the distribution of personal incomes extensive use is made of the National Resources Planning Board's publication *Consumer Incomes and Consumer Expenditures in 1935-1936*, as well as the Department of Commerce figures of national income.

The results of the study may be summarized as follows: Federal taxes, measured as percentages of income, impose an approximately flat-rate burden on incomes up to \$10,000, with a slight regression for incomes below \$5,000 and with a slight progression above \$3,000. Beginning at \$10,000, the progression increases substantially. State and local taxes hover in the vicinity of 10 per cent of the aggregate income of each income bracket except the lowest where they amount to 14 per cent. Generally speaking, the total American tax pattern is regressive at its lower end, nearly proportionate through all the middle brackets from \$1,000 to \$5,000, and increasingly progressive from there on.

The authors emphasize the fact that this analysis, depending as it must upon data which oftentimes is inconclusive or fragmentary, cannot lay claim to a high degree of accuracy. Nevertheless, they do maintain that the results indicate with a high degree of probability the contemporary distribution of the tax burden. This report may be thought of as a scouting expedition exploring unmapped territory in order to delimit known and unknown regions, offering a partial guide and presenting a challenge to explore areas still uninvestigated.

Mr. Hynning, in his analysis of the taxation of corporations during the last twenty-five years, has assembled vast quantities of statistical and historical information which give to his monograph an unusual richness of factual information. Materials which formerly were either not available, or to be had only with the greatest of difficulty, are now brought together in this single volume. The materials are assembled for the purpose of determining the effect of taxes upon corporations of varying sizes, types, and profitability.

Mr. Hynning holds that the tax system should be meshed with those broad social and economic policies which have been accepted by the nation. This desideratum is in his opinion of equal importance with that of raising revenue. Corporation tax policy is therefore appraised in the light of its effectiveness as a technique of governance.

The study concludes that the existing federal tax system contributes nothing to the resolution of the monopoly problem; that it encourages debt financing rather than equity financing; and that the capital stock and excess profits taxes have failed in their aim. On the other side, the national fiscal system encourages agricultural coöperatives, various forms of mutual and life insurance companies, and operators of oil and gas wells. Until recently federal corporation income taxes tended somewhat to favor holding companies.

The author's use of the term regressive may prove confusing unless one is constantly vigilant. The term is given three distinct meanings; in some cases it refers to a tax which falls more heavily upon small than large businesses; in others, it is a tax which weighs more upon the less profitable than upon the more profitable corporations; and, finally, it indicates those taxes which are passed on to the consumer in the form of higher prices. There are probably those who will hesitate to accept the author's basic premise that taxation should perform a dual function. Many will hold that the task of raising revenue is sufficient in itself; that to attempt to control socio-economic activities while striving to raise revenues is apt to achieve neither objective.

Dr. Anderson's investigation is the basic study in the T.N.E.C.'s series of monographs analyzing the rôle of taxation in the modern economy. The report is arranged in the following four sections: dynamics of the economy; the needs of government; the American revenue system; and the social-economic effects of the revenue system. As the author states this design seeks to fix the place of taxation in the economy in terms of the problems of idle men, idle machines, and idle capital. The report is so comprehensive in nature, extends over so wide a field of inquiry, and introduces such voluminous testimony that at best one can but touch upon certain limited sectors of the study. This unfortunately works an injustice.

Mr. Anderson is convinced that unless the American tax system is substantially revised it will constitute, as debts mount and expenditures increase, a threat to economic stability. The recommendations for improving the tax system fall into two general classes: those fundamental reforms which will require drastic changes in the interrelated tax systems of the different government units, and those specific detailed changes in tax statutes which can be made without regard to fundamental reform. Such a program will be time-consuming and must be modified to meet changing conditions.

The reforms of the first type can best be promoted by creating a fiscal unit of the Federal Budget Bureau with the task of collecting data and coöperating with other departments in a long-range, careful attack upon tax problems. The basic reforms in the federal system revolve around an effective income-tax structure, supplemented by certain levies upon business privileges. Through a thorough-going revision of income, estate, profits, and gift taxes, with proper credits to states participating in the combined program, a sound tax system can be developed to aid in stabilizing the economy. The failure of the property tax to recover its importance requires that basic reforms in the state system be instituted. Dr. Anderson looks with some favor upon the adoption of an "added value" tax on state corporations and businesses, property income taxes and certain registration and control taxes to regulate business activities.

The acceptance or rejection of many of Dr. Anderson's proposals will depend upon one's acceptance or rejection of his analysis of the problems of the economy as set forth in the first section of the report. He states that the American economy has fast approached a state of economic maturity. In the opinion of the reviewer many of the statements presented in this section of the study are oversimplifications. As a case in point it is stated (p. 4) that the physical frontier has been reached. As Hansen points out (*Fiscal Policy and Business Cycles*, p. 44), "it is well to emphasize that the economic frontier must always be conceived of not in terms of its own boundary but in terms of the possibility of capital investments throughout the world." One may question the statement that the spread of technology to foreign countries was a *major* factor in the decline of our foreign trade (p. 5). Also, in treating the problem of housing, a discussion of the building construction cycle would have been pertinent. The frequency with which the lack of mass purchasing power is referred to permits one to infer that "underconsumption" occupies an important position in the author's analysis of economic instability.

When treating controversial topics, which incidentally occupy many pages, Dr. Anderson presents the arguments of the opposition and then proceeds to refute them. This not only brings together much interesting material but gives to the study a moving quality that frequently is absent in similar reports.

J. M. McDANIEL

No. 31: *Patents and Free Enterprise*. By WALTON HAMILTON. 1941. Pp. 179. 25c.

This monograph should be read in conjunction with Parts 2 and 3 of the T.N.E.C. *Hearings*. Taken together, these documents contain a wealth of information on the significance and problems of the patent situation in the United States; and the remedies proposed for these defects in law, procedure, and economic incidence. In nine chapters and some 175 pages, Professor Hamilton has given a brilliant analysis of patent development, the need for immediate change in the system, and a method of achieving it. Unlike most government monographs and reports, this has an attractive, quotable English style, which leads one to hope that it will be widely read.

After a short discussion of invention and its function, the author traces some of the details of the rise of the grant of patents both in Europe and America. He then shows how, after the Civil War, under the complexity and difficulty of operation of large-scale business, the patent grant assumed large significance for the continuance of private business at the expense of public interest. In three ways it acted to restrict and modify individual enterprise: (1) the inventor passed into the background, (2) the field for individual talent was restricted, (3) the nature of invention was transformed into group research and invention in large corporation laboratories. Invention was then directed and controlled, and often resulted only in refinements which would not cause obsolescence to existing plant and equipment. With large-scale business and concentration, government took the offensive and attacked trusts. The latter in defense completely remade the usages originally intended to give protection to the individual inventor, and tried to convert the privilege decreed for the invention, by many ingenious devices, into an immunity for the business. In the face of this conduct, the courts were confronted with the task of formulating interpretation of the law to conform to public interests.

Against this background and interpretation a path is traced—in two chapters on alternatives for the law, and the grant as shield and sanction—through the conflicting maze of judicial decisions. As a result, one sees that the emergent law of patents comes from two opposing lines of development, one severely limiting the exclusive right of the invention and the other giving the patentee all the reward he can gain through freedom of contract. Today, Professor Hamilton concludes, the court has the liberty of shaping for good the law of patents.

Realizing that examples are required to convince, the author treats the patent situation in the telephone industry, the electric light industry, the foreign control of beryllium patents used here, the glass container industry, and the automobile industry. In this part he relies, as all writers must, on the raw material contained in the hearings of the T.N.E.C. and other official committees. He shows how patents have promoted monopolies and how, in some cases at least, the original grant may have been in reality invalid. He indicates the differing policies of the automobile industry which, by cross licensing and patent pools, has adopted a method more in accord with public interest than the glass container industry, with its narrow monopolistic attitude in licensing or leasing its machinery. He thinks the record of Ford especially to be commended. Ford regards technical novelties as common knowledge, he takes what he wants and licenses freely, he does not exact and refuses to pay tribute, he brings no suits for infringements and fights those brought against him.

Finally, after an analysis of the defects of the Patent Office procedure and process, due to the inadequacy of the law and the smallness of Congressional

appropriation, the author discusses a policy for the national economy. In so doing he goes more deeply than the recommendations of the Commissioner of Patents and the Science Advisory Board. With a less legalistic approach than is found in the suggestions of Willis B. Rice of the New York University School of Law, Hamilton also deals with the matter more incisively and constructively than Morris D. Forkosch of the New York Bar, and with more imagination than the as yet unpublished report of the study of patents sponsored by the National Industrial Conference Board, the National Association of Manufacturers, and the now-deceased American Engineering Council.

Hamilton's recommendations are in the direction of a conscious policy after years of neglect. He adopts all the recommendations of the Science Advisory Board, Commissioner of Patents Conway P. Coe, and the T.N.E.C. report. But these are on the easy level of administration. Further, Hamilton asks for more money for administration, and suggests a tax on successful patentees. He urges that all documents based on patents be made public records filed with the Federal Trade Commission. The courts should also draw a definite line between the patent privilege and the general law. With respect to pooling of patents, conditions will differ between industries. But in any case there should be governmental authority and supervision of licensing. Though he endorses the idea of a special court, Hamilton would ask the Supreme Court to revise its present rule of review. Since patent law is public law, he proposes to set up, in the Department of Justice, a Public Counsel on Patents with general supervision over patent grants and all patent litigation. But more fundamental, Hamilton urges the setting up of a general commission of inquiry to define norms of patentability, the revision of the time period of patent, probably downward, with differing periods for various types of innovations, a definite policy regarding concentration of economic power to enable free enterprise to survive, a speedy disposition of applications, publicity of patent applications, more thorough investigation, endowment of the Patent Office certificates with finality, and inclusion in the recommendation by the Commission of a code governing the use of patents "to make an advancing technology an instrument of the general welfare." We cannot stand any longer the current patent usage as a dominant factor in regimenting the industrial system, which must be more flexible to ward off, and adapt our economy to, the shocks of war and depression.

With Mr. Hamilton's thesis in the main this reviewer is in complete agreement. Yet he cannot avoid feeling that economists, and even professors of law, should give rather more heed to those who have proved themselves public spirited citizens of the Republic in administering large scale enterprise. The testimony in the T.N.E.C. hearings—though skillfully arranged in a sequence to prove a case on which leading members of the T.N.E.C. staff, at least, had their minds made up in advance—still does indicate that in many cases patent practice is conducted on a higher plane than might be inferred from much writing on the subject. Progress in reform will be made by coöperation of all parties. In these days of stress, appeal to the common welfare may well bring adequate support of a great revision in our patent system with permanent good for our whole economy.

RUDOLF A. CLEMEN

No. 26: *Economic Power and Political Pressures*. By DONALD C. BLAISDELL and JANE GREVERUS. 1941. Pp. 222, 25c.

It is appropriate that the "Investigation of Concentration of Economic Power" should include a study of the impact of this economic power upon the political process. In *Economic Power and Political Pressures*, Donald C. Blaisdell has presented an illuminating and even impressive picture.

The monograph opens with an excellent analysis of the difference between the legal but usually latent power of government, and the actual and dynamic control often exercised by business. The subsequent and major argument is in a frame of reference which interprets political events as largely reflecting a struggle between government as representing the public interest and business as selfish and often predatory. The interests of agriculture and labor are—with a characteristic New Deal slant—tacitly subsumed under the heading "public interest." Dr. Blaisdell follows Herring and Hamilton in calling attention to the activities of pressure groups in connection with the administration and the courts as well as with Congress. His own experience as an administrator has made him well aware of the intimate relationship between a government agency and its pressure group clientele—and the support which the latter may give to appropriations and favored legislation. Congress comes off rather well, especially as compared with the rather inert general public.

There follows a series of chapters which represent case studies of the major thesis. In the assembling in one place of the many episodes, and in the weaving of them into a consistent and documented picture lies the major contribution of the work. The chapter headings will suggest the scope: Industrial Relations, Tariffs and Taxes, Banking and Insurance, Utilities and Railroads, Shipping and Air Transport, Agriculture and Distribution. Hearings before Congressional committees have been the chief source of material; but other sources, including the publications of the lobbies themselves, have been ransacked.

After such a wealth of material, the dearth of concrete recommendations is somewhat disappointing. Virtually these recommendations narrow down to registration of lobbies under a commission and rejection of the Walter-Logan bill. There are also expressions of general sympathy with planning, governmental research, and better administration. Perhaps this failure to be more concrete is itself a reflection of a need for an analysis still more fundamental.

Repeatedly attention is called to the self-identification by each of these groups of their activities and success with the general welfare; yet the full implications of this are scarcely realized. The explanation of such self-identification lies, not in an inherent malevolence of business, but in the sociology of the partial experiences of any economic group in a specialized economy. These inevitably result in a reinforcing and rationalizing of prejudices. Especially is this true when the dominant culture pattern or climate of opinion is still individualist. In citing the opinion of Tugwell on the need of integration to combat such dispersiveness, the author skirts the edges of a possible answer. In such a situation the challenge to the political scientist is to suggest institutions which will weight the scales in the direction of a lessening of the partial experiences and toward the emergence of an integration freely and intelligently adopted.

It is in this connection that the author goes astray most seriously. The partial experiences of labor or agriculture do not guarantee such integration. They may merely result in legislation limiting crops or restricting output or underwriting the irresponsibility of a union. These policies are the actual political, if not the economic, counterpart of the justly censured efforts of many business men. Labor

and agriculture are now permanently articulate and powerful, if the experience of every industrial nation is any criterion. The time is therefore ripe to approach the problem, not in terms of "business versus government," but in terms of responsibility and function—for business, labor, and agriculture alike. Regulation of the separate parts is less important than integration of the whole.

ERNEST S. GRIFFITH

Library of Congress

No. 5: *Industrial Wage Rates, Labor Costs and Price Policies*. By DOUGLAS V. BROWN, JOHN T. DUNLOP, EDWIN M. MARTIN, CHARLES A. MYERS, and JOHN A. BROWNELL. 1940. Pp. 172. 25c.

This monograph presents the results of eight case studies concerning the relations between wage rates, costs, prices, and technological change. Part I consists of brief studies of seven plants in the cotton textile, paper, and shoe industries. The period covered is 1936-38 for all except two plants in the shoe industry for which records were available for the period 1931-38. Part II presents a more comprehensive study of several plants of International Harvester Co. for the period 1929-37. In view of its greater completeness this is the more valuable part of the monograph. One chapter which deserves particular notice is devoted to the important but neglected problem of the effects of conventional accounting techniques on price and production decisions of the firm.

The conclusions of these case studies are in no sense startling. It was found that the firms used various guides in their wage decisions, but "Wage changes were not influenced to as great a degree as might have been expected by policies of competing firms in the same industry" (p. xvi). Moreover, it was found that changes in wages were not the primary factor in causing changes in total production costs but were typically overshadowed by changes in overhead and material costs. Concerning price policies it was concluded that business men customarily overstress the importance which costs actually play in their decisions. In the case of the International Harvester Co., for example, the nature of market demand and the existing competitive situation were found to be the primary considerations. Moreover, it appears to be more usual for price changes to induce wage changes than the reverse. Finally, it was found that technological change was a matter of constant attempts to reduce costs and improve quality and that sharp increases in wage rates did not set off any wave of technological change.

While the present study is in no sense exhaustive, it is a most welcome exploratory study. Unfortunately the period of time under consideration was in most cases too brief. Moreover, the evidence, which was concerned primarily with short-run relations between price and wage decisions, leaves many questions of broad underlying relations for the most part unexplored.

J. P. MILLER

Yale University

No. 39: *Control of the Petroleum Industry by Major Oil Companies*. By ROY C. COOK. 1941. Pp. 101. 30c.

This monograph is a digest of the evidence presented before the Temporary National Economic Committee on monopoly control in the oil industry. The author takes up production, transportation, refining, and marketing of oil, indi-

cating the extent to which the twenty major companies—with the Standard companies dominant—control each branch of the industry, and the means by which they control. He has done the work well, and has included in the appendix a number of significant tables and graphs. Perhaps the "prosecution" gets a little the better side of the case, as presented here, but the conclusions are generally well supported by the evidence presented before the committee. Mr. Cook has done economists a genuine service in digesting this material and summarizing the important points brought out before the T.N.E.C.

JOHN ISE

University of Kansas

REVIEWS AND NEW BOOKS

Economic Theory; General Works

The Theory of Econometrics. By HAROLD T. DAVIS. (Bloomington, Ind.: Principia Press. 1941. Pp. xiv, 482. \$4.00.)

It is both significant and appropriate that the decennial year of the life of the Econometric Society should see the publication of a book which could appropriately have been called *The Principles of Econometrics*. The development of econometrics during this decennium is well demonstrated by comparing the contents and the bibliography of Professor Davis' book with those of Evans'¹ classic work. In addition to many valuable re-formulations and improvements of the neoclassical system, the last ten years have witnessed the growth of dynamic economics from infancy at least to adolescence. In 1930 Professor Evans and his fellow pioneers were concerned with bringing new horizons within the vision of the economist. In 1941 Professor Davis is able to report a very substantial record of exploration.

Professor Davis describes his book as a textbook and its arrangement conforms to familiar patterns. The first part on Economic Statics follows the path of orthodoxy from a discussion of the nature of wealth and income to the theory of general equilibrium by way of chapters on utility, supply and demand, exchange, monopoly and duopoly, and producers' and consumers' behavior.

The second part on Economic Dynamics deals with economic problems in which time is a significant variable. Such problems fall into two main groups. The first group includes problems of partial analysis where, say, demand and supply functions are such that to maximize profits over a period of time is not the same thing as maximizing profits at every point of time. The second type of problem is that represented by mathematical business cycle analysis, where the solution of a set of relations defining a closed system is a functional equation in any one of the variables of the problem, in contrast to the equilibrium values of the variables yielded by a general static analysis. In addition, Professor Davis' study of Dynamics includes chapters on fitting growth curves to production data, the use of the periodogram and the technique of serial correlation, the equation of exchange, and index numbers. The chapters on interest and investment and on insurance are welcome inclusions in the Dynamic section of the book, since they emphasize the fact that the problems of an uncertain future are germane to realistic economics, whereas they are assumed away by a rigorously static approach. However, the reader should be warned against the impression that economic uncertainties are insurable risks. It is doubtful

¹ G. C. Evans, *Mathematical Introduction to Economics*, New York, 1930.

whether uncertainty is susceptible to mathematical treatment, and it would have been instructive had Professor Davis expressed his opinion on this question.

A review of a book which is as important a landmark as this should not merely consist of a summary of its contents accompanied by conventional words of praise, nor should it concern itself with debates over minutiae of analysis. The general methods should be carefully evaluated. This seems particularly desirable since the author brings to economics the fruits of a distinguished career in the application of mathematics to the physical sciences. What follows will be frankly critical, and may perhaps be legitimately construed as the perverse reactions of one trained in economics alone to the impact of a broader vision. My criticisms will come under three heads: first, the relation of statics to dynamics in economics; secondly, Professor Davis' methodological approach; and thirdly, the implication of his analysis from the point of view of capitalistic development and economic policy.

The division of a work on economics into Part I: Statics, and Part II: Dynamics, unfortunately has many modern precedents. The theory of general equilibrium is presented in Part I and is then forgotten when the attempted realistic treatment in Part II begins. This is the procedure, for instance, of J. R. Hicks, who concludes his book² with engaging candor, as follows: "We began our study of dynamic economics by rejecting the concept of a stationary state as an analytical tool. We rejected it then because it seemed to be no more than a special case which offered no facility for generalization. We have come in the end to doubt whether it is even conceivable as a special case, . . ." Professor Davis also makes no use of the general equilibrium analysis in his realistic treatment. I think Professor Davis has fallen into the bad habit of the economist because of the attractive analogy offered by the physical sciences. But in mechanics, for instance, positions of stable equilibrium are known empirical facts, and there is every justification for determining the conditions for those equilibria without reference to any dynamic system. In economics, on the other hand, general equilibrium is an unproved hypothesis, and Professor Hicks seems to think that it is not a useful hypothesis at that. Why, then, encumber a textbook on modern economics with the subject at all? To honor the great names of Walras and Pareto is not in itself sufficient justification for burdening the minds of our students with useless impedimenta.

I think the answer is that, although equilibrium never characterizes an actual situation, the equilibrium concept can be used realistically if, and only if, it is considered in its relation to the dynamic model from which it is derived. To be more specific, dynamic models of the economy in general have particular solutions where the variables take on values that

² *Value and Capital*, Oxford, 1939.

are unchanging over time. These are the values about which cyclical fluctuations of the variables take place and toward which their values converge if the system is damped. These values are therefore entitled to be described as the equilibrium values of the variables, and are of importance, even though they may never in fact be attained.

This equilibrium value of, say, national income will be the average level of income over a sufficiently long period provided the conditions of the problem remain unchanged. Thus equilibrium analysis is immediately necessary in considering the average effects of permanent changes in the economy—the effect of the Social Security act is an example that comes readily to mind. However, as was implied above, our analysis must not rest with the determination of the equilibrium value of income; we must also determine the effects of changes in data on fluctuations about the equilibrium value. As an instance, a measure which will decrease the propensity of the economy to save and leave all other things unchanged will increase the equilibrium level of income; but when we consider the dynamic problem, it may be shown that such a change will make the cycles about the equilibrium position less damped. Clearly both those questions must be examined in evaluating any given policy.

If equilibrium is interpreted in the way I have suggested, it can be given a realistic and significant rôle in economic analysis. On the other hand, if it is merely inserted as a historical curiosum in Part I: Statics, it is of very little use to the practical economist. The most satisfactory division of a general work on economics seems to be between partial analysis and total analysis. Partial analysis applies neo-Marshallian methods to the solution of problems where demand and supply conditions can be assumed to be independent of each other, while total analysis must be used where this condition is not satisfied.

My second criticism of Professor Davis' methods concerns his approach to the analysis of economic problems and to his conception of the rôle that empirical evidence should play. Although this is an ancient field of controversy, the matter is still unsettled and I feel that no apology is needed for raising it here.

Professor Davis' point of view is well summarized by the following quotation. "It would be interesting, indeed, if it were possible to do so to formulate the dynamics of economic time series in terms of a variation principle as has been done so effectively in the dynamics of physical variables. . . . *There are many ways to formulate such a principle and probably, in the present state of economic theory, one way is as good as another, provided the resulting equations describe statistically the observed variation in the time series*" (p. 404). (Italics mine.) This presumably means that the important thing is to derive laws which are empirically verified, and once they are verified what went on in the mind of the theorist in develop-

ing his theory is irrelevant. This would be true in cases where a theory could be proved or disproved by a conclusive experiment and the expectation of changes in the data was zero. These conditions are not fulfilled in economics; even if the data did remain unchanging for a sufficiently long period for experiments to be made, the economist must always face the possibility of disturbances upsetting his calculations.

Nevertheless, Professor Davis does freely apply his principle to economic analysis. The most striking instances are his acceptance of the Paretian law of the distribution of income (of which more later) and the logistic law of industrial growth, on the basis of empirical evidence alone. The same tendencies are exhibited in his analysis of time series, where chief emphasis is placed on developing periodograms and serial auto-correlations of particular time series rather than investigating the interrelations of all the relevant time series of the economy. The latter type of problem plays but a minor and unsatisfactory part in Professor Davis' analysis.

The more fruitful point of view is that the final formula, far from being the end of economic investigation, is merely a device for testing economic theory. For an economic theory to be valid, it must fit the facts and here the final formula is of use; but it does not follow that if the theory fits the known facts it is a good theory, and the economist can not afford, on empirical grounds alone, to accept such a theory until it is proved to be wrong. The trouble is that economics is not an exact science. In support of this statement I quote Professor Davis himself: "So also in economics the observation of real cyclical phenomena in time series should lead to the same forecasting power which distinguishes an inexact science from an exact one. Unfortunately, . . . the proportion of total variance which can be attributed to pure harmonic terms in economic data is small even in the most regular of the series" (p. 42). This being so, the basis for economic prediction and economic analysis must be wide economic understanding based on sound theory and exhaustive empirical knowledge, rather than reliance on imperfect statistical prediction. In acquiring such understanding, the techniques used by Professor Davis, and the mathematical method in general, are invaluable. My criticism is not of Professor Davis' technical methods but of the use he makes of his results.

My third criticism concerns Professor Davis' general economic point of view; or rather not so much his point of view as the grounds he has for holding it. Here Pareto's law is of central importance, since his belief in its validity dominates Professor Davis' whole economic outlook.

His statement of the law is as follows: "In all places and at all times the distribution of incomes in a stable economy where the origin of measurement is at a sufficiently high income level, will be given approximately by the formula $y = ax^{-v}$, where y is the number of people having an income x or greater, and v is approximately 1.5" (p. 23). This statement is eluci-

dated by the following footnote: "The phrase in a stable economy has been interpolated by the present writer and should not be ascribed to Pareto. By a stable economy is meant one that is not verging on revolution or civil war as measured by political disturbances, civil riots and the like. The consequences of this interpolation will be examined later."

Before commenting on the basis for Professor Davis' acceptance of this law, let us illustrate his applications of it.

1. In chapter 19, he establishes a direct correlation between the concentration of income and business prosperity, and states (p. 201): "It is not unreasonable to suppose that disturbances in the concentration ratio may be accompanied by economic and political abstractions." To be specific, significance is attached to the fact that the concentration ratio was abnormally high in 1928 and 1929, and abnormally low in 1920, 1921, 1931 and 1932.

2. The Paretian law is held to be the criterion for the degree of progressiveness of the income tax (p. 200).

3. It is tentatively suggested that the collapse of France may be attributed to a sub-Paretian income distribution (p. 203).

4. A low interest rate policy is condemned because as a result of it "the concentration ratio will be lowered and with it will come all the attendant ills of this disturbance of the Pareto pattern" (p. 289).

5. An inference of fundamental importance can be drawn from the logistic law of industrial growth in conjunction with the Pareto law. On the basis of his study of growth Professor Davis concludes that we are near the upper symptote of industrial production. This leads to the conclusion that the rate of net private investment is approaching zero as a limit. On the other hand, the requirements of a "stable economy" preclude any attempts by the state to reduce to zero the propensity of the economy to save at a high level of income, which is necessary if maturity is to be accompanied by prosperity. The obvious inference is that a mature economy must either be kept alive by public investment or must fulfill the predictions of Marxian theory.

I do not propose to debate these conclusions in this review, but it does seem to be the duty of a reviewer to examine the basis of the author's acceptance of a law which he uses to draw inferences of such fundamental importance.

With this end in view I shall set out my criticisms of Professor Davis' derivation and use of the "generalized law of inequality" in summary fashion as follows:

1. Results obtained from graduating only the supra-modal part of a frequency distribution must be used with extreme caution, and very possibly with greater caution than Professor Davis has exercised.

2. The great importance Professor Davis attaches to the Pareto law from

the point of view of "a stable economy" derives from his theory that the Paretian distribution of income corresponds to the distribution of ability in the economy. This correspondence he establishes by investigation of the distributions of the ability of the faculty of the University of Indiana to play billiards and the abilities of given populations to write articles on mathematics and chemistry, respectively. Again the statistical results themselves are questionable; but, more important, even accepting those results, far from proving that it is necessary for stability, that abilities should be rewarded by corresponding incomes, these examples suggest, if anything, exactly the reverse conclusions. For I take it that the Indiana faculty does not play billiards professionally, and I imagine Professor Davis himself could testify to the fact that the pecuniary rewards for writing articles on mathematics do not provide the chief motivation of the writer.

3. In view of the last paragraph, it is hard to see how Professor Davis' conclusions can be applied as a criterion for income-taxation. Moreover, if we accepted the argument fully, a proportional tax, however high, on all incomes, the proceeds to be used to pay a subsidy to Mexico, would leave the Pareto distribution unaffected and therefore be irrelevant to the working of the economy of the United States.

4. The nearest approach to an economic theory justifying Professor Davis' conclusions is the following: "The *a priori* reason for these deductions" [*e.g.*, as to the fall of France] is to be found in the general assumption that a concentration of wealth and income of approximately the Pareto concentration is essential in supplying the necessary capital to provide employment for the optimum number of workers" (p. 203). We are apparently expected to accept without question a natural law that the Pareto distribution yields the optimum propensity to save.

I have dwelt at some length on the discussion of the Pareto law, not only because of the conclusions Professor Davis has drawn from it, but because his use of it illustrates very effectively the pitfalls of the method of analysis I have discussed in my second criticism.

My criticisms have been directed to Professor Davis' book as a general work on economics. As a vehicle for bringing to the student a knowledge of the mathematical techniques that are of use in economics, it serves its purpose excellently. The mathematical arguments are presented with the precision and the elegance that one expects of a professional mathematician, and the techniques employed are the simplest that are consistent with the difficulty of the subject matter. Its merits will make the book of great service to the economist, while its imperfections will reassure him that his subject is more than a branch of applied mathematics.

A. SMITHIES

University of Michigan

The Structure of American Economy, 1919-1929: An Empirical Application of Equilibrium Analysis. By WASSILY W. LEONTIEF. (Cambridge: Harvard Univ. Press. 1941. Pp. xi, 181. \$2.50.)

Professor Leontief has undertaken not less than the description of the American economy in 1919 and 1929 in terms of a neoclassical equation system. Hitherto we have possessed only a qualitative notion of the equations necessary to determine some kind of economic equilibrium (demand equations, cost equations, etc.). All quantitative determination has been of the partial equilibrium type, for example, evaluating demand elasticity of a particular good, other things being equal; Professor Leontief himself has made important contributions in this field, which he is now inclined to look down upon. The aims of his present book are much wider, to give quantitative determination to the equation system of *general equilibrium theory*.

The statistical material consists of the input and output figures for the different industries. Two huge double entry tables for 1919 and 1929 present a cross-classification; the output of coal mining, for example, is distributed over a *row* of forty-four industries, which, in principle, used up the coal produced, households and exports each representing one of these industries; on the other hand, reading down the *column* "coal," we find the input into coal mines, both producers' goods bought and productive services hired from households, *viz.*, labor and capital.

The interpretation of these double entry tables requires a considerable qualification of the Walras equation system.

1. Since the American economy neither in 1919 nor in 1929 was in a state of long-run equilibrium, the rule: average costs equal price (no profits nor losses!), is replaced by: current receipts equal current cost payments plus profits, leaving open the question to what extent replacement exceeded or fell short of current depreciation and stock depletion.

2. While in the Walras system the input consists of productive services measured per time unit, in the Leontief system it consists of goods produced (equipment goods and materials) plus that type of productive service that can be hired only. The number of kinds of input, therefore, equals the number of kinds of output, which has some mathematical consequence.

3. In consonance with the older Walras system, the so-called coefficients of production, (input of a good or service per unit of output) are considered as "fixed," *i.e.*, as independent of the size of output and of their relative prices. This excludes both economies of large scale and the possibility of substitution as expressing itself in the principle of marginal productivity in traditional theory; for according to the latter principle *various* quantities of a factor of production can be combined with a *given* quantity of another factor.

4. Likewise, the demand for a good is assumed to be independent of

the price of a good, and proportionate to real income (for example, double income, double bread consumption!).

5. Any economies occurring (a) in a given industry or (b) in the use of some equipment good or material in production are considered as affecting *proportionally* all coefficients of production in the industry in which the good is (a) produced or (b) used productively. (The "efficiency" of a good is a combined measure of both effects.)

6. Defining savings and investment in a gross fashion, namely, as an excess of current receipts in an industry over, or their falling short of, the industry's total current outlay, it is assumed that investment increases *proportionally* all outlay items of a given industry and that saving reduces them *proportionally*.

The theoretical and statistical consequences of these simplifications are interesting. On account of the homogeneity and linearity of the production and consumption functions, relative prices (which alone can be determined in the system) depend only on the relative size of the coefficients and not at all on the absolute size of input available, or on investments and savings in the individual industry. The latter factors, however, govern, together with the coefficients, the relative quantities of output in the different industries, while the absolute size of output naturally depends upon the general productivity of the system. In principle, it becomes possible to work back from statistical known magnitudes, *viz.*, input, output and investment coefficients, to the coefficients of production and consumption, which theoretically are the data. Practically, however, this task proved too laborious despite all the simplifications, despite the consolidation of the forty-four industries into ten accounts, and despite the use of Professor Wilbur's Simultaneous Calculator. So Professor Leontief had to be satisfied

1. to study the variations of the system (of prices and output) with respect to

- a. a change of the general productivity of an industry,
- b. a change in the investment coefficient of an industry;

2. to compare the results for 1919 and 1929, investigating particularly

- a. efficiency changes in the investment coefficients, and
- b. influences of changes in the consumption pattern on the level of consumption.

The most remarkable result is the *constancy* of the reaction patterns *over time*.

Professor Leontief is somewhat inclined to minimize the significance of the qualifying assumptions, with the exception of 6 above. The reviewer, on the other hand, is afraid that, if not 3 and 5 (concerning the production coefficients), then at least 4, the linear dependence of consumption on income, has seriously affected the results, while the elimination of the specific price-demand relationship is less objectionable for the broad cate-

gories of consumers' goods which Professor Leontief is dealing with. The acceptability of the results is further impaired by the absence of statistical reliability measures; the comparison of a theoretical price index, derived in a complicated way and with the help of additional assumptions from the computed variables of the system, with a statistical index derived directly from price data, showed only fairly good agreement. Some of Professor Leontief's results fit into the reviewer's general picture of the development, e.g., the change in the conditions of the capital market from 1919 to 1929, which encouraged saving. It is more difficult to accept, for example, the computed rise in the efficiency of agriculture by 100 per cent. However, even if future investigations should correct these results, Professor Leontief is to be congratulated for what he did achieve. Who would not admire the ingenuity he shows in simplifying the Walras system in such a way that it, for the first time, became available to quantitative determination? It is much more important that such a work was attempted than that the first approach is perfect in all respects. To the reviewer's mind the quotation from Benvenuto Cellini's *Memoirs* came back, which Henry L. Moore put as motto to his *Generating Economic Cycles*: "To this the king replied that he who worried so anxiously about the end of a piece of work would never make a beginning in anything." It may be hoped that, as Moore's work opened up the statistical determination of partial equilibrium relationships, Professor Leontief's work will stimulate a wealth of quantitative analysis in the field of general equilibrium.

HANS P. NEISSER

University of Pennsylvania

Economic Analysis. By KENNETH E. BOULDING. (New York: Harper, 1941. Pp. xviii, 809. \$4.25.)

This book is outstanding. It is designed as a text for a first course in principles, but it is also intended as a "contribution to the development and the systematization of the body of economic analysis itself." In both respects it succeeds admirably. It will be used as a text not only in the introductory course; it will be read in graduate courses and by many professional economists.

The book is divided into two sections, based on two methods of analysis. In the first part, all the analysis is carried on in terms of demand and supply. In the second part, the marginal technique is introduced. The topics in the first part are the conventional ones: prices, distribution, something about international trade and exchange rates, money and banking, and a very little bit about the business cycle. In the second part, the equilibrium of the firm in different types of markets is handled not only by the conventional marginal productivity approach, but also by making use of production surfaces. Similarly with consumers' demand: this is treated not

only as related to utility but also with the help of indifference curves. Although one may question whether such analysis belongs in an elementary text, praise must be given for the ingenuity and skill of the exposition.

The approach is highly abstract. There is a saving feature, however, in that following the introduction of each new tool of analysis a chapter is set aside in which the use of that technique in handling simple problems is demonstrated. Thus, for example, after the introduction of the theory of distribution, the effects on labor of a shift in demand or the imposition of a tax are considered.

The exposition is amazingly clear. Difficulties are exposed and treated with great ingenuity. This is a welcome relief from the all too common practice of making a text readable by saying nothing in many soothing words about any difficulties that may crop up.

There are, perhaps, certain aspects of the book with which teachers will find fault. To my mind, the following features will raise difficulties that could have been avoided.

In the first place, the purposes to which the analysis is directed are left unnecessarily obscure. Why need the student learn the use of these complicated tools if he is not shown that they help in the solution of real problems? The exposition is pretty generally concerned with answering the question: "What determines the equilibrium price of butter?" Or of labor, or wheat, or foreign exchange? Such questions have little intrinsic interest; we want answers to them because such answers enable us to tackle more important problems. Of course these problems are treated, but in such a way that I wonder whether the student is not in danger of losing sight entirely of the real object of his study.

The book would have seemed more purposeful and would have been easier to use in teaching if the analysis had somehow been directed more explicitly to such ends. As a model of the approach I have in mind I suggest Meade and Hitch *Economic Analysis and Policy*.

My second criticism is in a way connected with the first. Not only does the treatment *seem to be* unrelated to the real economic problems (actually, of course, it is relevant), but it is made to seem unnecessarily remote from the economy with which it purports to deal. There is hardly a genuine statistic in the book. The author contends that "it is unwise to crowd a principles course with masses of factual material in special studies—labor, marketing, etc.—merely for the sake of giving the work an air of factuality." With that view any teacher who has been obliged to wade through a detailed description, to take an example common in introductory textbooks, of all the kinds of money in circulation in this country, will be inclined to agree. But a certain amount of factual material is as important to an understanding of the operation of the economy as a knowledge of the relations that are set forth in this book.

Clapham's empty boxes have probably never been emptier and there are more of them than ever. As a compensation, the nature of the boxes and the relations between them are more clearly set out in this book than in any other I know. But teachers will have to be on guard lest their poorer students carry away the impression that economics is nothing but an interesting branch of geometry in which business terms are used for identification instead of letters.

I do not believe that the treatment of the theory of employment, or monetary theory, or business cycles reaches the same high standard of the rest of the book. And I believe that there are inconsistencies in the analysis of the relation between wages and employment. These, however, are details that need not be discussed here.

There is no doubt that the book is difficult and that it will make heavy demands upon the student. However, the exposition is so clear that it can be used, I believe, in an introductory course. If it can be used successfully, the teacher will probably feel that the student has learned something that was worth his while: a feeling that many teachers are unable to experience fully after their students have been exposed to many of the traditional texts.

I have reviewed the book as a possible text; I must also recommend it to anyone interested in economics. It is a long time since a serious general work in economics has been published and Dr. Boulding has succeeded in integrating much new material into the general body of economic doctrine.

LORIE TARSHIS

Tufts College

Principles of Economics: A Restatement. 4th ed. By RAYMOND T. BYE. (New York: Crofts. 1941. Pp. vii, 632. \$3.00.)

While Professor Bye was working on the fourth edition of the admirable text which he first published in 1924 he found the necessary alterations so sweeping, in view of the changes that had come in methods used in contemporary economic theory and in his own thinking, that he decided to rewrite the greater part of the book and to modify the title to read: *Principles of Economics: A Restatement*. In the field of monetary economics the adoption of managed currency systems has led to an increased emphasis on the nominal character of money and the recognition that it is not a passive but an active agent the flow of which influences production and business cycles. In price analysis the new technique is based upon the adjustment of the individual firm to the price situation. Monopolistic competition, once neglected, has now been explored. A new approach has greatly modified the classic explanation of the basis of international trade and novel trade controls have produced revisions of the older treatment of the mechanism of foreign exchange and the balance of international payments.

With greater modesty than the text justifies the author says in his preface that most of his thinking is to be found in the writings of the many economists, past and present, who have built up the structure of economic principles. He defines his own contribution as refinement and synthesis: refinements of such principles as Say's law of markets and synthesis of (for example) the law of comparative costs with the approach by Ohlin.

This edition, like the earlier ones, contains little material that is extraneous to the development of the theory. There are no chapter-long records of tax legislation, agricultural subsidies or social security measures. The book does contain a fairly extended survey of banking technique, probably because the rôle of the banks is to be given emphasis in the discussion of business cycles. The volume is, in short, no encyclopedia of American economic life for use as reference, but in large part a restatement and development of accepted principles. The plan progresses from a consideration of the processes and agents of production through the monetary, banking and price aspects of the market and international exchanges to the sharing of income and consumption.

Professor Bye's approach may be illustrated by a summary of his treatment of Say's law of markets and Keynes's theory of employment. He agrees with Say in holding that, given an uninterrupted circuit flow of money, there can be no aggregate production in excess of purchasing power. If apparent overproduction exists, Bye continues, either the circuit flow of money must have been interrupted, or goods must have been produced in the wrong proportions. Both occur, of course. As for the former, the continuity of the circuit flow of money and, hence, the maintenance of a full level of activity depend upon the investment of all money savings. Here, for a considerable distance, Bye follows Keynes. The bank rate of interest is not based upon the equilibrium rate of interest which would tend to preserve the balance of industry, but on the relative size of bank reserves. If the bank rate is below the equilibrium rate investment exceeds voluntary saving, the excess is financed by bank credit expansion, consumers are forced into involuntary saving, and a general contraction is the ultimate result. But Keynes's belief that opportunities for profitable investment of savings are declining has yet to be proved and "it does not appear that Keynes has said the last word upon this subject" (p. 257).

Granted that this book is intended as a text for an elementary course, it is altogether right and proper that Keynes should appear on as many pages as he does. But there will be gaps in the young student's intellectual background when it is all over. Ricardo appears once, far along in the chapter on rent, as follows: "This is known as the law of *land rent*—sometimes called *the Ricardian law*, after the economist David Ricardo" (p. 548). And Böhm-Bawerk does not appear in the chapter on "Time-Consuming Production" until the brief bibliographical note is reached at the

end. Adam Smith gets one bibliographical note, but neither Karl Marx nor Nassau Senior appear. Leo Huberman, in his more popularly-written book, *Man's Worldly Goods*, had the temerity to discuss and quote all of these except Böhm-Bawerk at some length.

Nevertheless this is a workable and intellectually stimulating book. Professor Bye writes clearly and vigorously, and plainly he has no taste for inventing obscure lingo so that it may be associated with his name. The diagrams are well-devised, contemporary in concept and not so numerous as to repel the beginning student. The volume fulfills the author's promise of "refinement and synthesis."

AMY HEWES

Mount Holyoke College

Principles of Economics. By RALPH H. BLODGETT. (New York: Farrar and Rinehart. 1941. Pp. xviii, 634. \$3.50.)

A satisfactory course in economic principles must of necessity be pretty rugged and difficult. For this reason the usual introductory course is for two semesters and many texts are now composed of two volumes. However, departments of economics have been called upon to offer a one-term "service" course for engineers, agricultural students and others, so "abridged editions" have to be prepared. Professor Blodgett has written one of these texts, and it is quite probable that it will prove to be one of the best.

The main merit of Blodgett's one-volume text lies in the author's power of clear expression. Very few have the facility to explain economic principles in the clear and simple style here revealed, and few have the power to bring principle and application together in such a well-rounded harmony. He is also blest with humor which he uses here and there to good advantage. He uses it, for instance, in a variation on a theme from Marshall. "In eating," he says, "a man makes use of one movable jaw and one that is stationary, but this does not mean that . . . the movable jaw does all the chewing" (p. 218).

In arrangement and content, the book follows pretty closely the customary pattern. We have, first, the introduction and definition of economic concepts; a section on production; a well-developed and carefully prepared treatment of value and price (151 pages in all); functional and personal distribution; money and banking, foreign exchange and international trade; and finally the concluding section on price changes and business cycles.

Quite naturally, the problem of inclusion and exclusion is difficult for the one-term text, yet many instructors will wish that chapters had been included on such pressing current problems as taxation and public finance, tariffs and unemployment.

Professor Blodgett's chief claim to originality is in the treatment of value and price. In this connection he says, "A few years ago I concluded that the

emphasis in the theory of value should be on time analysis rather than on conditions of the market. . . . Thus in the present volume, following the opening chapters on market conditions, the general nature of demand and supply in different periods of time, and cost of production, the main body of the theory takes up first short-run prices under all three market conditions (competition, monopoly, and monopolistic competition), then intermediate (short normal), and finally long-run prices under all three market conditions" (Preface). The reviewer has studied this section with care but is not wholly convinced that the method will prove uniformly satisfactory. It calls for a certain amount of repetition and is rather extended for a short course.

Some Marshallian economists—but not the reviewer—may receive something of a shock when told that "the questionable concept of the 'representative firm,' which has long been a bugbear for teachers of the theory of value, has been eliminated in long-run competitive price determination" (Preface). Indeed, Professor Blodgett says, "The effort spent in trying to find some way to handle the supposed problem of differential costs in a competitive industry in the long run is really wasted, for the problem does not actually exist in that period of time" (p. 221). For "in the long run, all of the many producers in a competitive industry tend to have the same average cost of production per unit . . . and in this period cost of production for a competitive industry as a whole may be confidentially [*sic*] considered to represent accurately the cost of production experienced by the individual producers" (p. 222). Many will doubt the wisdom of such a brief and cavalier treatment of differential costs. Yet all will do well to study the author's evidence presented here to show how the long-run forces are incessantly working toward a uniform unit cost of production.

It is at this point, however, that theory and reality are not adequately articulated. While there are long-run forces operating to bring unit costs to identity, there are always forces operating in a dynamic society to create cost differentials. Experienced entrepreneurs die and inexperienced ones take their places. Technology moves faster in one research laboratory than another. Some forecast the future more accurately than others. For these reasons, it may be expedient to recognize the existence and persistence of unit cost differentials among the individual plants of a given industry.

By way of final appraisal, it may be said that there is enough that is new and original to make it refreshing. There is enough that is "tried and true" to make it familiar. Above all, the style is readable and interesting. Students gaining their introduction to the principles of economics with Blodgett's text should not find it a "dismal science."

H. L. McCracken

Louisiana State University

Cournot nella Economia e nella Filosofia. Collana Ca' Foscari. (Padua: Cedam. 1939. Pp. 243. 20 lire.)

This volume of lectures and essays on *Cournot in Economics and Philosophy* was prepared under the auspices of the faculty of the Royal Institute for Economics and Commerce at Venice ("Ca' Foscari") in commemoration of the centenary of the publication of Cournot's *Researches* (1838). Each of the contributors (drawn from French and Swiss universities as well as from Italian) has chosen to honor the master in his own way.

In some cases, the contributors have contented themselves with a survey of Cournot's contributions to particular fields. Thus, Professor de la Harpe (Neuchatel) presents (pp. 6 ff.) a summary of the contributions of Cournot to mathematics (the well-known compliment of Poisson and Cournot's whimsical disclaimer are reproduced from Cournot's *Souvenirs* by Dr. Giacalone-Monaco in his Biographical Note, pp. 231 f.), and to technical philosophy, particular stress being laid on those aspects of Cournot's philosophical position which Professor de la Harpe sums up under the phrase "mathematical rationalism." Similarly, Professor Roy (Paris) undertakes a survey of Cournot's contributions to "the mathematical theory of wealth"; while Professor Lanzillo (Venice), in an essay entitled "'Chance' and Vitalism," attempts to relate Cournot's general philosophical position to certain propositions of "economic dynamics" and of general social policy.

In other cases—as in the essay by Professor Pietri-Tonelli (Venice), entitled "Successively Broader Generalizations of the Solution Given by Cournot for the Particular Economic Problem of the Exchange of Economic Goods between Economic Subjects of Different Elementary Economic Localities, in an Elementary Time-Period," and in the essay by Professor Bordin (Catania) on "The Economic Theories of A. Cournot and the Corporative Order"—the contributors have undertaken to pay tribute to Cournot by insisting upon the continuing suggestiveness of his analysis even for developments which he himself did not pretend to have envisaged. In still other cases—as in the essay by Professor Baudin (Paris) on "Economic Law," the admirably lucid and cogent essay by Professor Mises on "Working Hypotheses in Economic Science," and the essay of Professor Amoroso (Rome) on "The Mathematical Theory of Economic Planning" (*Programma Economico*)—the contributors' oblations have taken the form of their own reflections on the problem chosen for examination, without specific reference to Cournot's work. The contribution, finally, of Dr. Giacalone-Monaco (apart from the brief Biographical Note already mentioned) takes the form of a bibliography, which, even though it does *not* pretend to be complete (despite the contrary implication in the preface), and even though there are regrettable misprints in some of the German and English titles, is nevertheless valuable.

It is, of course, the contributors' evaluation of the purely economic

aspects of Cournot's work that will interest most readers of this journal. At the risk of seeming ungracious in the face of the evident desire of the contributors to do full justice to the forward-looking aspects of Cournot's economics, as well as to admit frankly its shortcomings when judged from the standpoint of later developments, I venture to suggest that the volume might have had more to say on both counts. Professor Roy, for example, does make it clear (p. 92) that Cournot was perfectly aware of that fact of general economic interdependence which it was one of Walras' great achievements to have emphasized with all possible articulateness; and it is a fair inference from other writings of Professor Roy that he knows Cournot to have been equally well aware of the relation of his demand schedules to that other element which, according to some (including the Keynes of the *General Theory*), reduces demand and supply schedules of the Cournot-Marshall type to uselessness for analysis of events in the real world: namely, the element of changes in the amount and distribution of *income*. But in other respects Professor Roy's evaluation of Cournot's treatment leaves something to be desired both as criticism and as prophecy.

On the critical side, for example, Professor Roy's attribution to Cournot of "the hedonistic principle" (p. 90) and his reference to the use of utility functions by later writers can hardly be said to bring out clearly one of the most serious shortcomings of Cournot's treatment of demand schedules: namely, that his very definition of a demand schedule as relating price to "the *sales* [*débit*] or the annual demand," or "the quantity *sold*" (*Recherches*, pp. 47, 51 f. of the English translation) was such as to obscure its properly *ex ante* character, and thereby to open the way to misunderstandings, still widely current, with respect to the rôle of particular demand schedules in the explanation of realized market events.

From the standpoint of prophecy, likewise, one could wish that Professor Roy's indications of the paths to which Cournot may be regarded as having directed our own generation had gone beyond Cournot's adumbration of the derivation of "statistical" demand curves (pp. 88, 90 f.). Specifically, for example, Professor Roy sees little more in Cournot's use of expressions of the type $pF(p)$ —"la valeur globale d'une denrée"—than an admittedly important recognition of the concept of elasticity of demand (pp. 91 f.). There is no emphasis on the importance of Cournot's equating of these expressions to what might now be called the "realized money demand" for particular commodities, and of his relation of both to the problem of the generation of money and real income. In one sense, to be sure, we can agree with Professor Roy that Cournot's admitted blunders in this part of his analysis—as, for example, in his chapter on The Social Income, which Professor Roy, like so many others, cites as one of the "weak points" in the *Recherches*—"give us the impression that he [Cournot] perhaps expected too much of his powers in tackling problems which require a more advanced

degree of evolution" of analytical techniques (p. 96). But the mere statement that in such parts of Cournot's work "it is still possible to glean valuable instruction" hardly conveys an adequate notion of the extent to which Cournot's analysis, with all its blunders of detail, was ahead, not only of that of his contemporaries, but also of much that is highly praised in our own day.

In reality, what Cournot was aiming at in this part of his analysis was a kind of construction that has an importance for the future of "economic dynamics" far transcending anything suggested by Professor Lanzillo's discussion of "economic dynamics" in relation to Cournot's *philosophical* system (pp. 67 ff.), and far transcending also anything suggested by Professor Bordin's discussion of Cournot's "statics" and its possible "supersession" (pp. 199 ff., 203 ff.). He was attempting to show how the essentially *discrete* analysis typified by the use of demand and supply schedules of the "Marshallian" type can be related to "*process* analysis"; or, if one wishes, he was attempting to show how the "price analysis" of "partial equilibrium" theory can be related to what is coming to be called, in some quarters, "income analysis," but is best characterized as analysis designed to provide a generalized apparatus for tracing the effect of *flows of money payments* and of objects sold against money payments upon the functioning of the economic process.

But to point out such things is less to blame the commentators on Cournot who have failed to emphasize these implications of his work than it is to praise the solitary genius of Cournot himself, calmly awaiting in death, as he did in life (*cf.* p. 233), the vindication that comes when the footprints left by an explorer far ahead of his own generation are finally read aright by the leaders of generations that follow.

ARTHUR W. MARGET

University of Minnesota

NEW BOOKS

BROWN, C. K. *Introduction to economics*. Am. econ and bus. ser. (New York: Am. Book Co. 1941. Pp. 547. \$3.)

A beginning textbook for college students.

CHASE, S. *A primer of economics*. (New York: Random. 1941. Pp. 60. \$1.)

DUMMEIER, E. F. and HEFLEBOWER, R. B. *Economics with applications to agriculture*. 2nd ed. (New York: McGraw-Hill. 1941. Pp. xii, 752. \$3.75.)

In his review of the first edition of this volume in 1934, the writer characterized it in these columns as "a valuable, pioneering effort in the right direction," and predicted that it would "undoubtedly meet with a well-merited reception in agricultural colleges." This prediction, he believes, has been fulfilled in large measure. However, much water has passed over the dam during the last seven or eight years, and if a textbook is to keep the place it has gained, it must be revised to meet new emphases and to bring factual data freshly to date. The second edition of this work represents a good job

at revision. Throughout the text, statistical data have been brought just about as nearly up to date as is practicable. Much new material has been added at various places, and old sections often rewritten for clearer presentation. Notable among the added materials are those relating to the theory of monopolistic competition, and the doctrines of J. M. Keynes on the topics of employment, interest and money. The chapters on agricultural credit, business cycles, and economic control under the New Deal have received the most extensive revision. Altogether, the second edition represents a substantial strengthening of this book in line with the purposes for which it was originally developed.

WILSON GEE

FREEMAN, J. F. *The basis for a general theory of economic relationships and of economic activity, applicable to our present-day economic organization of production.* (New York: Cornwallis Press. 1941. Pp. xxi, 387.)

JANZEN, C. C. and STEPHENSON, O. W. *Everyday economics.* Rev. ed. (New York: Silver Burdett. Pp. vii, 519. \$1.88.)

An illustrated high school textbook.

KIEKHOFER, W. H. *Economic principles, problems, and policies.* Rev. ed. (New York: Appleton-Century. 1941. Pp. xxxi, 906. \$4.)

KUHN, C. L. and HILL, H. C. *Today's economic problems; a study-guide in present-day economics.* (New York: Scribner. 1941. Pp. 260. 80c.)

MAYER, J. *Social science principles in the light of scientific method, with particular application to modern economic thought.* Duke Univ. sociological ser. (Durham: Duke Univ. Press. 1941. Pp. xxii, 573. \$4.)

RIEGEL, R. E., editor. *An introduction to the social sciences.* 2 vol. (New York: Appleton-Century. 1941. Pp. 1204. \$3.25 each.)

SCHWEITZER, A. *Spiethoff's theory of the business cycle.* Univ. of Wyoming pub. in sci., vol. VIII, no. 1. (Laramie, Wyo.: Univ. of Wyoming. 1941. Pp. 30.)

SHAW, E. S., editor. *Proceedings of the nineteenth annual conference of the Pacific Coast Economic Association, at Stanford University, December 27-28, 1940.* (Eugene, Ore.: Koke-Chapman. 1941. Pp. 138.)

Economic History

Economic History of Europe. By SHEPARD BANCROFT CLOUGH and CHARLES WOOLSEY COLE. (Boston: Heath. 1941. Pp. xx, 841. \$4.00.)

This economic history is a particularly satisfactory text to review. The authors have set themselves the task of presenting to students, and especially to sophomores, a full-scale economic history of Europe from 600 A.D. to the present time. For writers belonging to schools of economic historians having special interpretations of history this is often not a difficult task, but for careful scholars anxious not only to present accurate and significant facts and analyses, but also to avoid leaving out important material it is a formidable undertaking. The authors have succeeded remarkably well in accomplishing their purpose within the limits of their space. They have shown admirable judgment in selecting material and have made a consid-

erable effort to include in some form the significant matter available in the large special literature. Indeed, the primary weakness of the book is not omission, but rather the brevity of treatment which the authors have been forced to adopt in respect to many important developments.

The book is divided into periods, the scale of the treatment becoming greater as modern times are approached. There is first a brief review of 93 pages by Professor Cole of the Medieval period (600-1500). This is followed by 272 pages, by the same author, devoted to early modern times (1500-1776). This part is treated in two sections, divided at the year 1640. The final part, written by Professor Clough, amounts to 444 pages and covers the period since 1776. It falls into three sections, the dividing points being 1850 and 1914. Despite the relatively large amount of space given to this part, it is here that the treatment seems somewhat inadequate. This is especially true of the section from 1850 to 1914. Here, since a great many problems are touched on, before a topic is well developed it is necessary to pass on.

The point of view of the authors is wholly admirable. All special interpretations of economic development are rejected in favor of a broad evolutionary conception which fully recognizes the complexity of the forces which shape economic history. The bulk of the material is institutional, but at a number of points the authors use economic theory to explain developments. Statistics are also used to support important points, but not to excess. The comparative method is used in dealing with the various nations.

The sections on the period prior to 1776 are well done. Some of the beginnings of modern capitalism are discovered in this period. There are evident, however, some qualms regarding the use of this most infelicitous word to describe our modern economic system. Capitalism is defined simply as the economic system of the twentieth century. Reflecting the German school, its essential elements are held to be the capitalistic spirit, the use of capital, and the business techniques. Free contract, which is probably the most distinguishing feature of the system usually called capitalism, is, however, not emphasized.

In the sections devoted to early modern times the key topics are held to be geographical expansion, changing business institutions, and national policies. Chapters devoted to each of these topics therefore appear in each of the sections. Again a broad evolutionary point of view is in evidence. The events leading up to each geographical discovery are carefully traced. The history of commerce is well done. Agrarian changes, especially enclosure, are also treated in the evolutionary manner. In discussing the development of business organizations it is noteworthy that the extreme views of the Weber-Tawney school regarding the influence of protestantism are rejected in favor of a more central position. The chapters on mercantilism, especially in France, are probably best of all.

The period since 1776 is treated as one in which the trends of the earlier period continued, but at a more rapid rate. Professor Clough is very careful in his use of the term *Industrial Revolution* to indicate that by it he means no sharp break with the past. It is recognized that large-scale business, factories, and many modern business practices may be traced back prior to 1776. Good use is made of recent research work on the Industrial Revolution and its origins. One good feature of the book is that neither in this section nor elsewhere is any effort made to develop a series of stages.

The explanation of why the new developments occurred first in England is, however, not fully convincing. The explanation runs in terms of advantages in capitalistic spirit, business organization, monetary system, commercial activity, transportation, and foreign trade. It seems likely to this reviewer, however, that the rise of the coal industry, largely due to inadequate timber resources, was of more crucial importance. This rise led to the building of canals and railways, the development of steam pumping engines, and the growth of the metallurgical industries.

The discussion of imperialism in the late nineteenth century also fails to develop fully the problems of integrating the European economy with those of economically backward areas. Also, the effort to introduce a discussion of European developments in terms of short-run fluctuations, while commendable, is, because of the short space given, inadequate. The material on the economics of the first World War and of the post-war period is good. On the whole, considering the space limitations, this entire section covers the material on the period since 1776 in an excellent fashion.

The book has a very attractive typography, with a liberal use of illustrations and maps. Professors Clough and Cole's *Economic History of Europe* should prove to be a very readable text.

JOHN G. B. HUTCHINS

Cornell University

Industry and Government in France and England, 1540-1640. By JOHN U. NEF. (Philadelphia: Am. Philosophical Soc. 1940. Pp. x, 162. \$2.00.)

It is impossible in a short note to give any adequate idea of the range of problems covered by this stimulating study of the development of economic policy in France and England. In both countries the authority of the crown was, at this time, considerably enhanced, but the modes of exercising that authority were sharply contrasted. In France, centralized administration developed rapidly. In England, legislation defined national policies, but left administration to the local authorities. France granted direct subsidies to many new industries, set up private monopolies under letters patent, and established an important fiscal monopoly in the salt manufacture. In England, the activity of the crown was largely confined to the grant of special privileges under royal letters patent. The capricious selection of the bene-

ficiaries of these grants led to the struggle which resulted in their restriction to inventors. In France, the period was marked by the acquisition of new fiscal resources, which were wholly adequate at the moment, but incapable of much further development. In England, the increased revenue of the crown scarcely offset the decline in the purchasing power of the currency.

The basic factual material has long been accessible to any who were interested in a careful study of economic policy, but Professor Nef has developed the antithesis with skill and with new detail from manuscript sources. He has happily emancipated himself from all the catchwords of mercantilism, and given new vitality to these episodes by approaching the whole problem as a basic phase of social development. He concludes: "Governments can do something to cultivate prosperity and to determine the course of economic development, to guide it in the direction of the arts or of a multiplication of creature comforts. But they must work within the limits set by their time and place and by the objectives—spiritual, intellectual, social, and economic—of the people they govern" (p. 148). The state participates in the development of social organization, not as an independently conditioned external force, but as one of many factors in the progressive adaptation of each society to its own material and cultural environment.

ABBOTT PAYSON USHER

Harvard University

America's Economic Growth. Rev. of Economic History of the People of the United States. By FRED ALBERT SHANNON. (New York: Macmillan. 1940. Pp. viii, 867. \$3.75.)

In this revision of *Economic History of the People of the United States* Dr. Shannon has produced another brilliant piece of work, a book iconoclastic and sarcastic but also interesting and stimulating. A reviewer, though he may question statements and interpretations occasionally, can but admire the industry and knowledge displayed in *America's Economic Growth*.

The revision has 41 chapters in comparison with 35 in the first edition and about 375,000 words in comparison with 450,000 in the predecessor. Save for the condensation, Parts I and II are much the same in both editions. In Part III of the new edition two chapters have been turned into four chapters. Part IV in the new edition loses one chapter to a new division, but it remains at eight chapters through the division of the chapter, "The Triumph of the Machine." The last division, "The Crisis of Capitalism, Since 1929," has two chapters on the New Deal and a third chapter entitled "Symptoms of Reaction."

The revision has several maps and an unusually large number of tables. The index is analytical, the bibliography is comprehensive, and the gen-

eral format is more satisfactory than in the first edition. The style is good, if breezy and picturesque in metaphor.

The book, though an admirable piece of work, has defects. The author does not always hew to his main periods of division; he ignores graphs; he is too obviously pro-labor; and he is too harsh in criticism. His labor sympathies (pp. 244, 514, 515, 781) coupled with his desire for condensation, perhaps publisher-inspired, cause him to give wrong impressions occasionally. Thus, he is scarcely fair to Richard Arkwright (p. 204) and William H. Vanderbilt (p. 414). He ignores one source of Stephen Girard's fortune (p. 168) and he fails to mention a P. T. Barnum deceived through endorsement of notes (p. 439). Perhaps the desire for brevity leads to a slighting of the "trust movement" before 1860 (p. 210), and the slighting of whaling tonnage in the middle forties (pp. 215, 643). The same cause probably leads to the ignoring of numerous factors affecting the gold quotation of greenbacks (p. 321). The author is quite caustic in his criticism of the police (p. 557), of bankers (p. 736), and of newspaper men (p. 747). He is free in criticisms of men highly respected in public life, notably Theodore Roosevelt (p. 571) and Presidents Coolidge and Hoover (p. 592). Nor do the New Deal, business men, and the public escape his trenchant pen (p. 752). Occasionally errors of fact appear (pp. 205, 320, 643). Not even Dr. Shannon's first edition was too long, and some of the criticism of this shorter though physically larger volume arises from the excessive condensation of a number of topics. Nevertheless, Dr. Shannon has produced an excellent and challenging book.

WALTER W. JENNINGS

University of Kentucky

NEW BOOKS

- CLEVENGER, H. *Agrarian politics in Missouri, 1880-1896*. Univ. microfilms no. 222. (Ann Arbor: Univ. of Michigan Microfilms. 1940. Pp. 352. \$4.40.)
- CROCE, B. *History as the story of liberty*. Trans. from the Italian by Sylvia Sprigge. (New York: Norton. 1941. Pp. 324. \$3.75.)
- FAULKNER, H. U. *American political and social history*. 2nd ed. Crofts Am. hist. ser. (New York: Crofts. 1941. Pp. 829. \$5.)
- FLYNN, J. T. *Men of wealth; the story of twelve significant fortunes from the Renaissance to the present day*. (New York: Simon and Schuster. 1941. Pp. 542. \$3.75.)
- GALDAMES, L. *A history of Chile*. Trans. from the Spanish and edited by Isaac J. Cos. Inter-Am. hist. ser., vol. 4. (Chapel Hill: Univ. of North Carolina Press. 1941. Pp. 577. \$5.)
- HARMON, G. D. *Sixty years of Indian affairs; political, economic, and diplomatic, 1789-1850*. (Chapel Hill: Univ. of North Carolina Press. 1941. \$5.)
- LONG, B. K. *Drummond Chaplin*. (New York: Oxford Univ. Press. 1941. Pp. vi, 373. \$5.50.)
- LIPSON, E. *Europe in the nineteenth and twentieth centuries, 1815-1939*. (New York: Macmillan. 1941. Pp. 508. \$5.)

- PETRIE, W. M. F. *The revolutions of civilization*. Reprint ed. (New York: Peter Smith. 1941. Pp. 136. \$2.)
- PIM, A. *The financial and economic history of the African tropical territories*. Bert lectures on colonial econ. hist. for 1938. (Oxford: Clarendon Press. 1940. Pp. vii, 234. \$3.)
- SHOWMAN, R. K. and JUDSON, L. S., compilers. *The Monroe Doctrine, and the growth of western hemisphere solidarity*. Reference shelf, vol. 14, no. 7. (New York: H. W. Wilson. 1941. Pp. 302. \$1.25.)
- WOODSON, C. G. *The negro in our history*. 7th ed. (Washington: Associated Publishers. 1941. Pp. 703. \$4.)
- WRIGHT, C. W. *Economic history of the United States*. (New York: McGraw-Hill. 1941. Pp. xxviii, 1120. \$4.)

Economic Systems; National Economies

The Foundations of a More Stable World Order. By WALTER H. C. LAVES, editor. Lectures on the Harris Foundation, 1940, by Ferdinand Schevill, Jacob Viner, Charles C. Colby, Quincy Wright, J. Fred Rippy, and Walter H. C. Laves. (Chicago: Univ. of Chicago Press. 1941. Pp. xiii, 193. \$2.00.)

The Defeat of Chaos. By SIR GEORGE PAISH. (New York: Appleton-Century. 1941. Pp. vi, 122. \$1.00.)

The lectures at the Sixteenth Institute of the Harris Foundation in June, 1940, were delivered under the immediate impact of the great crisis marked by the fall of France. Ferdinand Schevill takes a historian's look back over the approximately twenty-five civilizations which have marked the course of human history and diagnoses the ills of our own as essentially an exaggeration of nationalism ("the totalitarian state is the nation-state carried . . . to its excess") and science. If our civilization is to achieve a more stable world order it will have to create a world faith and a social ethics which can merge and submerge the individual in the group and which "might not without justice be described as a return to the Middle Ages." Jacob Viner, discussing "International Economic Relations and the World Order," argues that on the whole the thesis that freer trade is conducive to peace is valid, but that wasted opportunities and present conditions make the principle relatively inapplicable today. After appraising the proposed federal union of the democracies as highly desirable but unlikely of accomplishment and viewing European union under Hitler (with extra-European annexes) as a likely prospect, Professor Viner turns to the Western Hemisphere. "The southern half of South America and our own country are more than continents apart" and there is danger that talk of Western Hemisphere solidarity will become "our national vehicle for day-dreaming, wishful thinking, and postponement of difficult and unpleasant but urgent decisions, corresponding to the appeasement policy of England and France before and after Munich." The economic defense of the Western Hemisphere alone

would be very difficult, particularly because of the problem of disposing of surplus products from mono-culture areas. Close collaboration with the British Empire and any other surviving and willing democracies, without regional restrictions, is much more likely to provide security for the United States than a hemisphere policy. Charles C. Colby contributes an informative discussion on the rôle of shipping in the first World War; Quincy Wright discusses international law and world order; J. Fred Rippy contributes a paper on the United States and world order; and Walter H. C. Laves concludes with some observations on the institutional requirements of a more stable world order.

The little book by Sir George Paish impresses this reviewer as an oversimple, uncritical reiteration of old slogans, applied to the problem of creating a new era of peace after this war in such a way as to cover up the real difficulties. Extend credits, remove artificial hindrances to trade, stabilize currencies, and return to the gold standard—this is the formula. Nation-states, still clothed with unlimited economic sovereignty, are to be persuaded, apparently, to act in the future on the principle that the prosperity of each depends on the prosperity of all. Buying power is to be maintained when great governmental war expenditures come to an end by generating a "universal feeling of confidence" through the adoption of the sound policies mentioned earlier. All this is dangerous delusion, because it leaves out so much. Something much more positive than a naïve faith in the market system and a return to "normalcy" will be necessary after this war if we are to achieve a stable economic basis for a democratic world system. The argument of the book is often exaggerated and inaccurate. Foreign trade is a good thing, but it will not do all that Sir George Paish implies toward promoting peace and prosperity. It is hardly correct, for example, to say that "if international trade is depressed, every country suffers from depression and if international trade is active every country enjoys prosperity," or to attribute the depression unqualifiedly to the collapse of international trade (p. 28). Nor can one accept the statement that the American dollar still has a "fixed and permanent value" because it is linked to gold, which "never depreciates in value with keeping" (p. 37). The great problems connected with "rendering the currencies of the various nations fixed and permanent" in their relations to each other (p. 35) are nowhere discussed.

EUGENE STALEY

*Fletcher School of Law and Diplomacy
Tufts College*

We Have a Future. By NORMAN THOMAS. (Princeton: Princeton Univ. Press. 1941. Pp. viii, 236. \$2.50.)

The author, leader of the Socialist Party in the United States, makes no

attempt to predict our future. He rather seeks to present the reader with a rational analysis of what our future might be made to be, if we demonstrated the requisite sagacity and vision to shape it intelligently. The goal is delineated in broad and simple but not very clearly defined terms. It is relative abundance of economic goods for all and the conquest of poverty. To reach this goal, the author suggests the need for a number of more or less radical changes in the structure of our economy. But before entering into a discussion of what these changes should be, he devotes more than half of the volume to a recital of mistakes of the past, particularly since the first World War, which have contributed to our present economic and political dilemma. Although there is nothing essentially new in the account of this tragic sequence of failure, which has culminated in the alleged downfall of the "old capitalism," a reiteration offers a logical point of departure for a consideration of the requisites for achieving the desired goal.

The many avowedly constructive proposals advanced in the second half of the volume are no more radical than one might expect from a recognized leader in socialist thought. They include, among others, nationalization of mineral resources, socialization of investment banking, socialization of basic utilities which are natural monopolies, adoption of a managed currency aimed at achieving price stabilization, expansion of consumers' coöperatives, extension of civil service and social insurance, and, most important, the shifting from planning for defense to overall planning for abundance. In so brief a volume it is manifestly impossible to evaluate each proposal carefully, and no pretense of doing so is made.

The author speaks feelingly of our two-party political system which because of its duopolistic position (referred to as a "two-party monopoly," p. 191) "is decidedly unwholesome." The political reforms advocated, however, designed to give minority parties a chance on the ballot, are not so radical as the proposed changes in the structure of our economy. But since the author believes the many economic changes advocated might be achieved by democratic means, he is thoroughly consistent in his advocacy of various political reforms.

The final chapter sets forth the author's views on the place of the United States in world organization, particularly after the war. They can be summarized with the concluding phrases of the volume "the maximum possible coöperation for peace; the maximum possible isolation for war."

There is much hard, common sense to be found in the pages of this brief, popularly written treatise.

KARL SCHOLZ

University of Pennsylvania

NEW BOOKS

- ALLEN, W. E. D. *The Ukraine*. (New York: Macmillan. 1941. Pp. 450. \$4.50.)
- ALTSCHUL, F. *Let no wave engulf us*. (New York: Duell, Sloan and Pearce. 1941. Pp. 60. \$1.)
- BARZUN, J. M. *Darwin, Marx, Wagner; critique of a heritage*. (Boston: Little, Brown. 1941. Pp. 432. \$2.75.)
- BISSON, T. A. *Shadow over Asia, the rise of militant Japan*. Headline books, no. 29. (New York: Foreign Policy Assoc. 1941. Pp. 96. 25c.)
- BROGAN, D. W. *U.S.A.; an outline of the country, its people and institutions*. World today ser. (New York: Oxford Univ. Press. 1941. Pp. 144. \$1.)
- EINZIG, P. *Hitler's "new order" in Europe*. (London: Macmillan. 7s. 6d.)
- . *Europe in chains*. (New York: Penguin. 1941. Pp. 127. 25c.)
- FOSTER, W. Z. *Socialism, the road to peace, prosperity and freedom*. (New York: Workers Lib. Publishers. 1941. Pp. 46. 5c.)
- . *World capitalism and world socialism*. (New York: Workers Lib. Publishers. 1941. Pp. 30. 5c.)
- GUILLEBAUD, C. W. *The social policy of nazi Germany*. Current problems. (New York: Macmillan. 1941. Pp. 142. \$1.25.)
- HANSON, E. P. *Chile, land of progress*. (New York: Reynal and Hitchcock. 1941. Pp. 221. \$1.75.)
- HITCH, C. J. *America's economic strength*. World today ser. (New York: Oxford Univ. Press. 1941. Pp. vii, 114. \$1.)
- HOMAN, P. T. and others. *Puerto Rican problems*. (Washington: Am. Council on Public Affairs. 1940. Pp. 15. 10c.)
- HU, T. Y. *Japan's economy under war strain*. (Washington: Chinese Council for Econ. Research. 1941. Pp. 68.)
- LANDON, K. P. *The Chinese in Thailand*. (New York: Oxford Univ. Press. 1941. Pp. xi, 310. \$2.50.)
- LASKI, H. J. *The decline of liberalism*. (New York: Oxford. 1941. Pp. 24. 75c.)
- . *Liberty in the modern state*. (New York: Penguin. 212. 25c.)
- LUCE, H. R. *The American century*. (New York: Farrar and Rinehart. 1941. Pp. 89. \$1.)
- MACKAY, R. W. G. *Peace aims and the new order*. Foreword by Norman Angell. (New York: Dodd, Mead. 1941. Pp. 306. \$2.50.)
- SIMPSON, L. B. *Many Mexicos*. (New York: Putnam. 1941. Pp. 349. \$3.)
- SOWARD, F. H. and others. *Canada in world affairs; the pre-war years*. (New York: Oxford. 1941. Pp. 356. \$3.25.)
- VANDENBOSCH, A. *The Dutch East Indies*. 2nd ed., rev. (Berkeley: Univ. of California Press. 1941. Pp. xii, 446. \$4.)
- This revised edition contains a new chapter on "The Dutch East Indies and Japan," an appendix on "The economic situation in the Netherlands Indies in 1939," and several appendices on foreign trade.
- WIEDEN, P. *New aspects of imperialism*. (New York: Workers Lib. Publishers. 1941. Pp. 40. 10c.)
- WILLKIE, W. L. *Free enterprise; the philosophy of Wendell L. Willkie as found in his speeches, messages and other papers*. General welfare ser. (Washington: Nat. Home Lib. Found. 1939-40. Pp. 114. 50c.)
- Economic review of foreign countries, 1939 and early 1940*. Econ. ser. 9. (Washington: Bur. of Foreign and Domestic Commerce. 1941. Pp. 361. 35c.)
- Europe under Hitler*. (London: Oxford Univ. Press. 6d.)

Mexican government publications; guide to the more important publications of the National Government of Mexico, 1821-1936. (Washington: Lib. of Congress. 1940. Pp. 333. \$1.25.)

Resumen general del censo industrial de 1935. Publicaciones de la secretaria de la economia nacional. (Mexico: Talleres graficos de la nacion. 1941. Pp. vi, 250.)

Statistics; Economic Mathematics; Accounting

NEW BOOKS

BAILY, H. H. *Specialized accounting systems.* Wiley accounting ser. (New York: Wiley. 1941. Pp. 497. \$4.)

Contains chapters on each of the following topics: "Contractors"; "Department stores"; "Small loan and finance companies"; "Building and loan associations"; "Commercial banks"; "Fire insurance"; "Life insurance"; "Stock brokerage"; "Grain brokerage"; "Water utilities"; "Railroads"; "Motor carriers"; "Air transportation."

BELL, W. H. and JOHNS, R. S. *Auditing.* Rev. ed. Coördinated accounting series. (New York: Prentice-Hall. 1941. Pp. 421. \$4.70; \$3.50, school edition.)

CHAMBERS, E. G. *Statistical calculation for beginners.* (New York: Macmillan. 1941. Pp. 118. \$2.)

D'ALESSANDRO, A. *Foundation of accounting.* (New York: Longmans Green. 1941. Pp. xii, 622. \$4.)

DAVIS, G. R. and YODER, D. *Business statistics.* 2nd ed. (New York: Wiley. 1941. Pp. ix, 616. \$3.75.)

Contains new materials and reorganization of materials based on teaching experiences.

FINNEY, H. A. *Tests and questions to accompany general accounting.* (New York: Prentice-Hall. 1941. Pp. 339. \$2.65, paper; \$2, school edition.)

NEWLOVE, G. H. and GARNER, S. P. *Elementary cost accounting.* Heath accounting ser. (Boston: Heath. 1941. Pp. 567. \$4.)

PATON, W. A. *Advanced accounting.* (New York: Macmillan. 1941. Pp. xx, 837. \$5.)

SMITHLINE, H. and THOMPSON, C. O. *Business arithmetic.* Rev. of original Thompson's *Business Arithmetic.* (New York: Prentice-Hall. 1941. Pp. 507. \$1.60.)

TILLER, C. W. *Governmental cost accounting.* (Chicago: Municipal Finance Officers' Assoc. 1940. Pp. 78. \$1.)

Extracto estadístico del Peru. Preparado por la direccion nacional de estadística. (Lima: Imprenta Americana. 1939. Pp. cxxxix, 568.)

Proceedings of the 1940 Ohio conference of statisticians on business research, held at the Ohio State University, November 15-16, 1940. Coll. of commerce conf. ser., no. C-13. (Columbus: Bur. of Bus. Res., Coll. of Commerce and Admin., Ohio State Univ. 1941. Pp. viii, 97.)

Statistical abstract of the United States, 1940: sixty-second annual edition. (Washington: Supt. Docs. 1941. Pp. 925. \$1.50.)

Business Cycles and Fluctuations

NEW BOOKS

ANGELL, J. W. *Investment and business cycles.* (New York: McGraw-Hill. 1941. Pp. xviii, 363. \$3.50.)

- BARNETT, P. *Business-cycle theory in the United States, 1860-1900*. (Chicago: Univ. of Chicago Press. 1941. Pp. ix, 129. \$1.)
- BRETHERTON, R. F., BURCHARDT, F. A. and RUTHERFORD, R. S. G. *Public investment and the trade cycle in Great Britain*. (New York: Oxford. 1941. Pp. 480. \$9.)
- BURJAM, F. *Den produktiva aktiviteten i dess förhållande till konjunkturutvecklingen*. Ekonomiska samfundet i Finland skrifter iii. (Helsingfors: Schildts. 1941. Pp. 283. Mk. 83.)
- KING, W. I. *The causes of economic fluctuation*. Rev. ed. (New York: Ronald. 1941. Pp. 376. \$3.50.)
- PIERSON, J. H. G. *Full employment*. (New Haven: Yale Univ. Press. 1941. Pp. ix, 297. \$2.50.)
- HARWOOD, E. C. *Cause and control of the business cycle*. (Cambridge: Am. Instit. for Econ. Research. \$1.)

Public Finance; Fiscal Policy; Taxation

NEW BOOKS

- BRUTON, P. W. *Bruton's cases on taxation*. Am. casebook ser. (St. Paul: West Pub. 1941. Pp. 1252. \$6.50.)
- BUEHLER, A. G. *Taxation of corporate excess profits*. (Washington: Am. Council on Public Affairs. 1940. Pp. 14. 25c.)
- DISRAELI, R. *Uncle Sam's treasury*. (Boston: Little, Brown. 1941. Pp. 121. \$1.25.)
- FEILER, A. *Conscription of capital*. Stud. on war and peace, no. 10. (New York: Peace Research Project, Grad. Faculty of Pol. and Soc. Sci. 1941. Pp. 23. 25c.)
- FORD, R. S. and SHEPARD, E. F. *Retail sales taxation in Michigan*. Michigan pamph. no. 12. (Ann Arbor: Univ. of Michigan Press. 1941. Pp. 20. 10c.)
- GUSHING, H. G. *A study of the sales tax with special reference to the Missouri law of August, 1935*. Univ. microfilms, no. 197. (Ann Arbor: Univ. of Michigan Microfilms. 1941. Pp. 244.)
- RATCHFORD, B. U. *American state debts*. (Durham: Duke Univ. Press. 1941. Pp. xviii, 629. \$5.)
- THARP, C. R. *Federal expenditures in Michigan*. Michigan pamph. no. 13. (Ann Arbor: Univ. of Michigan Press. 1941. Pp. 36. 10c.)
- Excess profits tax amendments of 1941. Act to amend certain provisions of the internal revenue code relating to profits tax and for other purposes. Approved March 7, 1941. (77th Cong. Public Law 10.)* (Washington: Supt. Docs. 1941. 5c.)
- Income tax act, 1918, and finance acts, 1931 edition. Supplement 9, December, 1940.* (London: H. M. Stationery Office. 1941. 1s.)
- Regulations 110, consolidated excess profits tax regulations relating to consolidated returns of affiliated corporations prescribed under section 730(b) of the Excess Profits Tax act of 1940.* (Washington: U. S. Treasury Dept., Internal Revenue Bur. 1941. Pp. 45. 10c.)
- Select committee on national expenditure, sess. 1940-41: sixth report.* (London: H. M. Stationery Office. 1941. Pp. 67. 1s.)
- Sources of war finance, an analysis, and an estimate of the national income and expenditure in 1938 and 1940.* (London: H. M. Stationery Office. 1941. 3d.)
- State of New York: eighty-first annual report of the superintendent of insurance for the year ended December 31, 1939. Vol. 3-A. Casualty and surety companies; title companies. Vol. 3-B. Fraternal benefit societies. Leg. doc. (1940)*

no. 35. (Albany: State of New York Insurance Dept. 1940. Pp. 81a, 582; 432b.)

Treasury decisions under customs and other laws. Vol. 75. July, 1939-June, 1940. (Washington: U. S. Treasury Dept. 1940. Pp. 469. \$1.)

Money and Banking: Short-term Credit

Money and Banking Today. By EUGENE E. AGGER. (New York: Reynal and Hitchcock. 1941. Pp. xvi, 764. \$3.00.)

Money and Banking. By J. MARVIN PETERSON, DELMAS R. CAWTHORNE and PHILIPP H. LOHMAN. (New York: Macmillan. 1941. Pp. xvii, 742. \$3.75.)

In general these two textbooks written for the introductory course in money and banking cover the same ground. Both present an up-to-date picture of the monetary system of the United States, recent developments being discussed in the main body of the text instead of being corralled in a final chapter or two. Each gives rather full treatment to different kinds of standards of value and their stability or instability. The history of money and banking receives less consideration at the hands of Peterson and associates than is usual in books of this kind, although their treatment is fuller than that of Agger who declares that he uses historical material mainly to illustrate principles and does not consider it ". . . worth a great deal standing alone" (Preface, p. v). A major portion of each book is devoted to the problems of banking both in their commercial and non-commercial aspects and to the organization, operations, and policies of the Federal Reserve System. Peterson and associates give much more attention than Agger to the controversy over liquidity and shiftability of bank assets and to the limits on expansion of bank credit. Neither book treats banking in foreign countries in much detail; in two chapters at the end of his book Agger describes banking in England, Germany, and Russia. Both books contain an exposition of several theories of money value. The Multiple Commodity Reserve Plan, the 100 per cent Reserve Plan, and similar reform proposals are treated briefly in both books.

Agger introduces the discussion of value of money in the early part of his book. He treats this complex problem from the standpoint of money rates, foreign exchange rates, and the domestic price level (chapters VI-VIII, pp. 97-154). He integrates these three aspects skillfully, and his lucid discussion should be stimulating to the student. Peterson and associates, in contrast to Agger, delay their treatment of the value of money until their book is more than half completed. Except for pointing out that the foreign exchange ". . . rate is in reality one aspect of the value of money which was treated in a previous discussion of this subject" (p. 661), they have not attempted to integrate the three aspects of money value. They discuss the domestic price level in Part V (pp. 475-536), money rates in Part VI

(pp. 553-564), and foreign exchange rates in Part VII (pp. 661-684).

Peterson and associates explain that "The chapters on the value of money have been placed late in the book because monetary theory has more meaning to a student after he has acquired a knowledge of banking theory and practice" (Preface, p. vi). Whatever the strength of this argument may be, other considerations need to be taken into account. There are objections to taking up the discussion of problems which require of the student an understanding of factors determining the value of money before the formal treatment of that complicated question has been presented. Without a basic understanding of price level theory and foreign exchange the student is not equipped to handle such problems as unstable standards of value and Federal Reserve operations and policies. To introduce a discussion of the internal and external value of money whenever such understanding is required involves needless repetition.

Agger expresses the view that the equation of exchange (of the Fisher-Kemmerer type) ". . . broadly embraces all the important factors affecting the value position of money, and a study of the interrelations of these factors helps us to understand how the price mechanism functions" (p. 141). Contrasting the Fisher-Kemmerer and Cambridge doctrines, he concludes, "The two approaches are . . . not mutually contradictory, but may be said . . . to supplement each other, the cash balances approach bringing into the picture human motives and human calculations, to add living warmth to an otherwise cold and apparently lifeless formula" (p. 145).

In their discussion of the determination of the price level Peterson and associates have this to say:

"Up to this point in the analysis, the variables considered important to price level fluctuations have been the quantity of money and credit, the velocity with which these quantities are used in effecting transfers of goods, and the volume of trade. As a supplement to this list of strategic elements, we must recognize (1) the psychological elements, (2) the technological factors, and (3) the level of production" (p. 500).

"The reasons for changes in the level of prices grow out of such monetary elements as the quantity of money and its velocity, and such nonmonetary factors as the volume of trade, the pace of technological advance, the level of output, and changes in public attitudes regarding the holding of money" (p. 507).

"The four general sources from which price changes have been shown to emanate were (1) the supply of money, (2) the demand for money, (3) non-monetary changes such as technological innovations, the level of output, and industrial mergers, and (4) the public's attitude with respect to liquidity" (p. 536).

Do they intend to deny that the equation of exchange ". . . broadly embraces all the important factors affecting the value position of money . . ."? Whether this is their position or whether they are enumerating *some* of the elements which help to determine changes in the factors of the equation, they have not made altogether clear.

Considerable duplication is found in the book of Peterson and associates. Typical of this tendency is the following: On page 25, under the heading "Conditions appropriate to a gold standard," they discuss these three points: (1) "A flexible price structure must be maintained"; (2) "No undue interference with the flow of international trade can be permitted"; (3) "The rules of the gold standard must be scrupulously observed." On pages 690-691 they take up again the same three points under the heading, "The assumptions of automatic actions." The second exposition differs from the first in the choice of words, not in ideas.

The book of Peterson and associates is not free from minor errors. For example, on page 347 they state, "The ratio of cash in circulation to deposits has been found to be \$1 : \$8.3. . . ." On the basis of this ratio the public holds over 10 *per cent* of its funds in the form of cash outside the banks. Their earlier discussion reveals that they do not mean this at all. On page 341 they assume that the public holds 8.3 *per cent* of its funds in the form of cash outside the banks.

On the whole Agger's book is well organized and clearly written. His ". . . emphasis is primarily on functional analysis and interpretation rather than on description of organization and of techniques" (Preface, p. v). Improvement, however, might be made by eliminating some duplication found in the discussion of the organization, operations, and policies of the Federal Reserve System in chapters XXV and XXVI (pp. 488-565), and chapter XXVIII (pp. 588-618).

The questions and problems at the end of each chapter are a special feature of Agger's book.

R. H. LOUNSBURY

Russell Sage College

The Economics of Money, Credit and Banking. By F. CYRIL JAMES. 3rd ed., rev. and enl. (New York: Ronald. 1940. Pp. xxi, 745. \$4.00.)

It was my pleasure to review, briefly, both the first and the second editions of this work. Because it amounts to a new book, the third edition presents something of a problem to a reviewer. It exceeds the length of the second edition by fifty per cent. Every chapter has been rewritten; most of them have been reorganized. Therefore, little reference may be made to what was previously said about the book.

In the new volume there is less concern with the immediateness of money, credit and banking problems and phenomena and more critical interpretation of the philosophies underlying and surrounding them. Instead of isolating finance from the balance of economic life, the approach is that money and credit affairs are mere incidents in the great sea of human activity and existence. The cornerstones for inferences in the present volume are: (1) the historical and political setting of the problems of the past, and (2) the general political, economic and social life of the times. The first

two editions were probably guilty of bias by depending too much upon the contemporary mass emotions of the social order.

The introduction of new materials has occurred in two ways: (1) new chapters essentially on added materials, broadening the scope of the work; and (2) new historical materials to strengthen the philosophies propounded, especially Canadian and British.

It may be hazarded that the author's general attitude toward experimentation in money and prices is more directly critical, although one can find but few instances indicating a lack of faith in their ultimate efficacy. The revamping of an entire money system and its attendant financial institutions, such as was the apparent intention of the New Deal in the United States from 1933 to 1940, are viewed dispassionately but with reserve. The conclusion appears to be that money and credit management will never be the decisive factor in the economic well-being of a nation. This book is probably the best volume available on the relations between money and credit conditions in the "Old World" and those of the "New World." It will appeal especially to those teachers who desire to avoid mere descriptive treatment of the financial system.

FLOYD F. BURCHETT

University of California

NEW BOOKS

- CROWTHER, G. *An outline of money*. (London: Nelson. 1941. 10s. 6d.)
- DURAND, D. *Risk elements in consumer instalment financing*. Finan. res. prog., stud. in consumer instal. finan. no. 8. (New York: Nat. Bur. of Econ. Research. 1941. Pp. xx, 163. \$1.50; \$2, technical edition.)
- MILLET, J. I. *Bank audits and examinations*. Rev. ed. (New York: Ronald. 1941. Pp. xx, 577. \$6.)
- MURANJAN, S. K. *Modern banking in India*. (Bombay: New Book Co. 1940. Pp. vi, 422. Rs. 7-8.)
- PEACH, W. N. *The security affiliates of national banks*. Johns Hopkins Univ. stud. in hist. and pol. sci., ser. lviii, no. 3. (Baltimore: Johns Hopkins Press. 1941. Pp. 187. \$1.50.)
- ROWLANDS, D. T. *Two decades of building and loan associations in Pennsylvania*. Reprinted from *The Pennsylvania Bulletin*, vol. vii, nos. 6-12, vol. viii, nos. 1-4. (Philadelphia: Univ. of Pennsylvania. 1941. Pp. ix, 135.)
- SCHERMAN, H. *Will we have inflation? including The real danger in our gold*. (New York: Simon and Schuster. 1941. Pp. 179. \$1.)
- SCHNEIDER, W. J. *Field warehousing as a facility for lending against commodities*. (New York: Macmillan. 1941. Pp. 91. \$1.)
- SIMPSON, W. H. *The small loan problem of the Carolinas, with a commentary on regulation in Virginia*. (Clinton, S.C.: Presbyterian College Press. 1941. Pp. 154. \$2.)
- STEINER, W. H. and SHAPIRO, E. *Money and banking*. Rev. (New York: Holt. 1941. Pp. x, 790. \$3.60.)
- STEWART, M. S. *How we spend our money*. Rev. ed. Public affairs pamph., no. 18. (New York: Public Affairs Committee. 1941. Pp. 31. 10c.)
- TAYLOR, O. *The new inflation; how to detect it from beginning to end*. (New York: Stock Market Pubs. 1941. Pp. 25. \$3, paper, loose-leaf, mimeographed.)

- WALSH, J. J. *Early banks in the District of Columbia, 1792-1818*. Stud. in econ., vol. 2. (Washington: Catholic Univ. of America Press. 1940. Pp. 191. \$1.75.)
- Agricultural credit in Denmark*. Econ. and credit res. div., bull. CR-2. (Washington: Farm Credit Administration. 1941. Pp. 71. 15c.)
- Assets and liabilities of operating insured banks, December 31, 1940*. Rep. no. 14. (Washington: Federal Deposit Insurance Corp. 1941. Pp. 35.)
- Director of the mint: annual report for the fiscal year ended June 30, 1940, including report on the production of the precious metals during the calendar year 1939*. (Washington: Supt. Docs. 1940. Pp. 110. 45c.)
- Federal Reserve act of 1913 with amendments, and laws relating to banking*. (Washington: Supt. Docs. 1941. Pp. 314. 25c.)

International Trade, Finance and Economic Policy

New Directions in Our Trade Policy. By WILLIAM DIEBOLD, JR. Studies in Am. for. rel., no. 2. (New York: Council on Foreign Relations. 1941. Pp. x, 174. \$2.00.)

The Reciprocal Trade Agreements Program. By GRACE BECKETT. (New York: Columbia Univ. Press. 1941. Pp. xv, 142. \$2.00.)

Since studies of recent American commercial policy are all too few, these two books should be welcomed. Miss Beckett's book, as the title indicates, discusses only the trade agreements program, whereas Mr. Diebold's book is a study of other aspects of American commercial policy as well and emphasizes the fact that the trade pacts have occupied a much less important place in American policy during the past two years than during the years 1936-38.

Mr. Diebold begins his analysis with a study of the trade agreements program. Although his discussion is intentionally by no means exhaustive, it is penetrating. Instead of indulging in the conventional platitudes which characterize the program as a partial renunciation of American protectionism, the author treats it in its true perspective. He calls attention to the various illiberal practices developing concurrently with the "liberalism" of the Hull program, as, for example, the somewhat startling fact that nearly one-fourth of American dutiable imports were restricted by quota limitation in 1939. One statement concerning the program is a particularly refreshing commentary upon some of the exaggerated claims made by its sponsors and deserves quoting: "The trade agreements program did not introduce a free trade policy, or even a general low tariff policy, but a policy of altering tariffs to the degree necessary to get concessions for American exports without hurting domestic producers. This 'adjusted protectionism' differed from past American protectionist policy more in technique than in fundamental concept" (p. 23). Nevertheless, Mr. Diebold feels that the program should be retained and that it might well be used even during the war to secure a better understanding with Latin America. He offers substantial evidence

that an economic basis already exists for agreements with Chile, Peru, and, especially, Mexico.

The latter part of Mr. Diebold's book is a critical discussion of various proposals (such as, for example, the trade cartel plan) which have been advanced to care for the problems of Western Hemisphere trade during and after the present war. The discussion of the post-war situation has been predicated upon varying assumptions (German victory, stalemate, and British victory) and, although some may disagree with the obvious bias toward greater hemispheric self-containment, the author has advanced convincing arguments to support his case, and, given the current political milieu, his conclusions are probably as realistic as many of the alternatives that have been suggested.

Anyone looking for a critical theoretical analysis of the trade agreements program will not find it in Miss Beckett's book. In fact, the work is more of the nature of a primer on the subject, though this fact is somewhat camouflaged by a plethora of footnotes and statistical tables. The main divisions of the book consist of discussions of the background of the program, the general provisions of the agreements, the concessions obtained and granted, and the effect of the agreements upon American foreign trade. The description of the background of the agreements and of the general provisions adds little to the authoritative work of Dr. Tasca (*The Reciprocal Trade Policy of the United States*). The discussion of the concessions received and granted is a bit tedious but it is the only succinct statement covering all of the agreements that is available. The difficulties in interpreting statistics on the effects of the trade agreements are great and the reader is not likely to be impressed with the usefulness of such computations, unless, indeed, it be to show that they are, in fact, of little practical significance.

The chief value of this book lies in the fact that Miss Beckett has succeeded in collating an enormous mass of material published by the Departments of State, Commerce, and Agriculture and by the Tariff Commission. Although great industry has been shown in this painstaking task, most readers would have welcomed some statement of a few of the more important theoretical implications of the trade philosophy underlying the Hull program.

CARL KREIDER

Goshen College

Barriers to World Trade. By MARGARET S. GORDON. (New York: Macmillan. 1941. Pp. xii, 530. \$4.00.)

This book offers a detailed description of the restrictions upon international trade as they developed in the period from 1914 up to the outbreak of the second World War in September, 1939. It divides into four parts. The first sketches the evolution of commercial and foreign exchange policies

during and after the first World War up to the breakdown of the post-war gold standard. The second deals with national policies for the control of international payments, defining exchange control as all those measures limiting the right of individuals to deal freely in the foreign exchange market. In the third part, the author takes up tariff policy since 1931, import quotas and other forms of import restriction, and export promotion and control. Finally, the facts and prospects of bilateralism, regionalism, colonial policies, international commodity control schemes, and multilateral trade policies are systematically reviewed in part four.

For those students seeking, within the covers of one book, for a painstaking and orderly presentation of factual data pertaining to world commercial policies in the last decade, there is probably not a better one to be found than the volume under review. It can be used as a worthy companion to Condliffe's recent *Reconstruction of World Trade*. Mr. Condliffe paints on a broader canvas and subordinates the facts to extended and incisive analysis, whereas Mrs. Gordon is more inclined to let the facts speak for themselves. In their fundamental conclusions, however, both authors raise the same questions about the future of international economic relations.

As stated by Mrs. Gordon, the conclusions are: (1) The forces making for increased state intervention and control over national economic life dovetail with the social and political forces of traditional nationalism to create a restrictionist attitude and practice toward international economic relations. (2) The increased measure of state control over foreign trade creates conditions in which the principle of bilateral balancing appears to outweigh the principles of multilateralism and equal treatment, professions to the contrary notwithstanding. (3) Regionalism and imperial economic integration have made only an inconsequential contribution to the preservation and extension of the international division of labor. (4) While international trade has shown rather remarkable vitality in the face of the multitude of restrictions, its future prospects appear to be bad, unless a more secure basis for the international division of labor can be provided by effective international political organization.

MAX GIDEONSE

Rutgers University

Plan for Permanent Peace. By HANS HEYMAN. (New York: Harper. 1941. Pp. xx, 315. \$3.50.)

Professor Heymann's book is considerably more limited in scope than its ambitious title would indicate. It is primarily concerned with drawing a blueprint for an intricate system of international and super-national banking. In his then-time official capacity, the author in 1922 wrote a memorandum on this subject for Germany's Foreign Minister, Walter Rathenau.

That statement, presented to the Genoa Conference of 1922, pigeonholed, published in Germany by its author and often since brought up by him in his private and public capacity, is the cornerstone of his book. It is reproduced in an Appendix which is perhaps the most interesting part of the large volume. With this frustrated project at the back of his mind and with the conviction that the two world wars of our century were due to essentially economic causes, Dr. Heymann presents his new project of international financial organization as a determining contribution to world peace.

The first part of the book deals with the general background of the war. It is called, significantly, "Economic fallacies caused the war," a thesis which is not proved, however, in the seventy-five pages that follow. To affirm one's conviction is one thing, to do historian's work in tracing connections between events is yet another, and the latter is left undone. It is not enough to affirm that "It was above all an economic explosion caused by protectionism and imperialism which brought about the war in 1914"; nor to state, with respect to the present conflagration, that "misconceptions of economic theories, primarily, caused the war." We know all too well of the political, power-seeking elements in both wars; there is a large literature concerned with the origins of the first World War; and it is well established that the decisive factors in the present German-nazi war of conquest are primarily other than economic. Heymann's "materialistic interpretation of history" is neither convincing nor sophisticated, and as it does not go beyond rather hackneyed assertions supported only by inconclusive appeals to personal recollections, this part of the book need not be more than briefly noted.

Another point is more interesting. To attribute the effervescence of economic nationalism and of the rejuvenated mercantilism to fallacies and misconceptions of economic theory is hardly to go deeply enough into modern economic history. Theories of economic liberalism and internationalism, to which Dr. Heymann adheres by and large, have been more current and more firmly accepted in academic circles than any of the neo-mercantilist views, at least until the publication of Mr. Keynes's *General Theory*. The fallacies of protectionism were denounced time and again, and yet were a more readily accepted guide to policy than the more scholarly views of the main body of academic economists. Why was it? Mainly because economic nationalism is a corollary of political nationalism, a function of the nationalistic conception of international as compared with national issues. The disruptive protectionism of the twenties and the failure to carry out in practice the principles of international coöperation as stated, *e.g.*, in the Covenant of the League of Nations were due to the prevalence of nationalistic political conceptions with their emphasis on full national sovereignty, to political insecurity leading to a protection of "key industries," to prep-

arations for a possible aggressive war, not to forget the usual "protection" of special interests. All these considerations determined the type of "theory" to which politicians listened. To omit all these questions is to leave out the main feature of the post-1919 developments. Here lies the principal weakness of Dr. Heymann's book and the reason why it falls so far short of its stated objective.

Let us turn now to the principal, second part of the book called (not very happily) "Social capitalism can make peace." What "social capitalism" is, is not explained to this reviewer's satisfaction. This opportunity may be taken to complain about the all too prevalent habit of covering up complex and difficult, and at the same time vague, issues by well-sounding phrases. We have heard much (even in the book under review) about the "end of economic man"; also about "a system of social economy which is in harmony with our education and our character" (p. 259); about mechanisms which "will provide us with a relatively simple formula in higher economics, which is as indispensable as simple formulae are in higher mathematics" (p. 121); and so forth. This type of verbal formulations will neither improve our knowledge nor create new and improved instruments for guiding action.

In proposing the foundation of new institutions, it is important to state clearly the objectives sought and to devise the simplest possible institutional framework for the attainment of these objectives. Such a framework should draw as heavily as possible upon existing institutions. Hence, every new project of an international bank should be evolved on the basis of an appraisal of the Bank for International Settlements, of its past performance, and of its future possibilities. The B.I.S. was founded too late and was too limited in scope. Nobody will disagree with Dr. Heymann on that. But he is far from fair and far from accurate when he affirms (p. 262) that the B.I.S. "after all, was nothing but a creation of J. P. Morgan and Company, the First National Bank of New York, and the First National Bank of Chicago." It was not so simple as that! Nor is it fair or true to say that the bank "was not an instrument of friendship and collaboration in the reform of our socio-economic world order" (p. 122). Modest though it was, the Bank for International Settlements was a definite step forward in the direction of international financial and monetary collaboration. Were it not that it came to life so late (in 1930), its record would very likely have been better. Were it not for the prevalent nationalism, its powers would have been greater. The men who ran the Bank had vision and courage, men like Pierre Quesnay, Per Jacobsson, Leon Fraser, and others. Quesnay in particular, to whom only one fleeting reference is made in the book under review, had a bold and imaginative vision of the future of the institution of which he was one of the most important intellectual sponsors.

Dr. Heymann offers a scheme which includes several "continental banks"

for Europe, the Western Hemisphere and Asia, all to be topped by a "Bank of Nations." This system of banks would help the administration of international credits for productive purposes and would have a hand in the regulation of the total money supply of the world. (As one reads the book one gets the feeling that it would exercise these latter powers mainly for inflationary purposes. Business cycle connections are mentioned but not analyzed.) There are various other activities listed, such as an international administration of social security and so forth, but they are treated too vaguely to be more than noted here. There is also a chapter on the International Labor Organization which seems out of its proper context. The presentation of Dr. Heymann's own proposals was much more concise and clear in his Memorandum of 1922 than it is in the main body of his book.

There seems to be no good reason why there should be "continental banks" in a world endowed, after a defeat of Germany, with a new International Organization. But then the author is not quite explicit in the assumptions he makes regarding the outcome of the war. Also there seems to be no reason why one should brush away the possibility of the Bank for International Settlements, duly reorganized, becoming the new "Bank of Nations." In effect there would be but few administrative reforms to make in order to effect the transformation. The short reference to the matter in J. E. Meade's *Economic Foundations of a Durable Peace* conveys clearer ideas than do the elaborate charts attached to Dr. Heymann's book. A much more difficult problem—and this one is left quite in the dark—is that of policies which such a world bank should adopt, their aims and criteria. What should also be considered are the policies toward such a bank to be adopted by the various national governments and central banks within the framework of a new International Organization.

MICHAEL A. HEILPERIN

Bryn Mawr College

History of French Commercial Policies. By F. A. HAIGHT. (New York: Macmillan. 1941. Pp. xvii, 285. \$2.50.)

Within the compass of less than three hundred pages, Mr. Haight has written a readable and judicious book on French commercial policies from the days of Colbert to, what now seem like, the pre-historic days of Reynaud. Mercantilism; the liberal trade policies of the middle nineteenth century; the protectionism of the post-Civil War days; the vain attempts at tariff reduction in the twenties; the quotas, clearing agreements, and other devices of the thirties—all of these are handled with skill and clarity.

A large part of the book is devoted to very recent history. Mr. Haight is not unaware of the relation of economic policies abroad to French commercial policies. In order to understand these policies, one must take into account the effects of British abandonment of gold, the American devaluation

policy, the German exchange policies, etc. Unlike most historians of France's tragic period, he does not find in his particular field of interest the explanation of France's collapse. I wish that Mr. Haight had been bolder and evaluated the contribution of quotas and other restrictionist policies to the economic decline and the class conflict of the thirties, which proved to be so unfortunate for France. France's insistence on the gold standard in a world of depreciated currencies and, therefore, of unequal competition for French industry, accounts in large part for the quotas and clearing agreements and also for the suicidal attempt on the part of the French governments to bleed the economy through wage- and price-cutting. The contributions of these attempts at wage-cutting and of the accompanying unemployment in the thirties to the leftist movements and class feeling can hardly be exaggerated.

Mr. Haight seems sympathetic with the French reliance on quotas, clearing agreements, and the alliances with other gold countries to fight depreciation. Yet he admits the failure of the clearing agreements and in many respects is critical of quotas. It could be wished that he had discussed the quota as against tariffs in their effects on prices and the distribution of the spoils. And I do not see the distinction that he makes on page 142 between exchange control and quotas. The former deals with the adverse balance of payments; but the latter, in a limited field, also operates to reduce the adverse balance.

S. E. HARRIS

Harvard University

American Business in a Changing World. By A. W. ZELOMEK and ROBERT SHOOK. (New York: McGraw-Hill. 1941. Pp. xiv, 264. \$2.50.)

This book has been written by the president and the research director of a consulting organization. Its title hurts it. It is more than a recipe for business men as to how to get by in the current turmoil. It is an attempt to give the thought and action of the intelligent public in this country a sound orientation by a candid appraisal of the background and the current features of the world crisis, and of the prospects and possibilities of future development and action. Within the limits of its purpose which is not primarily that of a scientific research contribution, the book, though of uneven quality, is, on essential issues, enlightening and thought-provoking.

The authors begin with a picture of the background to the present crisis in three chapters dealing with Europe, the British Empire, and United States, respectively. The crucial importance of the year 1914 as the real beginning of the world revolution, the failure of reconstruction, and the moral and material reasons for this failure are effectively stated; and the fatal tendencies and errors of the leading powers, including America, are forcefully and to our mind, on the whole, correctly presented. A serious

shortcoming of this part, and in fact of the whole work, is the superficial treatment of Russia and Japan, and their rôles in past, current and coming events.

The first chapter of Part II, "Problems in the Making," shows the same trenchant qualities as the first part; but the chapters on the gold standard and free trade are much less satisfactory. The crucial problem whether, in the long-run, barter and free exchange, the gold standard and managed currency, can be combined and some degree of economic liberalism can be maintained in such a mixture is slurred over. Also, in the chapter on free trade, the discussion of direct, quantitative regulation of trade and its consequences for the political and economic system, is quite inadequate. The discussion of the world's raw material situation suffers particularly from the fact that one cannot appraise the future raw material situation of any country without assuming too much, politically and economically, not only about this country but about all the others as well. The authors seem to change their assumptions sometimes as they go along.

As to the third part, most readers will agree that success in the defense program depends to a very great extent on the timely mobilization of moral forces. The idea of the authors, however, that America—in contrast to Germany—can finance a great effort, at least for some time, otherwise than out of sacrifices in the form of greater exertion and less private consumption seems to us very unfortunate, as it not only is incorrect, but it is apt to bolster current illusions and unfortunate tendencies which may bring about consumers' restrictions by the fatal detour of inflation.

A chapter on joint economic and political defense of the Americas and a summarizing chapter bring the book to a close. The value of the summary, with its economic and political forecasts, seems to us to rest less on the validity of the picture drawn, which is quite naturally highly subjective and debatable, than in the emphasis on the necessity for courageous adjustment to enormous dangers and changes. It seems very true that even in case of an English victory, the world is most unlikely to come to rest soon and to be safe for democracy and freedom. American and her people may be called to assume far greater responsibilities for the whole world than they ever shouldered in the past. In this respect the challenge of the authors is too colorless and timid.

HERBERT VON BECKERATH

Duke University

NEW BOOKS

- BIDWELL, P. W. *Economic defense of Latin America*. Am. looks ahead ser. no. 3. (Boston: World Peace Found. 1941. Pp. 96. 50c.)
- LEWIS, C. *Nazi Europe and world trade*. (Washington: Brookings Institution. 1941. Pp. xi, 200. \$2.)
- MADDOX, W. P., editor. *America and Japan*. Annals, vol. 215. (Philadelphia: Am. Acad. of Pol. and Soc. Sci. 1941. Pp. 257. \$2.50; \$2, paper.)

MILLER, D. *You can't do business with Hitler*. (Boston: Little, Brown. 1941. Pp. 229. \$1.50.)

SCHUMAN, F. L. *International politics; the western state system in transition*. 3rd ed. (New York: McGraw-Hill. 1941. Pp. 758. \$4.)

SCHWARZ, S. *Research in international economics by federal agencies*. Internat. econ. handbook no. 2. Edited by Eugene Staley. (New York: Columbia Univ. Press. 1941. Pp. xxxix, 357. \$1.75.)

This convenient handbook devotes 150 pages to brief description of the various agencies of the federal government engaged in economic research; 135 pages to a survey of recent government research projects in the three fields of structure of national economy, structures of international economic organization and international economic relations; and 45 pages to a finding list of government publications. It will be a necessary *vade mecum* to economists working in many different fields. The title of the book is misleading, since the coverage is much broader than research activities directly concerned with international economics. The date of publication was too early to include in the finding list T.N.E.C. *Hearings* beyond volume 20. The preliminary list of T.N.E.C. monographs was used, so that titles 37 to 43 are incorrect.

STAUDINGER, H. *The future of totalitarian barter trade*. Stud. on war and peace, no. 7. (New York: Peace Research Project, Grad. Faculty of Pol. and Soc. Sci. 1940. Pp. 24, 25c.)

TAMAGNA, F. M. *Italy's interests and policies in the Far East*. I. P. R. inquiry ser. (New York: Inst. of Pacific Rel. 1941. Pp. xiii, 91, \$1.)

WRIGHT, Q., LAUTERPACHT, H., BORCHARD, E. M. and MORRISON, P. *Legal problems in the Far Eastern conflict*. I. P. R. inquiry ser. (New York: Inst. of Pacific Rel. 1941. Pp. xi, 211. \$2.)

Europe's trade; a study of the trade of European countries with each other and with the rest of the world. League of Nations pub. (New York: Columbia Univ. Press. 1941. Pp. 116. \$2.)

This volume is the most complete statistical study of the part played by Europe in the trade of the world prior to the outbreak of the present war. Special attention is paid to Europe's trade with the United States, the British dominions, India, and Europe's overseas territories. This work is the first publication to be prepared and issued in this country by the Economic Intelligence Service of the League, part of which was established at Princeton, to carry on the work previously done at Geneva.

J. C. ROCCA

Foodstuffs trade with Latin America. Trade promotion ser. 214. (Washington: Bur. of Foreign and Domestic Commerce. 1941. Pp. 55. 10c.)

Foreign trade and hemisphere unity. Conf. board rep. (New York: Nat. Industrial Conf. Board. 1941. Pp. 43.)

Orders and regulations relating to foreign funds control: United States. (Basle: Bank for International Settlements. 1941. Pp. 32.)

Our world trade in 1940; value and volume of principal exports and imports between United States and chief foreign markets. (Washington: Chamber of Commerce of the United States. 1941. Pp. 31.)

Trade of the United Kingdom with British countries and foreign countries: annual statement, 1939, compared with years 1935-38. Vol. 1. *Summaries of import and export trade*. (London: H. M. Stationery Office. 1941. 12s. 6d.)

Business Finance; Insurance; Investments; Securities Markets

The Flow of Business Funds and Consumer Purchasing Power. By RUTH P. MACK. (New York: Columbia Univ. Press. 1941. Pp. xvii, 400. \$3.75.)

Worth-while books on corporation finance are rare; studies in this field which provide new factual material and which apply it to the broad problems of economics are rarer still. This is such a book. It shows a familiarity with the financial records of corporations which comes only from long first-hand study. It reveals an inquisitive mind which is original enough to be provocative but not so original as to lose contact with previous work in the field and with the facts. It exhibits nice craftsmanship throughout, not the least in the style and the mode of presentation. To call this book a pioneer effort would be going too far, since its methods, notably the source-and-application-of funds technique, have been repeatedly applied in recent years. This study, however, proceeds further in this approach, both intensively and extensively, than anything that has been published to date. It is unlikely, too, that, amidst the rapid progress now being made in the field of corporate economics, either the factual material presented or its interpretation will stand for a long time. The studies now under way within the Financial Research Project of the National Bureau of Economic Research and the Survey of American Listed Corporations will produce similar statistical material covering either a much larger group of corporations or a much longer period of time than Mrs. Mack could cover single-handed. But until the results of these investigations are published and analyzed, Mrs. Mack's book will remain the main source of information on some crucial aspects of the behavior of our corporate economy.

The book is divided into three parts, which differ in their sources and their method of treatment. Chapters II to VI present the results of a statistical study of selected items from the balance sheets and income accounts of 54 large manufacturing corporations for the years 1934 through 1938, and for a smaller number of corporations for 1932 and 1933. Most of the basic data are taken from the reports made to the Securities and Exchange Commission. Depreciation, operating reserves, non-operating income, profits and retained income (the latter concept is regarded as the focus of the analysis and defined to correspond roughly to net profits plus depreciation and reserve accruals) are discussed one by one and are followed by an analysis of year-to-year changes in the financial and non-financial items in the balance sheet. The statistical analysis is based, in the main, on the ratios of the different items to sales, though numerous relationships between items are introduced from time to time. The figures, however, are not subjected to correlation analysis which might have given somewhat more precision to

many relationships which are now left rather vague. It is not easy to determine to what extent the findings of this part of the book are typical of all business enterprises. Comparison with the results of the Survey of American Listed Corporations, which is possible only for a few items, seems to indicate that the 54 companies covered in the study are fairly representative of large manufacturing corporations.

Chapters VII and VIII summarize what the author has learned from interviews with officers of most of the 54 corporations, supplemented by a study of the existing literature, about the factors which determine the size and timing of depreciation allowances and the purchase of industrial equipment. This is probably the most interesting and valuable part of the book. It is found that depreciation policy is characterized by conservatism and that successful companies try to write off as much as the Bureau of Internal Revenue will permit them to—two hardly unexpected conclusions. From the fact that retirements lag considerably behind depreciation allowances it is inferred that much fully depreciated equipment is in use at any time. Depreciation accruals were sufficient “to finance not only replacement of plant, but most of the improvement in process, changing customer demand, and increase in output required by the average company in established industries,” confirming a thesis recently advanced in the T.N.E.C. hearings. Particular interest attaches to the discussion of the factors dominating the purchase of equipment. As the main tangible results, there appear the conclusions (a) that equipment is typically replaced not because it is physically worn out, but because it is expensive to run, and (b) that “except for brief periods of anticipation of perhaps a few months . . . company officials waited for sales to materialize and often for them to have materialized for some time, before risking capital investment.”

Chapters IX and X, finally, apply the empirical findings to some problems, much discussed in recent years, of the flow of funds between the consumer, the industrial and the financial markets, and of the adequacy of these flows to maintain consumer purchasing power and to prevent depression. This section may well be closest to the author's heart but, to this reviewer at least, it seems not quite as satisfactory and persuasive as the rest of the book. This is not to deny that these chapters contain many interesting suggestions which well justify their testing against the experience of a larger number of corporations and of a longer period of time, in accordance with the author's commendable principle of concentrating attention on the “relation of individual decisions to the well-being of the economy as a whole.” The analysis of these two chapters generally runs along lines made familiar through recent writings of Currie and Hansen and the T.N.E.C. investigations. The author's main contribution, apart from a welcome concretization on a number of points, probably is the emphasis on the *de facto* importance of realized as opposed to anticipated demand for consumers' goods in the

process of capital formation. This conclusion, which forms the main basis of the author's plea for compensatory government spending, is worthy of attention because it has more foundation than many similar assertions. It will need considerable further confirmation, however, before being accepted as a decisive characteristic of the present-day American economic scene and a foundation stone of business cycle theory.

R. W. GOLDSMITH

Washington, D.C.

Balancing and Hedging an Investment Plan. By WALTER E. LAGERQUIST.
(New York: Ronald. Pp. xiv, 296. \$3.50.)

This is a book with which the experienced investor will feel at home. In a simple and direct way the author places his experienced finger on a number of crucial forces which shape investment results. The list is a long one and for the most part familiar. To the traditional risks arising from economic conditions, technological change, and managerial failures have been added those arising from the welter of regulatory, tax, labor, monetary, fiscal and other legislation which create new problems for the investor and bring, at best, the pains of adjustment. And now the war and post-war repercussions threaten to multiply these problems many fold.

In this new world (the old is gone forever), the investor must become reconciled to a lower return on his capital, and even of this he will have reasonable assurance only if a sound investment program is followed. Such a program will not arise out of the employment of any "secret formula" but from an intelligent and consistent application of already known investment fundamentals. The author emphasizes the vital importance of: (1) an investment plan, carefully worked out to fit the needs of the individual case; (2) ample diversification, to guard against excessive losses that arise from the human impossibility of accurate foresight into the future; and (3) continuous management, including changes in the proportions of the investment fund held in common stocks, long-term bonds, short-term bonds and cash, during the different stages of the business cycle. Capital gains arising from this cyclical "trading" he emphasizes as necessary to offset the losses that inevitably creep into any investment fund.

The title probably implies a greater emphasis upon "hedging" in a narrow sense and the prescription of typical programs of investment than will be found in the book. The chapters are grouped in four major divisions, dealing with the economic and political background, the selection of securities, cyclical balance, and estate planning, respectively. These divisions are more or less loosely tied together and the individual chapters bear evidence that, as the author states, they evolved from technical bulletins prepared for his clients. The style is direct, crisp, and forceful. A few charts are provided to aid the reader, but footnotes, statistical tables, and long discus-

sions of involved points which might confuse or burden the reader are scrupulously avoided. The average reader will find that the analysis in the first three divisions is easy to follow. In the somewhat technical fourth division, dealing with estate and gift taxation, he will glean some useful ideas at the cost of some fairly hard digging.

Among the more important conclusions of the author is his belief that high-grade bond prices are now vulnerable, because the artificially cheap money of the 1930's will eventually spell its doom just as it did in the 1920's. Yields on such bonds will, however, be lower than those prevailing in former years. Long-term investments in common stocks, or anything else, the author believes to be folly in view of rapidly changing conditions. He believes the "common-stock theory" to be based on "hind-sight" and "hand-picked" data.

As a general treatment which emphasizes and correlates rather well-known principles, and brings them to bear upon the difficulties of present-day investment, the book has much to commend it. The author's recommendations carry the forcefulness that flows from careful analysis and long experience. Whether they are sufficiently tangible to be put into practice is a question each reader must decide for himself.

CHELICIE C. BOSLAND

Brown University

Common Stocks and Bonds as Long-Term Investments. By LEO SPURRIER. Stud. in bus. admin., vol. XI, no. 2. (Chicago: Univ. of Chicago Press. 1941. Pp. vii, 91. \$1.00.)

This is the latest published series of comparisons between the investment outcome of hypothetical common stock and bond purchases. Unlike some of the earlier empirical studies (*e.g.*, those of Smith and Van Strum) the author attempts to test the results of investing in the common stocks and bonds of the *same* companies. The periods chosen are 1912 to 1935 (7 tests) and 1923 to 1935 (9 tests). In only 4 of the 16 tests and in only 30 out of 128 individual comparisons did common stocks show larger returns in the form of income and capital appreciation than did bonds, but in those cases their superiority was so great that they showed better aggregate results if all comparisons are combined. The author holds that his findings support the "common stock theory," a theory which he contends has never been definitely proved, but which he believes will hold true in the future—partly because he expects rising commodity prices.

A significant contribution of this study is that it makes possible many cross-comparisons between the investment results of railroad, industrial, and public utility stocks and bonds. For example, not only is the frequently demonstrated superiority of industrial and utility stocks over railroad stocks again confirmed, but the superiority of industrial and utility bonds over

railroad bonds is definitely established. The results are stated in terms of index numbers of year-to-year performance which combine capital appreciation and income.

Although some students of the common stock theory would be inclined to disagree with some of the author's interpretation, all who have followed the statistical studies that have been released over a period of about twenty years will find here a valuable addition to the literature because it makes use of a somewhat larger number of companies than is usual, because it makes cross-comparisons possible, but principally because it brings these studies closer to the present time and is additional evidence of how largely empirical results depend upon the assumptions underlying such comparisons.

CHELICIE C. BOSLAND

Brown University

Management Trading, Stock Market Prices and Profits. By FRANK P. SMITH. (New Haven: Yale Univ. Press. 1941. Pp. xii, 146. \$2.50.)

This rather short but suggestive and timely analysis of "insider" security transactions will appeal primarily to those who are concerned about the part that present restrictions on management trading in the stocks of their own companies play in the current dull, thin, and anemic stock market. The author poses a number of questions about the volume, timing, and profitability of management trading and attempts to answer them by a study of the statistical information that has been compiled since 1935. This study is set against a background of the indictment of insider transactions drawn from the familiar Senate Banking Committee and S.E.C. reports, and the resultant provisions of the Securities Exchange act of 1934.

Although the limited period of time (1935-39) and lack of complete data make conclusions uncertain, the author finds management trading sizable in absolute volume, but small relative to the volume of trading on organized exchanges; that it has at least a partially stabilizing effect upon stock prices; and that insiders exhibited no unusual skill in making profits from trading in the stocks of their own companies. He suggests that probably Section 16 of the act of 1934 (which restricts insider trading) has fallen short of its anticipated benefits and that greater market continuity and more stable markets might be expected to flow from increased interest in securities by insiders.

The author shows judicious restraint in drawing inferences from his statistical findings, and although the questions raised probably cannot now be finally answered, readers will find here a clear, intelligent, and enlightening discussion of an important problem in private finance.

CHELICIE C. BOSLAND

Brown University

The Business Corporation. By EDWARD SHERWOOD MEAD, DAVID BOWEN JEREMIAH, and WILLIAM EDWARD WARRINGTON. (New York: Appleton-Century. 1941. Pp. xx, 680. \$4.00.)

This is a revision of Mead's *Corporation Finance*, first published in 1910. The revision is so complete, however, as fully to justify the change in title.

All texts in corporation finance are limited to the same basic material and so differ only in their arrangement of subjects, style of writing, methods of presentation, and emphasis. This book of forty-four chapters adequately covers the traditional material, but it also treats several matters not always included in the orthodox presentation. For example, there is a chapter devoted to forms of business other than the corporate, one given to leases, one to budgets, and one to actual corporate liquidation. The chapters treating mortgages, trust indentures, and corporate endorsements and guarantees are especially noteworthy. The book contains a good summary of all of the recent legislative acts that affect corporate practice.

An outstanding characteristic of the book is its emphasis on the changes in financial methods introduced in the last ten years, and it abounds with interesting practical illustrative material drawn from recent history. At various points the authors have applied economic analysis to the solution of corporate problems and policies, but the book as a whole wisely remains predominantly practical in approach, rather than theoretical. Industrial, public utility, and railroad finance all receive a well-balanced treatment.

Certain minor criticisms are possible. It contains no diagrammatic aids to the student such as are found in Gerstenberg and Burtchett. On controversial issues the authors present the arguments of both sides impartially, but reveal their conservative leaning by phrases inserted here and there in the discussion such as, "Much can be said for this viewpoint." There is also a noticeable tendency to laud the exploits of the captains of industry, particularly those of Henry Ford. It is doubtful if accountants will agree with the method of accounting for betterments described by the authors on pages 365-366 or with their statement (p. 367) that a reserve for depreciation is not essential if a plant is owned by a single person or by a very few individuals.

As a whole, the revision is well done and the book merits a rating with the four or five leading textbooks of the subject. In any case, it is certain that the student who reads this book will know corporation finance if he remembers what he has read. The same cannot be said of all the finance texts now on the market.

WILFORD J. EITEMAN

Duke University

NEW BOOKS

CURRY, O. J. *Utilization of corporate profits in prosperity and depression.* Michigan bus. stud., vol. ix, no. 4. (Ann Arbor: Univ. of Michigan. 1941. Pp. 131. \$1.)

A useful statistical study which raises pertinent questions about the possibility of using corporate savings from prosperous years to support wage and dividend payments during lean years.

ELY, R. J. W. *National bank stock as investment*. Univ. microfilms no. 54. (Ann Arbor: Univ. of Michigan Microfilms. 1941. Pp. 283.)

JORDAN, D. F. *Investments*. 4th rev. ed. (New York: Prentice-Hall. 1941. Pp. 495. \$4.75; \$3.50, school edition.)

LINCOLN, E. E. *Applied business finance*. 5th ed. rev. (New York: McGraw-Hill. 1941. Pp. xxxvii, 948. \$4.50.)

LINTON, M. A. *Life insurance and the democratic state*. Barbara Weinstock lectures on morals of trade. (Berkeley: Univ. of California Press. 1941. Pp. 50. \$1.)

MCCAHAN, D. and KELLY, A. M. *College and university courses in insurance and related subjects; a survey*. (Philadelphia: Am. Coll. of Life Underwriters. 1940. Pp. 36. 35c.)

MYERS, J. W., and others. *Problems of the insurance buyer*. Insurance ser., no. 36. (New York: Am. Management Assoc. 1940. Pp. 63. \$1.25.)

RODRIGUEZ, L. J. *Las sociedades de participaciones financieras*. (Montevideo: Pena. 1941. Pp. 36.)

SIMMONS, L. T. *The issuance and distribution of corporate securities under the new federal regulation*. Univ. microfilms no. 209. (Ann Arbor: Univ. of Michigan Microfilms. 1941. Pp. 676.)

Securities and Exchange Commission: annual report for fiscal year ended June 30, 1941. (Washington: Supt. Docs. 1941. Pp. 381. 35c.)

———. *Decisions and reports; vol. 7, part 1, April 1, 1940-June 30, 1940*. (Washington: Securities and Exchange Commission. 1941. Pp. 640. 65c.)

———. *Title 1, Securities act of 1933 as amended; title 2, Corporation of Foreign Bondholders act, 1933*. (Washington: Securities and Exchange Commission. 1941. Pp. 41. 10c.)

Also includes provisions of federal laws relating to Securities act of 1933 as amended, which was issued in 1936 as a separate publication.

Statistical tables from New York insurance report, 1941. (Albany: New York Insurance Dept. 1941. Pp. 163.)

Statistics of American listed corporations. Part 1. From data collected by WPA, sponsored by Securities and Exchange Commission. (Washington: Securities and Exchange Commission. 1940. Pp. xi, 347, mimeographed.)

Survey of American listed corporations: reported information on selected defense industries. Vol. VI. From data collected on WPA projects sponsored by Securities and Exchange Commission. (Washington: Securities and Exchange Commission. 1940. Pp. 381.)

Taxation affecting life insurance, life insurance trusts and annuities: 1941 ed. (New York: Prentice-Hall. 1941. Pp. 167. \$1.)

Public Control of Business; Public Administration; National Defense and War

The Economic Causes of War. By LIONEL ROBBINS. (New York: Macmillan. 1940. Pp. 124. \$1.35.)

It is difficult to disagree with the main theses of this brief but compre-

hensive essay, so eloquently and forcefully are they argued. They may be reduced to three. The first, negative in nature, asserts that the leading current theories of imperialism are inadequate to explain modern wars. The underconsumption theory fails woefully in its logic, while the Marxian explanation, running in terms of the investment pressures of finance capitalism, Professor Robbins finds inadequate in meeting the critical test of history. Certain isolated cases of diplomatic friction and war may, he concedes, be attributed in large part to financial conflict, though this cause is inadequate to serve as a general explanation.

The second major thesis asserts the basic cause of war to be the existence of independent national sovereignties. In a world in which war is possible, the effort to conserve or increase the power (largely economic) of sovereign states makes international conflict inevitable. And while, on occasion, the struggle for power may be on an aggressive level (as with nazi aggrandisement), it is most frequently undertaken as a defensive measure—to counteract the restrictionism of other states, itself a product of the sinister interests of private pressure groups.

The solution, Professor Robbins urges in his third main argument, is the abolition of nationalism by the creation, first of a federation of European states, eventually of a world union.

This little book should be widely read, for it provides a refreshing clarification of issues of great current interest, as well as a useful prolegomena to any discussion of reconstruction after the present war.

P. T. ELLSWORTH

University of Cincinnati

Big Business, Efficiency and Fascism: An Appraisal of the Efficiency of Large Corporations and of Their Threat to Democracy. By KEMPER SIMPSON. (New York: Harper. 1941. Pp. x, 203. \$2.50.)

"This book is a plea for the revival of competition in business, without which . . . the problem of unemployment cannot be solved in our democratic competitive economy." Since "big business consciously or unconsciously restricts the emergence or progress of medium-sized or small business, . . . it contributes to unemployment. And continuing unemployment means a permanent relief roll or fascism" (from the Preface).

The first third of the book (Part I) is largely devoted to this thesis. The remaining two-thirds summarizes the Federal Trade Commission's investigation (recently published as T.N.E.C. monograph no. 13) of the relative costs and rates of return of plants and companies of different size in a number of industries. This material, which the Commission compiled from various industry cost studies made over the last thirty years, indicates that the largest companies and plants did not typically have the lowest costs or highest rates of return in the industries covered.

Mr. Simpson uses this finding to reassure us that big business can be made smaller without loss of efficiency. But his main concern is apparently with the problem of unemployment, which cannot be solved unless our present giant concerns are supplanted by small and "medium-sized" firms. The economic system must be made more competitive.

This is as far as the author gets with his main argument. He neither defines competition nor tells us how much of it he wants—except that it must be more than we now have. Nor does he explore how and under what conditions a system made up of fewer very large concerns might yield a higher or more stable level of employment. There is no indication that he seeks "atomistic competition," but he ignores the imperfections of competition and the hindrances to employment that exist in any system short of that ideal. The reviewer has no desire to defend big business. He, too, believes that there are seeds of fascism in the present American business scene. But is the answer to be found merely in making big business somewhat less big? Mr. Simpson has stated a thesis. The first part of his book falls far short of proving it on the analytical level, while the factual part of the book dealing with costs, though useful, is largely irrelevant to his main argument.

R. A. GORDON

University of California

NEW BOOKS

- AGAR, W. *Food or freedom: the vital blockade*. Am. in a world at war ser. (New York: Farrar and Rinehart. Pp. 32. 10c.)
- AMDUR, L. H. *Patent fundamentals*. (Brooklyn: Chemical Pub. 1941. Pp. 305. \$4.)
- ARNOLD, T. *Antitrust law enforcement*. (Washington: Am. Council on Public Affairs. 1940. Pp. 32. 25c.)
- BALDWIN, H. W. *United we stand! defense of the western hemisphere*. (New York: McGraw-Hill. 1941. Pp. 374. \$3.)
- BARUCH, B. M. *American industry in the war; a report of the War Industries Board (March, 1921)*. (New York: Prentice-Hall. 1941. Pp. 510. \$5; \$3.75, school edition.)
- BEARD, C. A. *Public policy and the general welfare*. Am. govt. in action ser. (New York: Farrar and Rinehart. 1941. Pp. xii, 176. \$1, college edition; \$1.50, trade.)
- BENSON, G. C. S. *The new centralization; a study of intergovernmental relationships in the United States*. Am. govt. in action ser. (New York: Farrar and Rinehart. 1941. Pp. xii, 181. \$1, college edition; \$1.50, trade.)
- BEVERIDGE, W. *Some experiences of economic control in wartime*. Barnett House papers. (New York: Oxford. 1941. 40c.)
- BLOCH, H. S., and others. *Economic mobilization*. (Washington: Am. Council on Public Affairs. 1940. Pp. 43. 75c.)
- BORKENAU, F., HUXLEY, J. and CROWTHER, G. *After peace, what?* Coöp. books, ser. 2, no. 1. (Norman, Okla.: Coöperative Books. 1941. Pp. 27. 50c.)

BRODIE, B. *Sea power in the machine age*. (Princeton: Princeton Univ. Press. 1941. Pp. viii, 466. \$3.75.)

CHERNE, L. M., and others, editors. *Business and defense coördinator*. (New York: Research Inst. of Am. 1941. \$80 per year, loose-leaf.)

CORWIN, E. S. *Constitutional revolution, ltd.* (Claremont, Calif.: Claremont Colleges. 1941. Pp. ix, 121. \$2.)

Three lectures delivered under the auspices of Claremont Colleges, Pomona College and Scripps College: "Judicial choices in constitutional interpretation"; "The New Deal comes to the Supreme Court"; "Dissolving concepts."

CULVER, D. C., compiler. *Administration and organization in wartime in the United States; a bibliography*. P. A. S. ser., no. 71. (Chicago: Public Admin. Serv. 1940. Pp. 17. 50c.)

EARLE, E. M. *Against this torrent*. (Princeton: Princeton Univ. Press. 1941. Pp. 73. \$1.)

FAINSOD, M. and GORDON, L. *Government and the American economy*. (New York: Norton. 1941. Pp. xvii, 863. \$3.90, text edition.)

FINER, H. and others. *The effect of the blitzkrieg on the economic order*. Round table broadcast, no. 164. (Chicago: Univ. of Chicago Press. 1941. Pp. 26. 10c.)

FRASER, C. E. and TEELE, S. F., editors. *Industry goes to war; readings on American industrial rearmament*. (New York: McGraw-Hill. 1941. Pp. 130. \$1.50.)

Contains papers on "Mobilizing industry for war," by Brigadier General Harry K. Rutherford; "Guns and butter," by J. Philip Wernette; "Gearing a business for national defense," by Marvin Bower; "Food in a world at war," by Joseph S. Davis; "Minerals and war," by Paul M. Tyler; "Wheels for defense," by Robert F. Black; "Wartime labor productivity," by Edwin C. Robbins; "Defense 'lending': 1918 and 1941," by John D. Glover; "Negotiated contracts," by Charles I. Gragg; "Present status of priorities," by John H. Martin; "Buying Latin American loyalty," by J. Anton de Haas.

GRAHAM, G. A. *Education for public administration; graduate preparation in the social sciences at American universities*. Soc. Sci. Research Council stud. in admin., vol. 11. (Chicago: Public Admin. Serv. 1941. Pp. 366. \$3.50.)

KEMLER, E. *The deflation of American ideals; an ethical guide for New Dealers*. (Washington: Am. Council on Public Affairs. 1941. Pp. 184. \$2.)

KOONTZ, H. D. *Government control of business*. (Boston: Houghton Mifflin, 1941. Pp. xi, 937. \$4.50.)

PENNOCK, J. R. *Administration and the rule of law*. Am. govt. in action ser. (New York: Farrar and Rinehart. 1941. Pp. xii, 259. \$1, college edition; \$1.50, trade.)

REUTHER, W. P. *500 planes a day; a program for the utilization of the automobile industry for mass production of defense planes*. (Washington: Am. Council on Public Affairs. 1941. Pp. 16. 25c.)

SCOGGIN, M. C., compiler. *Books for defense courses; a list of titles supplied to classes in defense industries in New York schools*. (New York: New York Public Lib. 1941. Pp. 10. 10c.)

STASSEN, H. E., and others. *What should labor and industry contribute to national defense? America's town meeting of the air bull.*, vol. 6, no. 19. (New York: Columbia Univ. Press. 1941. Pp. 34. 10c.)

- STUDENSKI, P. and MORT, P. R. *Centralized vs. decentralized government in relation to democracy*. (New York: Bur. of Pubs., Teachers Coll., Columbia Univ. 1941. Pp. vii, 69. 75c.)
- WARBURG, J. P. *Our war and our peace*. (New York: Farrar and Rinehart. 1941. Pp. 250. \$1.75.)
- WERNER, M. *Battle for the world; the strategy and diplomacy of the Second World War*. (New York: Modern Age Books. 1941. Pp. 403. \$3.)
- Administration and organization in wartime in the United States: a bibliography*. P. A. S. ser., no. 7. (Chicago: Public Admin. Serv. 1940. Pp. 17. 60c.)
- Administrative procedure in government agencies; monograph of the Attorney General's Committee on Administrative Procedure, in 14 parts: Part 1. Administration of the Fair Labor Standards act of 1938, Wage and Hour Division, Children's Bureau. Part 2. War Department. Part 3. Social Security Board. Part 4. Railway Labor, the National Railroad Adjustment Board, the National Mediation Board. Part 5. National Labor Relations Board. Part 6. Civil Aeronautics Authority. Part 7. Department of the Interior. Part 8. United States Employees' Compensation Commission. Part 9. Administration of internal revenue laws, Bureau of Internal Revenue, Board of Tax Appeals, Processing Tax Board of Review. Part 10. Bituminous Coal Division, Department of the Interior. Part 11. Interstate Commerce Commission. Part 12. Federal Power Commission. Part 13. Securities and Exchange Commission. Part 14. Administration of the customs laws, United States Tariff Commission, Bureau of Customs. (77th Cong., 1st sess., Sen. doc. 10.)* (Washington: Supt. Docs. 1941. Pp. 85, 20, 59, 25, 37, 82, 70, 56, 84, 56, 106, 40, 136, 72. 10c, 5c, 10c, 5c, 10c, 15c, 15c, 10c, 15c, 10c, 15c, 10c, 15c, 15c.)
- The book of the states, 1941-42. Vol. 4.* (Chicago: Council of State Governments. 1941. Pp. xii, 423. \$3.50.)
- The British commonwealth at war*. Round table war pamph. no. 4. (Toronto: Macmillan. 1941. Pp. 25. 10c.)
- Code of federal regulations: 1939 supplement, including presidential proclamations and executive orders, titles 1-25.* (Washington: National Archives, Federal Register Division. 1940. Pp. 1598. \$3.)
- Defense: act (H. R. 1776) to further promote the defense of the United States, and for other purposes. Approved March 11, 1941. (77th Cong., Public Law 11.)* (Washington: Supt. Docs. 1941. 5c.)
- Known as the Lease-Lend act.
- Defense—"not by arms alone"; a reading list of recent books on the democratic and totalitarian points of view in government.* (New York: New York Public Lib. 1941. Pp. 3. 5c.)
- Economic problems of national defense: a symposium.* Indiana business reports, no. 6. (Bloomington, Ind.: School of Business, Indiana Univ. 1941. Pp. 214. \$1.)
- Financing defense; how shall we pay the bill? Democracy in action, no. 4.* (New York: Council for Democracy. 1941. Pp. 41. 10c.)
- Index of patents issued from the United States Patent Office, 1940.* (Washington: U. S. Dept. of Commerce, Patent Office. 1941. Pp. 1255. \$4.)
- Index of trade-marks issued from the United States Patent Office, 1940.* (Washington: U. S. Dept. of Commerce, Patent Office. 1941. Pp. 469. \$3.)
- Laws relating to national defense enacted during the Seventy-sixth Congress (April 3, 1939-October 14, 1940.)* (Washington: Supt. Docs. 1941. Pp. 231. 20c.)

Peace aims: eighth Fortune round table, February 14-16, 1941, Princeton, New Jersey. (New York: Time. 1941. Pp. 20. 20c.)

Preliminary inventory of the War Industries Board records. (Washington: National Archives. 1941. Pp. xvii, 134, mimeographed.)

Total defense. (Washington: Am. Council on Public Affairs. 1940. Pp. 15. 10c.)

Industrial Organization; Business Methods and Policies

NEW BOOKS

FEILER, A. *The worship of bigness.* Stud. on war and peace. (New York: Peace Research Project, Grad. Faculty of Pol. and Soc. Sci. Pp. 11. 25c.)

LACHMANN, K. *The Hermann Göring works.* Stud. on war and peace. (New York: Peace Research Project, Grad. Faculty of Pol. and Soc. Sci. Pp. 17. 25c.)

MARSHALL, H., editor. *The business encyclopedia.* (New York: Garden City. 1941. Pp. 532. \$1.)

PETERSEN, E. and PLOWMAN, E. G. *Business organization and management.* (Chicago: Richard D. Irwin. 1941. Pp. xv, 691. \$4.)

ZU TAVERN, A. B. *Business principles.* (S. Pasadena: Commercial Textbook. 1941. Pp. 604. \$2.)

Business education for what? Proceedings of the University of Chicago conference on business education, 1940. (Chicago: Univ. of Chicago Press. 1941. Pp. 97. \$1.)

History and facilities of the Bureau of Business Research, University of Alabama. Multilithed ser., no. 3. (University, Ala.: Univ. of Alabama Bur. of Bus. Res. 1941. Pp. 113.)

Research—a national resource. Vol. 2. *Industrial Research.* Report of the National Research Council to the National Resources Planning Board. (Washington: Supt. Docs. 1941. Pp. xi, 369. \$1.)

Marketing; Domestic Trade

NEW BOOKS

BREWSTER, A. J. and PALMER, H. H. *Introduction to advertising.* 4th ed. (New York: McGraw-Hill. 1941. Pp. 540. \$2.50.)

GREEN, T. S., JR. *Liquor trade barriers; obstructions to interstate commerce in wine, beer, and distilled spirits.* Pub. admin. serv. ser., no. 70. (Chicago: Public Admin. Serv. 1940. Pp. 34. 60c.)

HOFFMAN, G. W. *Grain prices and the futures market; a fifteen-year survey, 1923-1938.* Technical bull. no. 747. (Washington: U. S. Dept of Agric. 1941. Pp. 77. 10c.)

HOWELL, L. D. *Cotton-price relationships and outlets for American cotton.* Technical bull. no. 755. (Washington: U. S. Dept. of Agric. 1941. Pp. 40. 5c.)

LUFTIG, W. *The automobile loan business.* (New York: Business Information Serv. Bur. 1941. Pp. 173. \$3.50.)

McNAIR, M. P. *Operating results of department and specialty stores in 1940.* Bur. of bus. res. bull. no. 113. (Cambridge: Grad. School of Bus. Admin., Harvard Univ. 1941. Pp. 40. \$2.50.)

REYNOLDS, R. V. and PIERSON, A. H. *Lumber distribution and consumption for 1938.* Misc. pub. no. 413. (Washington: U. S. Dept. of Agric. 1941. Pp. 58. 15c.)

SMITH, T. H. *The marketing of used automobiles*. (Columbus: Bur. of Bus. Res., Ohio State Univ. 1941. Pp. xv, 290. \$3.)

Cotton and grain futures acts, commodity exchange and warehouse acts, and other laws relating thereto. (Washington: Supt. Docs. 1941. Pp. 173. 15c.)

Contains laws from 64th to and including the 76th Congress.

Governmental marketing barriers. Law and contemporary problems, vol. 8, no. 2. (Durham: Duke Univ. Press. 1941. Pp. 207. \$1.)

Rand McNally commercial atlas and marketing guide. 72nd ed. (Chicago: Rand, McNally. 1941. Pp. 546. \$36, per year.)

Mining; Manufacturing; Construction

NEW BOOKS

ALLSMAN, P. T. *Reconnaissance of gold-mining districts in the Black Hills, South Dakota*. Bureau of Mines bull. 427. (Washington: Supt. Docs. 1940. Pp. v, 146. 20c.)

ESPACH, R. H. and NICHOLS, H. D. *Petroleum and natural-gas fields in Wyoming*. Bureau of Mines bull. 418. (Washington: Supt. Docs. 1941. Pp., 185. \$2.25, with maps.)

FAUBEL, A. L. *Cork and the American cork industry*. Rev. ed. (New York: Cork Inst. of Am. 1941. Pp. 151. \$1.50.)

GARDNER, E. D. and MOSIER, MCH. *Open-cut metaling*. Bureau of Mines bull. 433. (Washington: Supt. Docs. 1941. Pp. vi, 176. 40c.)

JENNY, H. *Der Schweizerische kohlenhandel*. (Basel: Münster. 1941. Pp. xvi, 230. Fr. 10.50.)

KENNEDY, E. D. *The automobile industry, the coming of age of capitalism's favorite child*. (New York: Reynal and Hitchcock. 1941. Pp. 333. \$3.50.)

LACHMANN, K. *War and peace economics of aviation*. Stud. on war and peace, no. 6. (New York: New School for Soc. Research. Pp. 12. 75c.)

LEVEN, D. D. *Done in oil; the cavalcade of the petroleum industry from a practical, economic and financial standpoint*. (New York: Ranger Press. 1941. Pp. 1084. \$10.)

MCGUIRE, C. W. *Economics of the community bonus with special reference to the Missouri boot and shoe industry*. Univ. microfilms no. 218. (Ann Arbor: Univ. of Michigan Microfilms. 1941. Pp. 332. \$4.15.)

MOORE, E. S. *American influence in Canadian mining*. Pol. econ. ser., no. 9. (Toronto: Univ. of Toronto Press. 1941. Pp. xx, 144. \$2.25.)

POTTINGER, D. *Printers and printing*. (Cambridge: Harvard Univ. Press. 1941. Pp. 151. \$2.)

WRIGHT, T. P. *Aircraft production and national defense*. Am. in a world at war, no. 10. (New York: Farrar and Rinehart. 1941. Pp. 32. 10c.)

Aluminum; its story. (Pittsburgh: Aluminum Co. of America. 1940. Pp. 44.)

Earthen floor and wall tiles: study of production and trade in earthen floor and wall tiles in the United States and in the principal countries, with special reference to factors essential to tariff considerations. United States Tariff Commission, rep. 141, 2nd ser. (Washington: Supt. Docs. 1941. Pp. 158. 25c.)

Petroleum facts and figures. 7th ed. (New York: Am. Petroleum Inst. 1941. Pp. 192. \$1.)

The place of the petroleum industry in the national defense; round-table discus-

sion, Tulsa, Oklahoma, January 11, 1941. (Tulsa: Mid-Continent Oil and Gas Assoc. 1941. Pp. 20.)

Census of manufactures: reprint of Part 1 of the biennial census of manufactures for 1937, chapters 1, 2, 4, 5, and 6 (with corrections). (Washington: U. S. Dept. of Commerce, Bureau of the Census. 1941. Pp. 1-41; 1329-1674. 35c.)

Statistical summary of mineral production (general United States summary and detailed production by states). (Washington: U. S. Dept. of Interior, Bureau of Mines. 1940. Pp. 46. 10c.)

Transportation; Communication; Public Utilities

Power in Transition. By ERNEST R. ABRAMS. (New York: Scribner. 1940. Pp. 318. \$3.00.)

"Power in Transition" is the first book to catalog the major power projects financed by the federal government. Systematically it describes their physical and economic aspects, and then seeks to appraise them, particularly as they affect privately owned electric power utilities. The central theme stated in the opening chapter is that the federal government is seeking to destroy the property values of private electric utilities by subsidized competition. Prevented from reducing rates by the sacrosanct doctrine of fair value, it now seeks to reduce property values and rates by the indirect means of regulation by competition. Mr. Abrams concludes that this excursion against private ownership "strikes at the very foundations of our privately owned electric power and light industry, and casts a doubt on the ultimate integrity of our whole economic system" (p. 298). Particularly, the entire electric power industry faces socialization; such socialization may possibly be extended to heavy industries; and federal jurisdiction may ultimately engulf all intra-state economic activities.

For the economist, this book is most useful as a convenient catalog of the historical, physical and financial aspects of the larger public power projects, including those which have not been well publicized, such as the Lower Colorado River Authority or the Santee-Cooper Project. It is also useful in the sense that it provides a roster of the objections to the various public power projects, and an eloquent brief of the private utility industry against the New Deal public power program. But unfortunately the book does not contain a balanced recital of the evidence nor an unbiased appraisal of it. True, a great number of individual facts are presented; so many, and often of so little importance in a volume of this sort, that they are obviously intended to convince the lay reader by sheer weight. While the range of evidence is fairly complete, the facts tending to support a given enterprise are given short shrift, whereas those condemning it are cited at greater length. Very little evidence is cited, however, on the actual effects of the public projects upon the investors in the private utility enterprises said to be adversely affected by the public projects.

Mr. Abrams' conclusions are that some of the power projects should not have been begun, some will become self-sustaining in time, and others will be only partially self-supporting. The financial and rate aspects of many projects are said to have been affected more by "political expediency" than by sound economic considerations. In the main these projects are said by Mr. Abrams to create a large excess of generating capacity within their market areas, which will be disposed of, if at all, by sale to the existing customers of established utilities at subsidized yardstick rates with which it is impossible for private enterprises to compete. At every turn, an outcropping of argument, an oblique comment, an apt turn of phrase, a quotation of opinion from a biased critic paraded as a learned pronouncement of fact, color the facts.

Space and time forbid a point by point bill of particulars in review of Mr. Abrams' facts and conclusions. Undoubtedly, however, a more impartial analyst, seeking to ascertain whether the power resources of the country have been more economically utilized under public ownership than under private enterprise, would come to conclusions probably far different in many cases, and certainly far less preconceived and absolute than those of Mr. Abrams. An impartial review would not necessarily "whitewash" all public projects. But it would not start with the assumptions that private enterprises have a perpetual vested right in the "earnings value" of property—value untouched by any effective administrative regulation, state or federal, or that public works construction during depression is merely a way of subsidizing public projects, or that power should bear all or most of the joint costs of a multiple purpose project.

HUBERT F. HAVLIK

Columbia University

Public Utility Economics. By C. WOODY THOMPSON and WENDELL R. SMITH. (New York: McGraw-Hill. 1941. Pp. ix, 727. \$4.50.)

In the field of public utilities the time is ripe for a textbook that will take into account the many important developments since the advent of the Roosevelt administration. Widespread adoption of this excellent book by Professors Thompson and Smith may, therefore, safely be predicted.

The work is divided into four parts. Part I treats of fundamentals: the place and importance of public utilities, their history, nature, economic characteristics, organization and financing. Part II describes the agencies of regulation: franchises, state and federal commissions, and commission techniques. Part III discusses the primary problems of regulation: rates, service, securities, and holding companies. Part IV deals with special problems: marketing, decline of the street railway, taxation, rural service, public ownership, and public power projects. Some of the chapters, especially those on

marketing and taxation, could well have been omitted; and other topics, notably the fair rate of return and security regulation, should have been developed more fully.

The fundamental assumption underlying the book is the existence of private ownership and operation in all fields except water supply. Though the authors do not particularly fear public ownership, they favor private enterprise, because they believe it is more conducive to the promotion of rapid technological change and because they prefer to let it bear the risks of "social obsolescence." They qualify their expressed preference for private ownership by saying that they would favor public ownership, despite its risks, if the public utility executives show a disposition to sabotage the regulatory process.

Assuming private ownership, the authors in an outspoken manner set forth their views on utility problems. They believe that the purpose of regulation is to approximate the competitive principle of price fixing. In the field of valuation their choice is "cost of reproduction of a substitute plant," and in the field of depreciation they advocate depreciation accounting rather than retirement accounting. They oppose competition, including public competition, which they characterize as an admission of inability to control economic monopoly and as an attempt to solve the problem by an uneconomic process. They oppose tax exemption of publicly owned plants and high rates as a means of reducing the tax burden. Although sympathetic to public power projects, they maintain that their use as yardsticks is indefensible, and that it is futile to seek a solution of the problem of allocation of joint costs.

The reviewer, though not in agreement with the authors at all points, regards their treatment, generally speaking, as liberal and sane.

ELIOT JONES

Stanford University

Regulation of Pipe Lines as Common Carriers. By WILLIAM BEARD. (New York: Columbia Univ. Press. 1941. Pp. x, 184. \$2.00.)

This book deals with the development of the "common carrier" concept in so far as it has been used by the states and the federal government to regulate pipe lines. With the exception of two privately published works, this is the first systematic study that has been made of this most important topic. The author points out the various ways that pipe lines may become common carriers. The diversity of jurisdiction and the weaknesses in the "intrastate" and "interstate" classification are discussed. Two chapters are devoted to a discussion of regulation by state utility commissions and the Interstate Commerce Commission of rates and services of pipe lines under the common carrier provision. Proposals for and against segregating pipe lines from other divisions of the oil industry are presented. The question of

coördinating pipe lines with other means of transportation is also considered. A chapter on summary and conclusions completes the work.

The author's general conclusions are: (1) regulation of pipe lines under the "common carrier" principle has been a failure (p. 160); (2) coördination of pipe lines with other transportation agencies by a regulatory policy based on theories of valuation, operating costs, and fair return on properties is impossible (p. 147); and (3) integration in the oil industry should be encouraged, and the entire industry from production to marketing should be regulated as a public utility (pp. 160-173). Some readers will question the author's conclusion that blanket regulation of the entire industry is the best alternative, especially since he shows that regulation of one phase of the industry—pipe lines—has been anything but successful.

Certain phases of the work could have profitably received more emphasis. The recent decision of the Interstate Commerce Commission (Docket No. 26570) is of sufficient importance to justify more than a single reference (p. 67); the one paragraph (p. 154) devoted to the problem of concentration of control over oil pipe lines will be disappointing to those students interested in this question; six pages on pipe-line earnings (pp. 75-81) are of a general nature. The author's statement (p. 78) that low capitalizations explain the high rates of return is misleading. Low capitalizations would not explain the excessive rates of return on net investment; nor would they explain the high rates of return on the Interstate Commerce Commission valuations as presented in Docket No. 26570.

Although the author is convinced of the economies of integration and he states that "... where coördination is thorough, the big integrated business can supply refined products at a very low cost" (pp. 161-162), he gives no statistics to prove his point. To say "marketing outlets can be organized according to some orderly design" (p. 161) is not to the point and merely raises the question as to what is "orderly design."

Only slight reference is made to the material on pipe lines gathered by the T.N.E.C., and no mention whatsoever is made of the work of Professor George W. Stocking. More factual material and a bibliography would have enhanced the value of the work.

ROY A. PREWITT

Central Missouri State Teachers College

NEW BOOKS

BLOMQUIST, A. E. *Outline of air transport practice*. (New York: Pitman. 1941. Pp. 409. \$4.50.)

FINER, H. *Municipal trading*. (London: Allen and Unwin. 1941. 16s.)

MAYBEE, R. H. *Railroad competition and the oil trade, 1855-1873*. (Mt. Pleasant, Mich.: Extension Press, Central States Teachers Coll. 1941. Pp. x, 451.)

MIDDLETON, P. H. *Railways and the equipment and supply industry*. 2nd ed. rev. (Chicago: Railway Business Assoc. 1941. Pp. 142. \$1.)

- . *Railways and public opinion; eleven decades.* (Chicago: Railway Business Assoc. 1941. Pp. 169. \$1.)
- NICHOLS, C. E. *Nichols standard railroad textbook.* (Portland, Ore.: Railroad Textbook. 1941. Pp. 407. \$7.50.)
- PARMELEE, J. H. *A review of railway operations in 1940.* Special ser. no. 70. (Washington: Bur. of Railway Econ., Assoc. of Am. Railroads. 1941. Pp. 40.)
- Administrator of the Rural Electrification Administration; annual report for 1940.* (Washington: Supt. Docs. 1941. Pp. 54. 10c.)
- Aeronautical statutes and related material, the Civil Aeronautics acts of 1938, and other statutory provisions relating to civil aeronautics together with Reorganization Plans No. 3 and 4, certain other non-statutory material affecting civil aeronautics.* (Washington: Civil Aeronautics Authority. 1940. Pp. 162. 15c.)
- Civil air regulations. Part 61. Scheduled air carrier rules (interstate) as amended to January 1, 1941.* (Washington: Civil Aeronautics Board. 1941. Pp. 27. 5c.)
- Convention on telecommunication between the United States of America and other powers, signed at Madrid, December 9, 1932.* Treaty ser. (Washington: U. S. State Dept. 1941. Pp. 60. 10c.)
- Decisions of the Interstate Commerce Commission of the United States. Vol. 22. Motor carrier cases, February-May, 1940. Vol. 23. Motor carrier cases, May-June, 1940. Vol. 237. January-March, 1940. Vol. 239. (Finance reports), January-April, 1940.* (Washington: Interstate Commerce Commission. 1940. Pp. 986, 969, 896, 873. \$1.50; \$1.75; \$1.50; \$1.50.)
- Federal Power Commission laws, and hydroelectric power development laws.* (Washington: Supt. Docs. 1941. Pp. 135. 15c.)
- Investigation of railroads, holding companies, and affiliated companies: hearings, 75th Cong., 3rd sess., pursuant to S. Res. 71 (74th Cong.). Part 24. Swift and Company; Armour and Company; packer relations with various railroads.* (Washington: Supt. Docs. 1941. Pp. lxx, 10691-10987.)
- Laws relating to navy and commerce air service, and miscellaneous air laws.* (Washington: Supt. Docs. 1941. Pp. 171. 15c.)
- Motor carrier safety regulations (revised), including orders issued through November 4, 1940.* (Washington: Interstate Commerce Commission, Motor Carriers Bur. 1941. Pp. 113. 20c.)
- Radio laws of the United States (June 24, 1910-June 25, 1940.)* (Washington: Supt. Docs. 1941. Pp. 119. 15c.)
- Report on chain broadcasting.* (Washington: Federal Communications Commission. 1941. Pp. 153. 30c.)
- Rules and regulations, title 47, telecommunication, chapter 1. Part 31. Uniform system of accounts, class A and class B telephone companies, effective January 1, 1937 (revised to October 25, 1940). Part 32. Units of property class A and class B telephone companies, effective January 1, 1937.* (Washington: Federal Communications Commission. 1940. Pp. 105. 15c.)
- St. Lawrence survey. Part 2. Shipping services on the St. Lawrence River. Part 6. Economic effects of the St. Lawrence power project.* (Washington: U. S. Dept of Commerce. 1941. Pp. 40, map; 126. 25c; 20c.)
- Statistics of the communications industry in the United States for the year ended December 31, 1939, containing financial and operating data relating to communication carriers and standard broadcast stations subject to the Communications act of 1934.* (Washington: Federal Communications Commission. 1941. Pp. 266. 25c.)
- Statistics of railways in the United States, for the year ended December 31, 1939:*

fifty-third annual report. Prepared by Bureau of Statistics, Interstate Commerce Commission. (Washington: Supt. Docs. 1941. Pp. x, 583. \$1.50.)

Agriculture; Forestry; Fisheries

NEW BOOKS

- ANDREWS, H. J. and COWLIN, R. W. *Forest resources of the Douglas-fir region.* Misc. pub. no. 389. (Washington: U. S. Dept. of Agric. 1940. Pp. 173. 50c.)
- DILLER, R. *Farm ownership, tenancy, and land use in a Nebraska community.* (Chicago: Univ. of Chicago Press. 1941. Pp. vii, 192, mimeographed. \$2.)
- DILLON, J. J. *Seven decades of milk; a history of New York's dairy industry.* (New York: Orange Judd. 1941. Pp. 352. \$3.)
- FARNSWORTH, H. C. *Wheat in the post-surplus period 1900-09, with recent analogies and contrasts.* Wheat stud., vol. xvii, no. 7. (Stanford University, Calif.: Food Research Inst. 1941. Pp. 71. \$1.)
- . *World wheat survey and outlook, May, 1941.* Wheat stud., vol. xvii, no. 8. (Stanford University, Calif.: Food Research Inst. 1941. Pp. 33. 75c.)
- FERNANDEZ, R. *El café de Veracruz.* (Mexico, D.F.: Inst. Mexicano de Estudios Agrícolas. 1941. Pp. 164.)
- GARVIN, W. J. *Some factors affecting the supply of milk and milk products in Nova Scotia.* Catholic Univ. of Am. stud. in econ. no. 4. (Washington: Catholic Univ. of Am. Press. 1941. Pp. viii, 155.)
- HERB, M. I., compiler. *Crop and livestock insurance, 1937-40; selected list of references.* Econ. lib. list no. 24. (Washington: Bur. of Agric. Econ., U. S. Dept. of Agric. 1941. Pp. 38, mimeographed.)
- HOPKINS, J. A. *Changing technology and employment in agriculture.* (Washington: Supt. Docs. 1941. Pp. iv, 189. 25c.)
- REYNOLDS, R. V. and PIERSON, A. H., compilers. *Forest products statistics of the Central and Prairie States.* U. S. Dept. of Agric. statistical bull. no. 73. (Washington: Supt. Docs. 1941. Pp. 94. 15c.)
- TOTHILL, J. D., editor. *Agriculture in Uganda.* (New York: Oxford. 1941. Pp. 555. \$6.50.)
- TRIPP, T. A. *The farmer's search for economic democracy.* Social Action, vol. 7, no. 4. (New York: Social Action. 1941. Pp. 38. 15c.)
- WAYMACK, W. W., and others. *How does this war threaten the American farmer? America's town meeting of the air bull.,* vol. 6, no. 20. (New York: Columbia Univ. Press. 1941. Pp. 31. 10c.)
- WESTVELD, R. H. and PECK, R. H. *Forestry in farm management.* (New York: Wiley. 1941. Pp. 348. \$3.)
- WICKIZER, V. D. *Rice and wheat in world agriculture and consumption.* Wheat stud., vol. xvii, no. 6. (Stanford University, Calif.: Food Research Inst. 1941. Pp. 53. \$1.)
- ZON, R., and others. *Conservation of renewable natural resources; some fundamental aspects of the problem.* Univ. of Pennsylvania bicentennial conf. pub. (Philadelphia: Univ. of Pennsylvania Press. 1941. Pp. 206. \$2.50.)
- Executive council (Imperial Agricultural Bureau): eleventh annual report, 1939-40.* (London: H. M. Stationery Office. 2s.6d.)
- Expenses, income, and dividends of Oklahoma and Texas coöperative cotton gins.* Bull. 41. (Washington: Farm Credit Admin., Coöp. Research and Serv. Div. 1940. Pp. 62. 10c.)

- Farm relief and agricultural adjustments acts (June 15, 1920-November 25, 1940).* (Washington: Supt. Docs. 1941. Pp. 246. 25c.)
- Laws relating to agriculture.* (Washington: Supt. Docs. 1941. Pp. 447. 35c.)
- Lumber distribution and consumption for 1938.* Misc. pub. 413. (Washington: U. S. Dept. of Agric. 1941. Pp. 59. 15c.)
- Report of the activities (1939-40) of the Agricultural Adjustment Administration under the provisions of the Agricultural Adjustment act of 1938, the Soil Conservation and Domestic Allotment act, and related legislation, from July 1, 1939-June 30, 1940.* (Washington: Agricultural Adjustment Administration. 1941. Pp. 154. 20c.)

Economic Geography; Regional Planning; Urban Land; Housing

The Boulder Canyon Project: Historical and Economic Aspects. By PAUL L. KLEINSORGE. (Stanford University: Stanford Univ. Press. 1941. Pp. xiv, 330. \$3.50.)

As pointed out by Eliot Jones in his foreword to this book, the Boulder Canyon Project includes not only majestic Boulder Dam but also the supplementary works necessary to supply water to southern California and to the Imperial and Coachella valleys. It embraces the huge 240-mile Colorado River aqueduct to Los Angeles from Parker Diversion Dam (150 miles south of Boulder Dam), and the All-American Canal with its Coachella branch by which water is supplied to the two valleys from Imperial Dam (140 miles below Parker Dam). The book is devoted to a presentation of the multiple purposes, the financial and engineering plans, and the political and economic problems associated with these structures.

The history of man's efforts to harness the rampaging Colorado for navigation, irrigation, flood control, and power generation, is here related. The great difficulties experienced from 1905 to 1927 in holding the rebellious river to its course caused millions to be spent upon ever higher levees which the flooding stream surmounted and cut away with enormous damage to agriculture in the Imperial valley, and the submergence of 150,000 acres under the waters of the Salton Sea. Out of the pressing necessity for control emerged the Colorado River Compact between the states of this great river basin, sixth in drainage area in the United States. The terms of the pact, and of the Boulder Canyon Project Act are summarized. The Arizona-California dispute is reviewed, with an evident attempt at impartiality, and with an equally evident inability to see validity in Arizona's demand for half the unallocated water in the main stream, since "the Arizona proposals did not grant California enough water for her needs." The problem of state versus federal control of the dam, the conflict between Mexican and American interests, and the constitutionality of the Boulder Canyon Project act receive attention. Consideration of financial arrangements under the power and water contracts leads to the conclusion that "at the present time the

financial structure of the Boulder Canyon Project appears to be sufficiently secure to allay any doubt as to its soundness."

In making an economic evaluation of the services of the project, the author credits it with the following major benefits: saving from inundation of about 2,000 square miles of land in California and Mexico, including 1,250,000 acres of excellent farm land and several towns; solving through water storage in Lake Mead the drought problem of the region in respect to land at present under cultivation and an additional 1,500,000 acres awaiting future use; making available to Los Angeles the only dependable and adequate water supply; and providing as a by-product of the water an abundance of low-cost power needed for pumping and for serving the industrial and domestic needs of a rapidly growing population in southern California. Noted also are the temporary gains from the employment of thousands of men during a period of depression, and the potential services of the recreational area planned for Lake Mead and surrounding territory under the National Park Service. Whether fortunately or not the lake has not affected the climate of the region. So great are these benefits of flood control, river regulation, water-storage and reclamation services that "it would not have been an uneconomic procedure to conduct the project at a loss, if necessary, so long as the price charged for electric energy would cover the costs directly attributable to power production and would make some contribution to the joint costs."

The factual material is well organized to present a general survey of the project with its prospective results rather than a critical analysis of the operating policies now in effect. The book is documented throughout and contains a complete bibliography.

C. E. MCNEILL

University of Nebraska

Residential Real Estate, Its Economic Position as Shown by Values, Rents, Family Incomes, Financing, and Construction, together with Estimates for All Real Estate. By DAVID L. WICKENS. (New York: Nat. Bur. Econ. Res. 1941. Pp. xxii, 300. \$3.50.)

In his sub-title the author has indicated the scope of his study. Being a statistical treatise, less than 20 per cent of the volume consists of text material. Even much of this space is devoted to an explanation of the sources and the limitations of the statistics presented in approximately 150 tables.

The main sources of information are: *Census of Population*, 1930, VI, Families; *Federal Real Property Inventory* of 1934; *Financial Survey of Urban Housing*; and Bureau of Labor Statistics reports on building permits. Since none of these sources pretend to supply complete information on the subject of residential real estate, the author has been careful to set forth the nature of the information available to him.

As a matter of fact, the feature of the book that inspires most confidence is the evident desire of the author to let the facts speak for themselves. He does not try to prove too much from the material which he uses. Nevertheless, he has drawn useful conclusions which will prove of value to the student of real estate problems. Whenever his conclusions are based upon estimates he has taken care to warn the reader of that fact.

Among the interesting conclusions of the book are the following: More than half of the national wealth of the United States is in land and buildings; the value of real property increased fivefold from 1900 to 1930; residential real estate is the most important form of real property; real estate loans constitute the largest single form of credit; generalizations for the country as a whole are dangerous because of wide regional fluctuations.

The author engages in forecasts only to a very limited extent. He does suggest that rental housing constitutes a greater need than houses constructed for sale. Such new rental property should be supplied in the lower rental brackets.

The reviewer recommends *Residential Real Estate* as a valuable source book for all students of real estate problems. Even those engaged in the real estate business will find this volume a mine of useful information.

H. E. HOAGLAND

The Ohio State University

NEW BOOKS

- CARLSON, O. *A mirror for Californians*. (Indianapolis: Bobbs-Merrill. 1941. Pp. 372. \$2.50.)
- CHALMERS, S. H. *Low-cost homes; planning, financing, building*. Home inst. booklets, no. 15. (New York: Home Inst. 1941. Pp. 39. 15c.)
- JOHNSON, C. S., and associates. *Statistical atlas of southern counties; listing and analysis of socio-economic indices of 1104 southern counties*. (Chapel Hill: Univ. of North Carolina Press. 1941. Pp. x, 355. \$4.)
- JONES, C. F. and DARKENWALD, G. G. *Economic geography*. (New York: Macmillan. 1941. Pp. 651. \$4.25.)
- Alabama; a guide to the Deep South*. Compiled by workers of the Writers' Program of the W.P.A. in the State of Alabama. Am. guide ser. (New York: Richard R. Smith. 1941. Pp. 464. \$2.75.)
- Defense housing insurance: hearings, 77th Cong., 1st sess., on H. R. 3575 superseding H. R. 3162, to amend the National Housing act, and for other purposes, February 17-21, 1941*. (Washington: House Banking and Currency Committee. 1941. Pp. 166. 20c.)
- Land classification in the United States*. Report of the Land Committee to the National Resources Planning Board. (Washington: Supt. Docs. 1941. Pp. viii, 151. 60c.)
- Los Angeles*. Compiled by workers of the Writers' Program of the W.P.A. in Southern California. Am. guide ser. (New York: Hastings House. 1941. Pp. 485. \$2.50.)
- Michigan; a guide to the Wolverine State*. Compiled by workers of the Writers' Program of the W.P.A. in the State of Michigan. Am. guide ser. (New York: Oxford. 1941. Pp. 718. \$3.)

- Missouri; a guide to the "Show Me" State.* Compiled by workers of the Writers' Program of the W.P.A. in the State of Missouri. Am. guide ser. (New York: Duell, Sloan and Pearce. 1941. Pp. 652. \$2.50.)
- Montana; a profile in pictures.* Compiled by workers of the Writers' Program of the W.P.A. in the State of Montana. Am. pictorial guide ser. (New York: Fleming Pub. \$1.)
- Monterey peninsula.* Compiled by workers of the Writers' Program of the W.P.A. in Northern California. Am. guide ser. (Stanford University, Calif.: James L. Delkin. Pp. 207. 1941. \$2.50.)
- New England Regional Planning Commission: Is planning practical for your town?* Rev. ed. (Boston: National Resources Planning Board. 1940. Pp. 42. Gratis.)
- Public land acquisition in a national land-use program.* Part 2. *Urban land.* Report of the Land Committee to the National Resources Planning Board. (Washington: Supt. Docs. 1941. Pp. vii, 39. 20c.)
- Urban planning and land policies.* Vol. 2. Supplementary report of the Urbanism Committee to the National Resources Committee. (Washington: National Resources Committee. 1939. Pp. 366. \$1.)
- Wyoming; a guide to its history, highways, and people.* Compiled by workers of the Writers' Program of the W.P.A. in the State of Wyoming. Am. guide ser. (New York: Oxford. 1941. Pp. 517. \$2.75.)

Labor and Industrial Relations

Labor and National Defense: A Survey of the Special Labor Problems Arising from America's Defense Activities and a Program for Action. The Factual Findings by LLOYD G. REYNOLDS; The Program by the LABOR COMMITTEE. (New York: Twentieth Century Fund. 1941. Pp. xiii, 130. \$1.00.)

The factual findings, for which the research staff appointed for this study is responsible, appear in chapters 1-4. On the basis of these facts, the Labor Committee of the Twentieth Century Fund prepared a program for action. The program for which the Committee alone is responsible appears in chapter 5. The members of the Labor Committee were William L. Chenery, William M. Leiserson, Frazier MacIver, Sumner H. Slichter, Robert J. Watt, and Edwin E. Witte. The staff was headed by Dr. Lloyd G. Reynolds of the Johns Hopkins University, assisted by Dr. Russell Nixon of Harvard University, and Mr. Charles Killingsworth of the University of Wisconsin. Both factual findings and program are comprehensive, sensible, and worthy of wide reading.

In chapter 1, "Labor Requirements and Labor Supplies," are discussed the adequacy of the total labor supply and of the skilled labor supply, and methods of meeting labor shortages. The staff states (p. 14):

On the basis of 1940 appropriations, it seemed reasonable to predict an increase in employment of around six million between the fall of 1940 and the fall of 1942—three million in armament production and three million in consumer goods. Under the expanded program one can say merely that—barring an early

peace—the increase will be larger than this, and that it will certainly exceed the number of available unemployed persons in the labor market. It does not follow, however, that all will be well until the present unemployed have been completely absorbed, and that we will then be faced with a sudden and absolute “general shortage” of labor. In fact it would be wrong to conclude that all employable workers will have jobs by the end of 1942. . . . Many of the unemployed will not be absorbed because they are in the wrong places or the wrong occupations, and there may well be unemployment of one or two million, even at the peak of defense production.

The shortages will be most acute in the metal trades. A systematic discussion of methods of meeting these and other shortages includes comments on training within industry, in vocational schools, increasing labor mobility, upgrading, and dilution.

Chapter 2, “Labor Standards,” is concerned with the question: Given the rate of defense production which existing appropriations provide, will it be possible to maintain intact labor’s recent gains? The findings as summarized on pages 68 and 69 include the following:

Whether existing labor standards can be maintained during the next few years cannot be answered definitely at this time. . . . Workers in defense industries, and particularly skilled mechanics, will probably be better off than before, though workers whose wages do not advance appreciably may suffer a loss in real income. . . . The doubtful factor in the situation is the rate at which armament production will be accelerated during the next year or two.

Chapter 3, “Adjustment of Industrial Disputes through Collective Bargaining,” is summarized on page 84:

While it is true that the total number of union members today is three times the number in 1917, the chances of peaceful settlement of disputes are not correspondingly improved. The industries concerned most directly with national defense were almost entirely non-union in 1917. Now they are 30 or 40 per cent unionized, with aggressive organizing campaigns under way or projected in most fields. This formative character of unionism in the basic industries makes friction in them more likely. The adjustment of grievances and renewal of agreements is hampered by inexperience and by the hangovers of old antagonisms. Machinery for voluntary arbitration of disputes is almost entirely lacking. Battles still rage around certain non-union centers. Many disputes in defense industries are therefore likely to get out of hand and result in strikes, unless some agency outside the industry intervenes to facilitate a settlement.

The discussion of such agencies appears in chapter 4, “Adjustment of Industrial Disputes through Government Agencies.” The staff points to the high degree of success achieved by federal and state mediation and conciliation boards. The questions associated with compulsory arbitration lead to the conclusion that “The semi-compulsory methods usual in this country will probably continue to prove more desirable than complete compulsory arbitration on the Australian pattern” (p. 109).

In chapter 5 appear the recommendations of the Labor Committee. These

are presented in so meaty and compact a fashion that summarizing them is really impossible. The conclusions appear under three headings:

1. That there be set up in connection with the Office of Production Management a National Defense Labor Policy Committee whose chairman shall be appointed by the President and whose membership shall be nominated in equal numbers by the national organizations of labor and the national organizations of management.

2. That the present conciliation services of the government be supplemented by a Federal Emergency Mediation Board of three members appointed by the President.

3. That there be initiated a concerted effort to incorporate by voluntary action in all existing collective agreements affecting plants engaged in defense production (a) a specific covenant not to strike or lock out during the term of the agreement and to set up grievance machinery to settle disputes arising under the agreement, in all cases where the collective agreement does not already contain such a covenant, and (b) a further covenant that the working conditions established by the agreement shall be maintained without change and that there shall be no interruption of work during negotiations for renewal of the agreement; that any dispute which cannot be adjusted shall be submitted without interruption of work to the Federal Emergency Mediation Board, and that if the dispute cannot be settled by that Board and the parties are unwilling to arbitrate, and if the Board notifies the President that a stoppage would interfere with defense production, then the *status quo* shall be maintained and production continued for a specified time within which the President, by appointment of an *ad hoc* board or otherwise, may attempt a settlement of the controversy.

The problems with which this little book deals are among the most important faced by the United States at the present time. Their solution in a manner satisfactory to employers, labor, and the national interests would surely be facilitated by wide reading of this simple, straightforward, well-balanced discussion.

J. PHILIP WERNETTE

Harvard University

NEW BOOKS

ADAMS, W. W., GEYER, L. E. and PARRY, M. G. *Coal-mine accidents in the United States: 1938*. Bureau of Mines bull. 437. (Washington: Supt. Docs. 1941. Pp. 127. 15c.)

ADAMS, W. W. and KOLHOS, M. E. *Metal-mine accidents in the United States during the calendar year 1938*. Bureau of Mines bull. 435. (Washington: Supt. Docs. 1941. Pp. 52. 10c.)

ADAMS, W. W. and WRENN, V. E. *Quarry accidents in the United States during the calendar year 1939*. Bureau of Mines bull. 438. (Washington: Supt. Docs. 1941. Pp. 76. 10c.)

BROOKS, R. R. *National labor policy and total defense*. (Washington: Am. Council on Public Affairs. Pp. 15. 25c.)

BROUGHTON, P. S. *Man meets job—how Uncle Sam helps*. Public affairs pamph. no. 57. (New York: Public Affairs Committee. 1941. Pp. 32. 10c.)

CARSKADON, T. R. *Labor in the defense crisis*. Public affairs pamph. no. 58. (New York: Public Affairs Committee. 1941. Pp. 31. 10c.)

- DOUGLAS, P. H., and others. *Strikes and national defense*. Round table broadcast, no. 157. (Chicago: Univ. of Chicago Press. 1941. Pp. 26. 10c.)
- FEINSINGER, N. P. *Cases and materials on labor law*. (Madison, Wis.: College Typing. 1940. Pp. 637. \$6, loose-leaf.)
- GREENMAN, R. L., and SANDERS, L. L. *The federal labor laws; the Wagner act, the Wages and Hours act, the Walsh-Healey act*. (Deep River, Conn.: Nat. Foremen's Inst. 1941. Pp. 79. \$1.50.)
- LERNER, M., and others. *Why strikes in defense industries?* America's town meeting of the air bull., vol. 6, no. 23. (New York: Columbia Univ. Press. 1941. Pp. 37. 10c, paper.)
- MCCARROLL, C. F. *Accidents in the Oklahoma petroleum industry in 1937*. Bureau of Mines technical paper 620. (Washington: Supt. Docs. 1941. Pp. v, 141. 15c.)
- MCAUGHTON, W. L. *The development of labor relations law*. (Washington: Am. Council on Public Affairs. 1941. Pp. 197. \$3, cloth; \$2.50, paper.)
- MOORE, E. P. *Hours administration as influenced by the defense program*. (Princeton: Industrial Rel. Sect., Princeton Univ. 1941. Pp. 32. \$1.)
- PRICE, J. *Organised labour in the war*. Foreword by the Rt. Hon. Ernest Bevin, M.P. (New York: Penguin Books. 1941. Pp. 176. 25c.)
- RAUSHENBUSH, C. and STEIN, E., editors. *Labor cases and materials; readings on the relation of government to labor*. (New York: Crofts. 1941. Pp. xvi, 674. \$4.)
- RECTOR, H. B. *Labor, management and national defense under New Deal legislation*. (Cincinnati: Law Research Serv. 1941. Pp. 48. \$1.15; \$1, paper.)
- Basic training policies*. Industrial rel. dig., no. 6. (Princeton: Industrial Rel. Sect., Princeton Univ. 1941. Pp. 8. 20c.)
- Compilation of laws relating to mediation, conciliation, and arbitration between employers and employees, laws disputes between carriers and employees and subordinate officials under Labor Board, eight-hour laws, employers' liability laws, labor and child labor laws*. (Washington: House of Representatives. 1941. Pp. 450. 40c.)
- Earnings and hours in the leather and leather belting and packing industries, 1939*. Bull. 679. (Washington: Bur. of Labor Statistics. 1941. Pp. 56. 15c.)
- Employment stabilization; how to stabilize employment for payroll tax savings; a special report prepared by the editors of the Prentice-Hall "Unemployment Insurance Service."* (New York: Prentice-Hall. 1941. Pp. 71. \$1.)
- Labor fact book, 5*. Prepared by Labor Research Association. (New York: Internat. Pubs. 1941. Pp. 224. \$2.)
- The title of this book is just one of those little jests which are indulged in by the left-wing revolutionary sects. It does, indeed, contain a large amount of isolated facts, selectively arranged to create or fortify the correct bias under the headings of "The war," "Labor and social conditions," "Legislation," "Trade union trends," "Farmers and farm workers" and "Civil rights." Anyone who is acquainted with the "party line" will already know all the answers.
- Farm wage boards*. 1941 legislative problems, no. 8. (Berkeley: Bur. of Public Admin., Univ. of California. 1941. Pp. i, 26, mimeographed.)
- Labour legislation in Canada, 1937*. (Ottawa: Patenaude. 1938. Pp. v, 756. \$1.)
- . 1938. (Ottawa: Patenaude. 1939. Pp. xi, 112. 25c.)
- . 1939. (Ottawa: Patenaude. 1940. Pp. xiii, 120. 25c.)
- . 1940. (Ottawa: Cloutier. 1941. Pp. xiii, 235. 25c.)

- National Labor Relations Board: annual report for fiscal year ended June 30, 1940.* (Washington: Supt. Docs. 1941. Pp. 162. 20c.)
- National Labor Relations act: hearings, 76th Cong., 3rd sess., on H. R. 9195, act to amend National Labor Relations act, August 13 to September 16, 1940.* (Washington: Senate Education and Labor Committee. 1941. Pp. 286. 25c.)
- Policies in the adjustment of wage rates.* Industrial rel. dig. no. 5. (Princeton: Industrial Rel. Sect., Princeton Univ. 1941. Pp. 8. 20c.)
- Problems in wage adjustment.* Stud. in personnel pol., no. 33. (New York: Nat. Indus. Conf. Board. 1941. Pp. 27.)
- Railroad Retirement Board: annual report for the fiscal year ended June 30, 1940.* (Washington: Supt. Docs. 1941. Pp. 302. 40c.)
- Record of proceedings: second labour conference of the American states which are members of the International Labour Organisation, November 21-December 2, 1939, Havana.* (Montreal: Internat. Lab. Office. 1941. Pp. ix, 284.)
- Rights of labor: hearings, 76th Cong., 3rd sess., pursuant to S. Res. 266 (74th Cong.) to investigate violations of the right of free speech and assembly and interference with the right of labor to organize and bargain collectively.* Parts 67, 68, 69, 70. *Supplementary exhibits presented by various California organizations.* (Washington: Senate Education and Labor Committee. 1940-1941. Pp. 24459-24842; 24843-25270; 25271-25715; 25717-26110. 35c, 50c, 50c, 35c.)
- Salaries and hours of labor in municipal fire departments, July 1, 1938: West North Central Cities.* Bull. 684, vol. 4. *South Atlantic cities.* Bull. 684, vol. 5. (Washington: Bur. of Labor Statistics, U. S. Dept. of Labor. 1941. Pp. 28; 32. 10c each.)
- Seamen's act as amended, and other laws relating to seamen (March 4, 1915-October 17, 1940.)* (Washington: Supt. Docs. 1941. Pp. 122. 15c.)
- Strikes in defense industries: statement showing data for the formulation of a policy toward strikes in defense industries, together with a summary of the state and federal law and jurisprudence which define the rights and status of labor.* (77th Cong., 1st sess., Sen. doc. no. 52.) (Washington: Supt. Docs. 1941. Pp. vii, 299.)
- Wages and hours of labour in Canada, 1929, 1939, and 1940.* Department of Labor, Canada, rep. no. 24. (Ottawa: Cloutier. 1941. Pp. 214.)
- Issued as a supplement to *The Labour Gazette*, April, 1941.
- Wartime regulation of hours of labor and labor supply in Great Britain.* (Washington: U. S. Dept. of Labor, Wage and Hour Div. 1941. Pp. i, 82, mimeographed.)
- Women workers in their family environment.* Women's bur. bull. 183. (Washington: U. S. Dept. of Labor. 1941. Pp. 183. 15c.)
- Why women work.* Rev. ed. Public affairs pamph. no. 17. (New York: Public Affairs Committee. 1941. Pp. 31. 10c, paper.)

Social Insurance; Relief; Pensions; Public Welfare

The Federal Rôle in Unemployment Compensation Administration. By RAYMOND C. ATKINSON. (Washington: Committee on Social Security, Soc. Sci. Research Council. 1941. Pp. x, 192. \$2.00.)

This is another of the excellent series of studies which have been published under the auspices of the Committee on Social Security. It is an analysis of the position of the Social Security Board and the Bureau of Employ-

ment Security in the administration of unemployment compensation in our present federal-state system. It presents in very compact form a distillation of the information and conclusions reached as the result of continued and intimate observation of the operation of unemployment compensation both at the federal and state levels. To use the terminology which lawyers frequently employ to browbeat witnesses, it presents "conclusions rather than facts." It is, indeed, worthy of comment that a discussion of so many important aspects of unemployment compensation could be presented without a single statistical table or chart. The conclusions reached and the suggestions for change are well founded and merit serious consideration.

The federal-state unemployment compensation system is certainly one of the most complicated if not the most curious manifestations in American life of the results of judicial review. Judicial legislation may be said to have taken place in this instance without a decision having been rendered. The federal payroll tax with 90 per cent offset and the 100 per cent grant for administration expenses were adopted because of the fear (apparently groundless) that an outright federal unemployment compensation system would be declared unconstitutional. It is hardly possible to read this discussion of the problems of the present program without coming to the conclusion that the results of this anticipation of court actions have been unfortunate.

This is not to say that the present system has no desirable features. The author states quite clearly its advantages in broader opportunity for experimentation, adaptation to local conditions, decentralized administration, and in other ways. He also gives a number of suggestions not only for administrative improvements but also of means by which objectives which are desirable on broad economic and social grounds may be more nearly attained. These objectives include the distribution of the cost of unemployment over the whole nation, greater assurance of solvency throughout the system, and more adequate benefits, particularly in states with heavy cyclical and seasonal unemployment where workers are most in need of protection. A matter of special concern is the competition between states to reduce contribution rates and benefit scales. Mr. Atkinson shows how experience rating has stimulated the drive for less adequate benefit provisions and has given rise to the need for protection against a serious impairment of the benefit structure.

At the very least the present system should be patched in the places indicated by Mr. Atkinson, and the patches he suggests are probably as good as any for the job. As he points out, however, a national system would have many advantages over the best patched federal-state structure. Unfortunately the vested interests are now so great that the difficulties in the way of nationalization are as great as the need for it is clear.

BLAIR STEWART

Reed College

Economic Aspects of Medical Services. By PAUL A. DODD and E. F. PENROSE. (Washington: Graphic Arts Press. 1939. Pp. xxii, 499. \$3.75.)

This volume gives the results of an extensive survey conducted in 1934-37 of the medical care situation in the state of California. The survey was originally sponsored and was largely financed by the California Medical Association, which, however, found the conclusions unacceptable and refused to publish them. The present volume may be considered as the final report of the survey as prepared mainly by Professor Dodd who was the director.

The main portion of the book deals with the factual findings of two questionnaire studies. The first sought data from representative families on their need for and receipt of medical care, and the charges incurred and payment made for care. The second, addressed to medical, osteopathic and dental practitioners, sought information on gross and net incomes in 1933 and on income trends over the period 1929-33. The findings of these questionnaire studies are supplemented by chapters on the distribution of health facilities in California, the nature and extent of governmental public health activities, and the general nature and principles of health insurance.

The findings of the questionnaire surveys parallel those of similar studies, notably that made by the Committee on the Costs of Medical Care. At the time of the survey, 14 per cent of the white population of the state (the percentage varying inversely with income) reported they were in need of medical attention. Of these only about 60 per cent—the proportion varying sharply with income—were actually under treatment at the time. During the year preceding the canvass, 36 per cent of the population had had some dental attention, the proportion varying from 23 per cent for those in families with incomes under \$500 to 80 per cent for the over \$10,000 income group.

White families in California, it was found, were incurring medical costs averaging \$79 per family (\$24.33 per person) per year. The percentage of medical costs to income varied from 23 per cent for families with incomes under \$500 to 3 per cent for those with incomes of over \$10,000. As other surveys have shown, in each income group a large proportion of the total expense for medical care was incurred by a relatively small proportion of the families.

The survey of incomes showed that medical, dental and osteopathic practitioners suffered severely in the early years of the depression. Incomes of physicians dropped by 46 per cent from 1929 to 1933, and those of dentists by the same amount. In 1933, the average net income of physicians was \$3,572 (median \$2,700), and the average net income of dentists, \$2,769 (median \$2,500). Undoubtedly the low incomes of doctors at the depth of the depression helps to explain why the California Medical Association in 1935 went on record in favor of compulsory health insurance, a stand reversed as the economic position of the profession improved.

The report concludes that the health and medical care situation in the state is grossly unsatisfactory and that major changes in the system of private practice are necessary. The authors believe that insurance is the only way by which medical care can be adequately financed and doctors fairly remunerated. They examine and reject voluntary insurance as a solution. They recommend an overhauling of California's public health set-up and the establishment of a state-wide system of compulsory health insurance, financed by contributions from employers, employees and the state government, and providing both medical care and cash disability benefits. The standards and specifications for an appropriate system of insurance are discussed at considerable length, and those suggested were largely written into a compulsory health insurance bill introduced in the California legislature in 1939. The authors are emphatic in the belief that, while the medical profession should have a voice in the administration of a compulsory health insurance system, main control should lie with the public.

The book would be more readable if it were shorter, and if there was better selection of material. It might also have been improved by more moderation of expression. These, however, are slight defects of a volume which constitutes a valuable contribution to the growing literature on the economics of medical care.

LOUIS S. REED

Washington, D.C.

NEW BOOKS

- CHARNOW, J. *Topics for research concerning public assistance programs*. Pamph. ser., no. 6. (Washington: Soc. Serv. Research Council, Committee on Soc. Security. 1941. Pp. 77. 50c.)
- GOLDMAN, F. *Prepayment plans for medical care*. Pamph. ser. on group health plans. (New York: Medical Admin. Serv. 1941. Pp. 60. 25c.)
- HENKIN, L. and DONNER, I. *Unemployment insurance referee* (Division of Placement and Unemployment Insurance). Arco civil serv. ser. (New York: Arco Pub. \$2, mimeographed.)
- KESSLER, H. H. *Accidental injuries; the medico-legal aspects of workmen's compensation and public liability*. 2nd ed. (Philadelphia: Lea and Febiger. 1941. Pp. 803. \$10.)
- MACMAHON, A. W., MILLETT, J. D. and OGDEN, G. *The administration of federal work relief*. Social Sci. Research Council stud. in admin., vol. xii. (Chicago: Public Admin. Serv. 1941. Pp. ix, 407. \$3.75.)
- MCKINSEY, J. P. *Transient men in Missouri*. Univ. microfilms no. 219. (Ann Arbor: Univ. of Michigan Microfilms. 1941. Pp. 310. \$3.88.)
- MILES, A. P. *Federal aid and public assistance in Illinois*. Social serv. monog. (Chicago: Univ. of Chicago Press. 1941. Pp. xv, 259, mimeographed. \$1.50.)
- OTEY, E. L. *Cash benefits under voluntary disability insurance in the United States*. Bur. rep. no. 6. (Washington: Social Security Board, Bur. of Research and Stat. 1941. Pp. vi, 117. 15c.)
- Compilation of the social security laws, including the Social Security act, as*

- amended, and related enactments through the 76th Congress (January 3, 1941).* (Washington: Social Security Board. 1941. Pp. 60. 10c.)
- Occupation and health.* Supplement to *Encyclopaedia of Hygiene, Pathology, and Social Welfare.* (Geneva: Internat. Labour Office. 1940. Pp. 15.)
- An outline of foreign social insurance and assistance laws, four charts summarizing the principal legislative provisions in foreign countries.* Bur. rep. no. 5. (Washington: Social Security Board, Bur. of Research and Stat. 1940. Pp. 62. 15c.)
- State of Wyoming: twenty-fifth report of the Workmen's Compensation Department for year ending December 31, 1940.* (Cheyenne: State Treasurer. 1941. Pp. 316.)
- Unemployment and defense; a movie discussion guide.* Defense digest. (New York: Am. Assoc. for Adult Educ. Pp. 15. 10c.)

Consumption; Income Distribution; Coöperation

The Consumer Movement: What It Is and What It Means. By HELEN SORENSON. Pub. Instit. for Consumer Educ. (New York: Harper. 1941. Pp. xiii, 245. \$2.50.)

What is the consumer movement? Miss Sorenson answers this question primarily in terms of private organizations (she lists nearly a hundred) and government groups which devote their activities in whole or in part to consumers' problems. The development of the movement is attested also by an increasing body of literature in the last decade or more, and by an increasing number of courses in college, high school and adult education.

The two most interesting chapters in the book deal with the relation of the consumer movement to business. Miss Sorenson gives many examples of abuses of the consumer movement by business, which in their severest form were attacks charging the movement to be subversive, attempting to undermine the "American way" of life. In other cases, however, the business wolf dressed itself in the sheep's clothing of the consumer, as by creating pseudo-consumer organizations as means for advertising particular products or otherwise furthering its own ends. The book suggests that at present the coöperation between business and consumers is more striking than the antagonisms, as the more far-sighted business men recognize that consumer protection and guidance may promote their own self-interest as by an invisible hand.

In setting forth objectives of the movement, Miss Sorenson quotes from a speech of Mr. Cassels, Director of the Institute for Consumer Education, which sponsors this book. These objectives are four: income, information, integrity (from business men), and independence (of business controls). She discusses these briefly. The great need of the movement, in Miss Sorenson's conclusion, is for "practical consumer action."

The above no doubt sufficiently indicates that the book is stronger in description than in analysis. As a matter of fact, a body of organizations

each devoted to some particular interests of consumers may create a movement in the form of eddies rather than in the form of a tide. The consumer movement is a movement in the constructive sense only as the interests behind it are compatible and to some extent integrated.

Activities, public and private, in the consumer movement fall into several groups, though a single organization may prosecute all. Among these activities are those which prevent wastes in marketing and make buying practices more efficient. The consumer testing agencies and the *bona fide* consumer activities of business men belong here. Their objectives may not be closely coördinated but they are generally consistent. They take a certain scale of living for granted and provide more economical means for bringing it about. They are an advancing consumer movement, though their aim may be narrow.

The book takes note, however, of another type of consumer activity unlike the above, and with a different relation to a consumer "movement"; but it does not point out the distinction. Some consumer organizations undertake the function of value creation, as in the case of those which work for improved nutrition, housing, public health and recreation. These organizations are trying to make a new standard of living. But for the most part they are seeking their ends independently of one another, each without particular regard for the objectives of the rest. Some even work directly against one another, as one group for socialized medicine and one against it. There has been no concerted effort to weigh their values in relation to one another, to decide which are most important either in themselves or in view of their costs and of the limited economic resources at our command. There are groups which would expend new millions for better nutrition, others which would subsidize the housing of a third of our people.

Which of these, and of a dozen other objectives, is most important? At what cost can each be achieved? Have we studied the interrelation of values among themselves, costs among themselves? Which values contribute most to the building up of others and thus advancing the whole? In the complexity and interaction of costs in our economy, which costs are least?

Consumer activities and organizations in the category of value creation deal with the most important matters, but in an uncoördinated way. Yet there are groups concerned with consumers' welfare which could, and in fact do, move slowly in the direction of perceiving a more integrated picture. Such is the American Home Economics Association and such may well be the Institute for Consumer Education. It is natural that consumer goals should, in their beginnings, have been inchoate and unintegrated, but they cannot continue to be so if the movement as a whole achieves any degree of maturity. Consumers have proved that they can organize and even that they can act. Granting that we wish to preserve in our economy a wide measure of independence and freedom, what the consumer movement needs

most is more coördination of its goals in order that its action shall lead to greater values at less sacrifice.

ELIZABETH E. HOYT

Iowa State College

Consumer Representation in the New Deal. By PERSIA CAMPBELL. (New York: Columbia Univ. Press. 1940. Pp. 298. \$3.25.)

In this clearly and compactly written volume—number 477 in *Studies in History, Economics and Public Law*, edited by the Faculty of Political Science of Columbia University—Dr. Campbell records the results of her study of the organization and operation of the Consumers' Advisory Board of the National Recovery Administration, the Consumers' Counsel of the Agricultural Adjustment Administration and the Consumers' Counsel of the National Bituminous Coal Commission. She also offers an analysis of "the consumer policy developed by them with reference to programs for regulation of industry and agriculture." Since she finds the performance of these agencies, if not always their policies, inadequate to the exigencies of the situations into which they were tossed she concludes her study with some carefully informed speculation about what sort of federal agency might effectively look out for the consumers' interests. In the author's thinking these interests are broadly conceived to be well served when "everyone shall be able to secure each day his daily 'bread,' of good quality, and at decreasing cost, under conditions promotive of human worth."

In terms of the impact of their accomplishments upon the national economy, the agencies whose performance the author painstakingly explores hardly seem worth the effort—a conclusion supported by her notation that "The New Deal consumer agencies . . . had little influence on the course of events." However, as pioneer strivings and fumbblings of honest and often intelligent people to develop both policies and practices which would consciously and explicitly direct the conduct of our economy toward getting needed things well produced, the works of these agencies are eminently worth not only the author's study and analysis but extensions of its many directions. It is difficult to gather up the threads of constructive performance by such an agency as the Consumers' Advisory Board of the N.R.A. because so much of its energies were devoted to picking itself up off the floor after being knocked down and around by high test pressure groups. It did, however, do something more than merely survive miserably, and Dr. Campbell has found out and reported much of what it was. In the process she has provided neat and well done summaries of key economic policies to which consumer agencies have sought to give force and effect on behalf of their amorphous clients. She is, however, too generous toward the work of the Consumers' Advisory Board, which was guilty of considerable intellectual bungling, due mainly to confusion over the scope and nature of the con-

sumer interest as distinguished from the public interest—a confusion which Dr. Campbell's study does less to eliminate than might be desired.

It is fitting that the subject of consumer representation in the New Deal be treated very seriously for it has been a serious and at times even a slightly tragic subject. No complete treatment, however, can fail to disclose some hilarious incidents and developments. For example, if the membership of the Consumers' Advisory Board of N.R.A. during its first year had been asked to formulate a program for national economic salvation it is almost certain that it would, in spite of the great restraint and dignity of the membership, have got into a terrific row in the process, so great were the conflicts in the basic economic notions of the membership. However, the relationships of the membership within the board were no less than angelic. The balm was provided by unanimity on the proposition that the controlling course being followed by N.R.A. was bad from any national point of view. A proper exposition of this remarkable balance in consumer representation seems to this reviewer to have amusing possibilities of a sort which, explored more fully, might not only add some leaven but some real light to Dr. Campbell's excellent study.

DEXTER M. KEEZER

Reed College

Introduction to the Coöperative Movement. By ANDREW J. KRESS, editor. (New York: Harper. 1941. Pp. xii, 370. \$3.00.)

This is a series of readings well selected to give the beginner in this field a survey of the history and present condition of the coöperative movement throughout the world. Consumers' coöperatives from the time of Owen and the Rochdale pioneers to recent attempts at coöperation for medical service are described either by contemporaries or later authorities on the several subjects considered. Producers', agricultural, and financial coöperation are the subjects of the next three sections of the book. In each case, foreign as well as American experiments are described.

For parts five and six Professor Kress has collected items on the social philosophy of the coöperative movement and the extent of its international organization. The authors here selected make it clear that to a true believer the coöperative movement is no mere palliative but the beginnings of a changed social order or coöperative commonwealth. Part seven contains the most recent statistics with reference to coöperatives, both producers' and consumers'.

Two chapters in part one stand out. One of these concerns the attitude of religious leaders toward coöperation, to many of whom the movement is apparently a step toward the world described in the teachings of Jesus. In the other outstanding chapter, dealing with coöperative medicine, both the views of the American Medical Association and of the rebels in that society are expressed.

Professor Kress's book has many of the advantages and disadvantages of any collection of readings. The writers are not uniformly interesting and one occasionally wishes the editor had rewritten some of the selections. Likewise the readings must of necessity have been taken from their context, thus losing some of their value. On the other hand the selections enable the reader to obtain ideas, facts and opinions from those actually in the movement rather than read the pedantic interpretations of an onlooker.

At the end of each division is a select bibliography for those desiring further study. For a person wishing to get a working knowledge of an important movement, this book is recommended.

FRANK T. DE VYVER

Duke University

NEW BOOKS

- BARNETT, J. D. *A more coöperative democracy; a book for the general reader.* (New York: Richard R. Smith. 1941. Pp. 179. \$2.)
- HALL, F., editor. *The consumer and defense.* (Columbia, Mo.: Stephens Coll. Inst. for Consumer Educ. 1940. Pp. 160. 75c.)
- HOLLINGSWORTH, H., and others. *Consumer purchases study.* Misc. pub. no. 402. *Family expenditures for medical care, five regions.* (Washington: U. S. Dept. of Agric. 1941. Pp. 249. 30c.)
- KAPLAN, A. D. H., and assistants. *Study of consumer purchases.* Urban ser. bull. no. 643, vol. I. *Family incomes and expenditures in New York City, 1935-36.* Bull. no. 644, vol. II. *Family expenditures in nine cities of the East Central Region, 1935-36.* Bull. no. 648. *Family expenditures in selected cities, 1935-36;* vol. I, *Housing;* vol. III, *Clothing and personal care;* vol. IV, *Furnishings and equipment;* vol. VII, *Recreation, reading, formal education, tobacco, contributions, and personal taxes;* vol. VIII, *Changes in assets and liabilities.* (Washington: U. S. Dept. of Labor, Bur. of Labor Stat. in coöp. with WPA. 1941. Pp. vii, 274; ix, 390; ix, 404; viii, 578; vii, 227; x, 385; 194. 30c, 45c, 45c, 70c, 25c, 35c, 20c.)
- KEMMERER, E. W., and others. *Can we prevent higher living costs? America's town meeting of the air* bull., vol. 6, no. 22. (New York: Columbia Univ. Press. 1941. Pp. 37. 10c.)
- MONROE, D., and others. *Consumer purchases study.* Misc. pub. no. 415. *Family expenditures for automobile and other transportation, five regions.* (Washington: U. S. Dept. of Agric. 1941. Pp. 275. 30c.)
- STIEBELING, H. K., and others. *Consumer purchases study.* Misc. pub. no. 405. *Family food consumption and dietary levels, five regions.* (Washington: U. S. Dept. of Agric. 1941. Pp. 399. 35c.)
- TERESHENKO, V. J., and research staff. *Legal phases of coöperation.* Stud. of coöp. project, ser. A, pt. 3. (New York: WPA in coöp. with City of New York, Research and Clerical Projects. 1941. Pp. x, 242, mimeographed.)
- TONNE, H. A. *Consumer education in the schools.* (New York: Prentice-Hall. 1941. Pp. 378. \$2.85.)
- TURNER, H. H. *Case studies of consumers' coöperatives.* Stud. in hist., econ., and pub. law, no. 481. (New York: Columbia Univ. Press. 1941. Pp. 330. \$2.50.)
- VAILE, R. S., editor. *Consumers' coöperatives in the North Central States.* (Minneapolis: Univ. of Minnesota Press. 1941. Pp. xvi, 431. \$3.50.)

- WILLIAMS, F. M., HANSON, A. C., assisted by WIMSATT, G. B. *Money disbursements of employed wage earners and clerical workers in twelve cities of the South, 1934-36*. Bull. no. 640. (Washington: U. S. Dept. of Labor, Bur. of Labor Stat. 1941. Pp. xii, 700. 60c.)
- Changes in cost of living, March 15, 1941*. (Washington: U. S. Dept. of Labor, Bur. of Labor Stat. 1941. Pp. 21.)
- Retail prices—food, February 1941; May, 1941*. (Washington: U. S. Dept. of Labor, Bur. of Labor Stat. 1941. Pp. 6; 7.)
- Retail prices—food and coal, January, 1941, and year 1940*. (Washington: U. S. Dept. of Labor, Bur. of Labor Stat. 1941. Pp. 25.)
- Weekly expenditure of working-class households in the United Kingdom in 1937-38*. III. *Households in rural areas in England and Wales*. (London: H. M. Stationery Office. 1941. 3d.)

Population; Migration; Vital Statistics

NEW BOOKS

- CHASE, S. *What the new census means*. Pub. affairs pamph. no. 56. (New York: Public Affairs Committee. 1941. Pp. 30. 10c.)
- LESTCHINSKY, J. *The natural increase of Jewish people during the last century*. (New York: Yiddish Scientific Inst. 1941. Pp. 11.)
- Interstate migration: hearings, 76th Cong., 3rd sess., pursuant to H. Res. 63 and H. Res. 491, to inquire into the interstate migration of destitute citizens, to study, survey, and investigate the social and economic needs and the movement of indigent persons across state lines*. Part 5. *Oklahoma City, September 19-20, 1940*. Part 6. *San Francisco, September 24-25, 1940*. Part 7. *Los Angeles, September 28, 1940*. Part 8. *Washington, D.C., November 29, December 2-3, 1940*. (Washington: House Select Committee to Investigate the Interstate Migration of Destitute Citizens. 1941. Pp. 1759-2200; 2201-2801; 2803-3083; 3085-3463. 65c, 65c, 35c, 45c.)
- Population and its distribution*. 6th ed. Compiled by J. Walter Thompson Company. (New York: Harpers. 1941. Pp. x, 429. \$10.)

Data compiled in convenient form from the Census of 1940.

Unclassified Items

NEW BOOKS

- BEALE, H. K. *A history of freedom of teaching in American schools*. Rep. of Commission on the Soc. Stud., Am. Hist. Assoc., part 16. (New York: Scribner. 1941. Pp. 361. \$2.)
- CANTRIL, H. *The psychology of social movements*. (New York: Wiley. 1941. Pp. xv, 274. \$2.75.)
- Essays on the lynching mob, the kingdom of Father Divine, the Oxford group, the Townsend plan, and the Nazi party.
- CLARK, H. F., editor. *Economic education; 1940 eleventh yearbook*. (Washington: Nat. Council for the Soc. Stud. 1940. Pp. 171. \$2.30; \$2, paper.)
- COWGILL, D. O. *Mobile homes: a study of trailer life*. (Washington: Am. Council on Public Affairs. 1941. Pp. vii, 127. \$2.)
- DAVIS, H., editor. *The South American handbook, 1941*. (New York: H. W. Wilson. 1941. Pp. 720. \$1.)

- FOSDICK, R. B. *The Rockefeller Foundation, a review for 1940*. (New York. 1941. Pp. 64.)
- GARCEAU, O. *The political life of the American Medical Association*. (Cambridge: Harvard Univ. Press. 1941. Pp. 186. \$2.50.)
- KRUEGER, M., and others. *War aims and peace aims*. Round table broadcast. (Chicago: Univ. of Chicago Press. Pp. 28. 10c.)
- MARSCHAK, J. *Peace economics*. Stud. on war and peace. (New York: Peace Research Project, Grad. Faculty of Pol. and Soc. Sci. Pp. 19. 25c.)
- Annual report of the Librarian of Congress for the fiscal year ended June 30, 1940*. (Washington: Supt. Docs. 1941. Pp. vii, 555.)
- Henry E. Huntington Library and Art Gallery: thirteenth annual report, 1939-40*. (San Marino, California. 1941. Pp. 29.)
- Studies in philosophy and social science*. Vol. IX, no 1. (New York: Inst. of Soc. Research. 1941. Pp. 194. \$1.)

This issue is devoted to "problems of modern mass communication."

PERIODICALS

Economic Theory; General Works

- ADARKAR, B. P. and GHOSH, D. *Mr. Keynes's theory of interest*. Indian Jour. Econ., Jan., 1941. Pp. 16.
- ANDERSON, T. J., JR. *Competition and monopoly in land markets*. Am. Econ. Rev., June, 1941. Pp. 2.
- BAUER, P. T. *A note on monopoly*. Economica, May, 1941. Pp. 9.
- BLOOM, G. F. *A reconsideration of the theory of exploitation*. Quart. Jour. Econ., May, 1941. Pp. 30.
- ENKE, S. *Profit maximization under monopolistic competition*. Am. Econ. Rev., June, 1941. Pp. 10.
- HART, A. G. *Peculiarities of indifference maps involving money*. Rev. Econ. Stud., Feb., 1941. Pp. 3.
- HENDERSON, A. *Consumers' surplus and the compensating variation*. Rev. Econ. Stud., Feb., 1941. Pp. 6.
- HERSKOVITS, M. J. *Economics of anthropology: a rejoinder*. Jour. Pol. Econ., April, 1941. Pp. 10.
- HICKS, J. R. *The rehabilitation of consumers' surplus*. Rev. Econ. Stud., Feb., 1941. Pp. 9.
- KAFKA, A. *Professor Hicks's theory of money interest*. Am. Econ. Rev., June, 1941. Pp. 3.
- KELLENBERGER, E. *Teuerung und Löhne. Ist die schraube-ohne-ende-theorie richtig?* Zeitschr. f. Schweiz. Stat. und Volkswirtschaft., 1940, No. 4. Pp. 13.
- KNIGHT, F. H. *Anthropology of economics*. Jour. Pol. Econ., Apr., 1941. Pp. 22.
- KOOPMANS, T. *Distributed lags in dynamic economics*. Econometrica, Apr., 1941. Pp. 7.
- MARQUEZ, J. *La economía de Hobbes*. El Trimestre Econ., Apr.-June, 1941. Pp. 20.
- MARSCHAK, J. *A discussion on methods in economics*. Jour. Pol. Econ., June, 1941. Pp. 8.
- MEHTA, J. K. *The negative rate of interest*. Indian Jour. Econ., Jan., 1941. Pp. 6.
- MORGENSTERN, O. *Professor Hicks on value and capital*. Jour. Pol. Econ., June, 1941. Pp. 34.
- MOSAK, J. L. *Wage increases and employment*. Am. Econ. Rev., June, 1941. Pp. 2.
- PALANDER, T. *Om "Stockholmsskolans" begrepp och metoder: metodologiska reflexioner kring [G.] Myrdals "Monetary equilibrium."* Ekon. Tids., Mar., 1941. Pp. 54.
- PEGUM, D. F. *Economic planning and the science of economics*. Am. Econ. Rev., June, 1941. Pp. 10.
- REDER, M. *Monopolistic competition and the stability conditions*. Rev. Econ. Stud., Feb., 1941. Pp. 4.
- ROBINSON, J. *Rising supply price*. Economica, Feb., 1941. Pp. 8.
- ROLL, E. *Importancia social de las tendencias contemporáneas de la teoría económica*. El Trimestre Econ., Apr.-June, 1941. Pp. 17.
- ROSA, R. V. *A multiplier analysis of armament expenditure*. Am. Econ. Rev., June, 1941. Pp. 15.
- ROWNTREE, R. H. *Note on constant marginal cost*. Am. Econ. Rev., June, 1941. Pp. 3.
- RUGGLES, R. *The concept of linear total cost-output regressions*. Am. Econ. Rev., June, 1941. Pp. 3.
- SALANT, W. S. *The demand for money and the concept of income velocity*. Jour. Pol. Econ., June, 1941. Pp. 28.
- SAMUELSON, P. A. *The stability of equilibrium: comparative statics and dynamics*. Econometrica, Apr., 1941. Pp. 24.
- SANDERSON, G. B. *A note on the theory of investment*. Economica, May, 1941. Pp. 12.
- SCHUMPETER, J. A. *Alfred Marshall's "Principles": a semi-centennial appraisal*. Am. Econ. Rev., June, 1941. Pp. 13.
- SCHUMPETER, J. A., COLE, A. H. and MASON, E. S. *Frank William Taussig*. Quart. Jour. Econ., May, 1941. Pp. 27.
- SHIRRAS, G. F. *Income elasticity of demand*. Econ. Jour., Apr., 1941. Pp. 5.
- SMITHIES, A. *Optimum location in spatial competition*. Jour. Pol. Econ., June, 1941. Pp. 18.

- SOMERS, H. M. *Monetary policy and the theory of interest*. Quart. Jour. Econ., May, 1941. Pp. 20.
- STARK, W. *Jeremy Bentham as an economist*. Econ. Jour., Apr., 1941. Pp. 24.
- THARAKHAN, K. J. M. "Consumer's surplus": a rejoinder. Indian Jour. Econ., Jan., 1941. Pp. 12.
- TOBIN, J. *A note on the money wage problem*. Quart. Jour. Econ., May, 1941. Pp. 9.
- TRIFFIN, R. *Monopoly in particular-equilibrium and general-equilibrium economics*. Econometrica, Apr., 1941. Pp. 7.
- VINER, J. *Marshall's economics, in relation to the man and to his times*. Am. Econ. Rev., June, 1941. Pp. 13.
- WESTERMANN, L. G. *Het evenwichtsbegrip in de economie*. De Econ., Mar., 1941. Pp. 9.
- WINTON, E. M. "Wages fund theory and the popular influence of economists": a reply. Am. Econ. Rev., June, 1941. Pp. 1.

Economic History

- ALBION, R. G. *Early nineteenth-century shipowning—a chapter in business enterprise*. Jour. Econ. Hist., May, 1941. Pp. 11.
- DE AZEVEDO, A. *Mauá, bandeirante do século XIX*. Rev. de Ciências Econ., Jan.-Feb., 1941. Pp. 5.
- DUNHAM, A. L. *How the first French railways were planned*. Jour. Econ. Hist., May, 1941. Pp. 14.
- FAY, C. R. *The growth of the new empire 1783-1870 (Britain)*. Econ. Jour., Apr., 1941. Pp. 12.
- VON HAYEK, F. A. *The counter-revolution of science. Part I*. Economica, Feb., 1941. Pp. 28.
- . *The counter-revolution of science. Part II*. Economica, May, 1941. Pp. 32.
- HECKSCHER, E. F. *Kontinentalblockad förr och nu*. Ekon. Tids., Mar., 1941. Pp. 17.
- HUGON, P. *Crônica sobre dois economistas falecidos*. Rev. de Ciências Econ., Jan.-Feb., 1941. Pp. 3.
- IRIGOYEN, U. *Vigorizamos las ciudades fronterizas con el comercio libre*. Rev. de Econ., Apr., 1941. Pp. 5.
- MARANI, C. *Camillo Tarello e gli inizi della scienza agronomica moderna*. Riv. di Storia Econ., Mar., 1941. Pp. 18.
- NEF, J. U. *Industrial Europe at the time of the Reformation (ca. 1515-ca. 1540)*. Continued. Jour. Pol. Econ., Apr., 1941. Pp. 42.
- PADOVAN, G. *Capitale e lavoro nel commercio veneziano dei secoli XI e XII*. Riv. di Storia Econ., Mar., 1941. Pp. 24.
- RAPPARD, W. E. *Trois économistes genevois et leurs carrières parlementaires*. Zeitschr. f. Schweiz. Stat. und Volkswirtschaft., 1940, No. 4. Pp. 34.
- SMITH, R. S. *Life insurance in fifteenth-century Barcelona*. Jour. Econ. Hist., May, 1941. Pp. 3.
- SULLIVAN, A. M. *1841—The year of the prophets*. Dun's Rev., May, 1941. Pp. 8.
- USHER, A. P. *Institutional methodology in economic history*. Jour. Econ. Hist., May, 1941. Pp. 8.
- WERNEKKE, G. R. *Die ersten hundert jahre der italienischen eisenbahnen 1839-1939*. Archiv f. Eisenbahnw., Mar.-Apr., 1941. Pp. 26.

Economic Systems; National Economies

- ANDREOLI, S. B. *L'ordinamento sindacale della Spagna*. Riv. di Pol. Econ., Apr., 1941. Pp. 11.
- ÅKERMAN, J. *De svenska länens ekonomiska utveckling under mellankrigsperioden*. Ekon. Tids., Mar., 1941. Pp. 39.
- ALARCÓN, A. *El desarrollo de la reforma agraria a la luz de los datos censales*. Rev. de Econ., May, 1941. Pp. 8.
- BAYKOV, A. *Development of industrial production in the U.S.S.R.* Economica, Feb., 1941. Pp. 10.

- BLOCH, K. *Whither Japan*. Soc. Research, May, 1941. Pp. 16.
- CLOKEI, H. MCD. *Democratic possibilities in a totalitarian world*. Canadian Jour. Econ. and Pol. Sci., May, 1941. Pp. 16.
- DAWSON, R. MACG. *The impact of the war on Canadian political institutions*. Canadian Jour. Econ. and Pol. Sci., May, 1941. Pp. 19.
- DORFMAN, A. *Valor real de la producción industrial Argentina*. Trimestre Econ., Apr.-June, 1941. Pp. 9.
- EINZIG, P. *Hitler's new order in theory and practice*. Econ. Jour., Apr., 1941. Pp. 18.
- FRANKLIN, H. L. *Agricultural and food control in Switzerland*. Foreign Agric., Apr., 1941. Pp. 29.
- DE HAAS, J. A. *The democratic new order*. Harvard Bus. Rev., Summer, 1941. Pp. 12.
- HALEVY, E. *The age of tyrannies*. Economica, Feb., 1941. Pp. 17.
- HOLLENBERG, A. *Autonomie en staatsinmenging in beroep en bedriff in Duitschland I*. De Econ., Mar., 1941. Pp. 10.
- HULA, E. *Control of the conquered*. Soc. Research, May, 1941. Pp. 20.
- JOESTEN, J. *Scandinavia in the new order*. Foreign Affairs, July, 1941. Pp. 10.
- KAKRA, E. *Reconstruction in Finland*. Internat. Lab. Rev., May, 1941. Pp. 13.
- MACKAY, R. A. *Canada and the balance of world power*. Canadian Jour. Econ. and Pol. Sci., May, 1941. Pp. 15.
- MARTÍNEZ C., G. *La industria establecida y las nuevas industrias*. Rev. de Econ., Apr., 1941. Pp. 7.
- MELLON, H. J. and HORN, P. V. *European self-sufficiency*. Conf. Bd. Econ. Record, Apr. 24, 1941. Pp. 4.
- MEYER, F. *Die sicherung der autonomen wirtschaftsentwicklung im bereich der aussenwirtschaft*. Weltwirtsch. Archiv, Mar., 1941. Pp. 49.
- ORNELAS, R. *Los Mexicanos como hombres de empresa*. Rev. de Econ., Apr., 1941. Pp. 9.
- D'OVIDIO, O. L. *Politica economica e trasformazioni economiche strutturali*. Riv. di Pol. Econ., Apr., 1941. Pp. 12.
- RICHARDS, C. S. *Some economic and administrative aspects of South Africa's war effort*. So. African Jour. Econ., Dec., 1940. Pp. 39.
- SINGER, H. W. *The German war economy in economic periodicals*. Econ. Jour., Apr., 1941. Pp. 17.
- SKADE, R. *Økonomiske foranstaltninger i Danmark under krigen*. Økonomi og Politik, Oct.-Dec., 1940. Pp. 46.
- SHORT, C. M. *Economic effects of Canada's war effort*. Bankers Mag., May, 1941. Pp. 6.
- STARK, W. *A forerunner of Marxism: Francois-Jean de Chastellux*. Economica, May, 1941. Pp. 5.
- STRAUSS, F. *The food problem in the German war economy*. Quart. Jour. Econ., May, 1941. Pp. 49.
- Den økonomiske udvikling i de nordiske lande*. Økonomi og Politik, Oct.-Dec., 1940. Pp. 22.
- Den økonomiske udvikling i de vigtigste lande*. Økonomi og Politik, Oct.-Dec., 1940. Pp. 21.

Statistics; Economic Mathematics; Accounting

- ALANIS P., E. *La estadística en el progreso humano*. El Trimestre Econ., Apr.-June, 1941. Pp. 28.
- BARTON, H. C., JR. *Adjustment for seasonal variation*. Fed. Res. Bull., June, 1941. Pp. 11.
- BOATWRIGHT, J. W. *Principles and procedures for putting across business statistics reports to executives*. Jour. Am. Stat. Assoc., June, 1941. Pp. 6.
- BROWNE, D. E. *Accounting for defense contracts*. N.A.C.A. Bull., June 15, 1941. Pp. 13.
- CEDERWALL, G. *Säsongerna och lönesystemet inom byggnadsindustrin*. Ekon. Tids., Mar., 1941. Pp. 7.
- COURT, L. M. *Entrepreneurial and consumer demand theories for commodity spectra. Part I*. Econometrica, Apr., 1941. Pp. 28.
- DEAN, J. and WISE, M. H. *An appraisal of index numbers of prices farmers pay*. Jour. Am. Stat. Assoc., June, 1941. Pp. 9.

- DOW, J. C. R. *The inaccuracy of expectations; a statistical study of the Liverpool cotton futures market, 1921/2-1937/8*. *Economica*, May, 1941. Pp. 14.
- FRÉCHET, M. *Comparaison des diverses mesures de la dispersion*. *Rev. de l'Inst. Internat. de Stat.*, 1940, No. 1-2. Pp. 12.
- HORNEDO, E. *Sobre el desaparecido comité regulador*. *Rev. de Econ.*, May, 1941. Pp. 6.
- HÜBER, R. *Bemerkungen zur wirtschaftssoziologie Arabiens*. *Weltwirtsch. Archiv*, Mar., 1941. Pp. 25.
- INDENBURG, PH. J. and DERKSEN, J. B. D. *Methods of evaluation of the national income of the Netherlands 1921-1938*. *Rev. de l'Inst. Internat. de Stat.*, 1940, No. 1-2. Pp. 17.
- JOY, A. *The meaning of unemployment statistics*. *Jour. Am. Stat. Assoc.*, June, 1941. Pp. 8.
- KEESING, F. A. G. *Econometrie*. *De Econ.*, Feb., 1941. Pp. 29.
- KENDALL, M. G. *The effect of the elimination of trend on oscillations in time-series*. *Jour. Royal Stat. Soc.*, Part 1, 1941. Pp. 10.
- KUZNETS, S. *Statistics and economic history*. *Jour. Econ. Hist.*, May, 1941. Pp. 16.
- LOVE, J. W. *How a newspaperman likes statistics presented*. *Jour. Am. Stat. Assoc.*, June, 1941. Pp. 7.
- MACROSTY, H. W. *Economic statistics—retrospect and prospect*. (*The inaugural address of the president.*) *Jour. Royal Stat. Soc.*, Part 1, 1941. Pp. 14.
- MAY, G. C. *Gross income*. *Quart. Jour. Econ.*, May, 1941. Pp. 5.
- MCINTYRE, F. *Wholesale price indexes*. *Jour. Am. Stat. Assoc.*, June, 1941. Pp. 6.
- MOWBRAY, A. H. *Observation on correlation analysis*. *Jour. Am. Stat. Assoc.*, June, 1941. Pp. 5.
- MÜLLER, A. *Die wertpapierbewertung nach mathematischen kursen. Zu ihrer einföhrung in der Schweiz*. *Zeitschr. f. die Ges. Versicherungswiss.*, June, 1940. Pp. 6.
- NERY, F. *Breve noticia sobre a estatística comercial Brasileira*. *Rev. Brasil de Estatística*, Oct.-Dec., 1940. Pp. 11.
- RIEBESELL, P. *Neue deutsche forshungen über das gesetz der grossen zahl*. *Blätter f. Versicherungsmath.*, June, 1940. Pp. 19.
- ROTHBARTH, E. *The measurement of changes in real income under conditions of rationing*. *Rev. Econ. Stud.*, Feb., 1941. Pp. 8.
- SAVORGNAN, F. *Quelques recherches de microstatistique*. *Jour. de la Soc. Hongroise de Stat.*, No. 4, 1940. Pp. 11.
- SAYRE, R. A. *Cost of living indexes*. *Jour. Am. Stat. Assoc.*, June, 1941. Pp. 10.
- STOLPER, G. and DOBLIN, E. M. *The new Federal Reserve Board index of production*. *Econ. Jour.*, Apr., 1941. Pp. 11.
- TAITEL, M. *Price indexes as viewed from the standpoint of the national defense program*. *Jour. Am. Stat. Assoc.*, June, 1941. Pp. 9.
- TINTNER, G. *The variate difference method: a reply*. *Econometrica*, Apr., 1941. Pp. 2.
- VORMELKER, R. L. *How the librarian would like to find statistics*. *Jour. Am. Stat. Assoc.*, June, 1941. Pp. 8.
- WALTHER, F. *Die wertpapierbewertung nach mathematischen kursen (mit erwidernng)*. *Zeitschr. f. die Ges. Versicherungswiss.*, Feb., 1941. Pp. 4.
- WOLF, A. O. *Internal audit fundamentals*. *N.A.C.A. Bull.*, May 15, 1941. Pp. 36.
- ZAPFF, J. *Die ausgleichung von sterbetafeln unter besonderer berücksichtigung der gewichte der einzelbeobachtungen. Fortsetzung und schluss*. *Blätter f. Versicherungsmath.*, June, 1940. Pp. 49.
- Bibliographie statistique internationale: table systématique des matières; bibliographie*. *Rev. de l'Inst. Internat. de Stat.*, 1940, 1/2. Pp. 48.
- Financial, industrial, commercial statistics, United States*. *Fed. Res. Bull.*, May, 1941. Pp. 58.
- Índices de producción de las industrias de transformación*. *Rev. de Econ.*, May, 1941. Pp. 8.
- Practice in accounting for depreciation*. *N.A.C.A. Bull.*, Apr. 15, 1941. Pp. 16.

Business Cycles and Fluctuations

- ADARKAR, B. M. *A simplified version of the trade cycle theory—I*. *Indian Jour. Econ.*, Jan., 1941. Pp. 19.

- BARNETT, P. *Business-cycle theory in the United States, 1860-1900*. Jour. Bus. Univ. Chicago, Apr., 1941. Pp. 124.
- BERGER, T. *Est genmåle*. Ekon. Tids., Mar., 1941. Pp. 6.
- BODMER, L. E. *Morbidity trends and trade cycles*. Internat. Lab. Rev., May, 1941. Pp. 28.
- KÄHLER, A. *The prospects of inflation*. Soc. Research, May, 1941. Pp. 17.
- KNIGHT, F. H. *The business cycle, interest and money. A methodological approach*. Rev. Econ. Stat., May, 1941. Pp. 15.
- KOOPMANS, T. *The logic of econometric business-cycle research*. Jour. Pol. Econ., April, 1941. Pp. 26.
- DE SCITOVSKY, T. *Capital accumulation, employment and price rigidity*. Rev. Econ. Stud., Feb., 1941. Pp. 20.
- WRIGHT, D. MCC. *A neglected approach to the acceleration principle*. Rev. Econ. Stat., May, 1941. Pp. 2.

Public Finance; Fiscal Policy; Taxation

- ANGELL, J. J., GALBRAITH, J. K., HART, A. G., SHOUP, C., HANSEN, A. H. *Defense financing and inflation: symposium*. Rev. Econ. Stat., May, 1941. Pp. 15.
- BUEHLER, A. G. *Production taxes*. Harvard Bus. Rev., Summer, 1941. Pp. 12.
- ECCLES, M. S. *Financial problems of defense*. Fed. Res. Bull., June, 1941. Pp. 5.
- FAIRCHILD, F. R. *The federal financial system*. Am. Econ. Rev., June, 1941. Pp. 18.
- HAMMARSKJÖLD, D. *Svenska finansproblem*. Nationalök. Tids., Vol. 79, No. 1, 1941. Pp. 13.
- HEWES, A. *Recent municipal spending*. Social Forces, May, 1941. Pp. 7.
- HICKS, U. K. *Lags in tax collection—a neglected problem in war finance*. Rev. Econ. Stud., Feb., 1941. Pp. 11.
- KISSLER, H. *Agrarkreditprobleme in den südosteuropäischen ländern*. Bank-Archiv, Mar. 1, 1941. Pp. 2.
- LUTZ, H. L. *The second revenue act of 1940*. Bull. Nat. Tax Assoc., Apr., 1941. Pp. 5.
- MCCLINTIC, J. C. *Reduction of state personal income tax revenue through special statutory features*. Bull. Nat. Tax Assoc., Apr., 1941. Pp. 5.
- MCGUIRE, C. E. *El cuadro fiscal de la historia contemporánea*. Rev. de Ciencias Econ., Dec., 1940. Pp. 14.
- MADGE, C. *Public opinion and paying for the war*. Econ. Jour., Apr., 1941. Pp. 11.
- MAIZELS, A. *Consumption, investment, and national expenditures in wartime*. Economica, May, 1941. Pp. 11.
- PHELPS, O. W. *The Supreme Court and regulatory taxation*. Jour. Bus. Univ. Chicago, Apr., 1941. Pp. 28.
- PLEHN, C. C. *Taxation in the Philippines, with foreword by Leandro H. Fernandez*. Philippine Soc. Sci. Rev., Feb., 1941. Pp. 38.
- SÁENZ, J. *Las áreas en las finanzas públicas*. El Trimestre Econ., Apr.-June, 1941. Pp. 29.
- SHOUP, C. *The taxation of excess profits*. III. Pol. Sci. Quart., June, 1941. Pp. 24.
- WOLFBEIN, S. L. *Public finances of a one-industry city*. Bull. Nat. Tax Assoc., May, 1941. Pp. 9.
- Acquisition of corporate control under the reorganization and exchange provisions of the federal income tax*. Yale Law Jour., May, 1941. Pp. 17.
- The excess profit tax: proposals for 1941*. Yale Law Jour., May, 1941. Pp. 22.

Money and Banking; Short-Term Credit

- BROWN, W. A., JR. *Gold: master or servant*. Foreign Affairs, July, 1941. Pp. 14.
- CORNS, M. C. *The potentialities of excess reserves*. Bankers Mag., June, 1941. Pp. 6.
- DUDLEY, R. G. and EVANS, W. H. *Public utility financing in the first quarter of 1941*. Jour. Land and Pub. Util. Econ., May, 1941. Pp. 3.
- FABRIZI, G. *Il credito agrario in Africa*. Riv. di Pol. Econ., Mar., 1941. Pp. 9.
- FREUND, G. and DEWEY, H. *The Federal Reserve's monetary control plan: Part II*. Bankers Mag., May, 1941. Pp. 4.

- . *The Federal Reserve's monetary control plan: Part III*. Bankers Mag., June, 1941. Pp. 4.
- GIBSON, A. H. *The use and abuse of the money factor*. Bankers Mag., Apr., 1941. Pp. 18.
- GRAHAM, F. D. *100 per cent reserves: comment*. Am. Econ. Rev., June, 1941. Pp. 2.
- HORSEFIELD, J. K. *The duties of a banker*. Economica, Feb., 1941. Pp. 15.
- HUNSCHA, K. *Kapitalknappheit und Bankkredit*. Bank-Archiv, Feb. 23, 1941. Pp. 4.
- KALECKI, M. *The short-term rate of interest and velocity of cash circulation*. Rev. Econ. Stat., May, 1941. Pp. 3.
- LINDERT, P. *Das kroatische bankwesen*. Bank-Archiv, May 15, 1941. Pp. 4.
- LOGAN, R. R. *Notes on New Mexico banking*. New Mexico Quart. Rev., May, 1941. Pp. 11.
- MANERO, A. *Proyecto de reorganización bancaria*. Rev. de Econ., Apr., 1941. Pp. 15.
- MÜLLER, G. *Geld- und kreditwirtschaftliche probleme der konsolidierung*. Bank-Archiv, May 15, 1941. Pp. 3.
- REYES P., F. *El crédito popular en México*. Rev. de Econ., June, 1941. Pp. 4.
- RUPP, F. *Die zahlungsbilanz der vereinigten staaten*. Bank-Archiv, Mar. 1, 1941. Pp. 4.
- SCHMIDT, E. W. *Die kriegsausgaben im kreislauf der geld- und güterwirtschaft*. Bank-Archiv, Feb. 23, 1941. Pp. 3.
- SCHWEIZER, A. *Schweizerische handelsbankpolitik heute und morgen*. Zeitschr. f. Schweiz. Stat. und Volkswirtschaft, 1940, No. 4. Pp. 18.
- TAMAGNINI, G. *Rilievi sulla diversa natura del mercato monetario e del mercato finanziario*. Riv. di Pol. Econ., Mar., 1941. Pp. 15.
- Banking after the war*. Bankers Mag., Apr., 1941. Pp. 10.
- Competitive bidding in the sale of public utility bonds*. Yale Law Jour., Apr., 1941. Pp. 17.
- A new economic policy*. Bankers' Insur. Manag. and Agents' Mag., May, 1941. Pp. 12.

International Trade, Finance and Economic Policy

- ABELARDE, P. E. *American tariff policy in the Philippines. A study of the rôle of the Congress of the United States in handling tariff legislations in a dependency*. Philippine Soc. Sci. Rev., Feb., 1941. Pp. 32.
- BACON, L. *Rubber regulation*. Foreign Agric., June, 1941. Pp. 10.
- CHALMERS, H. *Impact of the war upon the trade policies of foreign countries*. Int. Ref. Service, Dept. of Com., Mar., 1941. Pp. 11.
- CLARK, E. R. *Canada's foreign exchange problem*. Canadian Banker, Apr., 1941. Pp. 14.
- CORBETT, P. E. *Canada in the western hemisphere*. Foreign Affairs, July, 1941. Pp. 12.
- DIAMOND, H. S. *Experiment in tariff-making: Czechoslovakia*. Pol. Sci. Quart., June, 1941. Pp. 20.
- DILLNER, G. *Einzelstudien über marktregulierungen XII. Weltzuckerwirtschaft und marktregulierungen*. Weltwirtsch. Archiv, Mar., 1941. Pp. 37.
- DUNDA, J. N. *Izgleđi nañih iseljeničkih uštednji*. Ekonomist, No. 11-12, 1940. Pp. 14.
- ELLIS, H. S. *Inversiones y política monetaria*. Rev. de Econ., Apr., 1941. Pp. 9.
- FETTER, F. W. *Some neglected aspects of the word duty*. Jour. Farm Econ., May, 1941. Pp. 22.
- JORI, E. *Rapporti di scambio tra economie autarchiche*. Riv. di Pol. Econ., Mar., 1941. Pp. 16.
- LACOA, T. *Manifestaciones del crédito naval en algunas naciones*. Rev. de Ciencias Econ., Dec., 1940. Pp. 12.
- LEWIS, W. A. *The inter-relations of shipping freights*. Economica, Feb., 1941. Pp. 25.
- LIU, T. C. *China's foreign exchange problems: a proposed solution*. Am. Econ. Rev., June, 1941. Pp. 14.
- MCGUIRE, C. E. *Os mercados monetários e a política pública*. Rev. de Ciências Econ., Jan.-Feb., 1941. Pp. 10.
- MCKINLEY, G. W. *The residual item in the balance of international payments*. Am. Econ. Rev., June, 1941. Pp. 9.
- NIELSEN, A. *Handelen med penge og fremmed valuta*. Nationaløk. Tids., Vol. 79, No. 1, 1941. Pp. 26.

- RAJ, J. S. *The rôle of national wage and income structures in international trade*. Indian Jour. Econ., Jan., 1941. Pp. 17.
- REEDMAN, J. N. *Exchange policy and import control*. So. African Jour. Econ., Dec., 1940. Pp. 16.
- RIPPY, J. F. *South America's foreign trade and hemisphere defense*. Jour. Bus. Univ. Chicago, Apr., 1941. Pp. 10.
- SCHILLER, K. *Meistbegünstigung, multilateralität und gegenseitigkeit in der zukünftigen handelspolitik*. Weltwirtsch. Archiv., Mar., 1941. Pp. 37.
- SCHUSTER, E. *Die neuen grundlagen der weltwirtschaftlichen zusammenarbeit*. Weltwirtsch. Archiv., Mar., 1941. Pp. 31.
- VOLIN, L. *Grain exports from the Soviet Union*. Foreign Agric., May, 1941. Pp. 10.
- WIJNHOLDS, H. W. J. *De theorie der wisselkoersen*. De Econ., Mar., 1941. Pp. 27.

Business Finance; Insurance; Investments; Securities Markets

- ÅKESSON, O. A. *Kriegsversicherung von sachtgütern in Schweden*. Zeitschr. f. die Ges. Versicherungswiss., Oct., 1940. Pp. 10.
- ECCLES, M. S. *The problem of financing defense*. Bankers Mag., June, 1941. Pp. 7.
- HERSEY, A. B. *Sources and uses of corporation funds*. Jour. Am. Stat. Assoc., June, 1941. Pp. 10.
- HAGSTROEM, K. G. *Das sinken des zinsfusses in Schweden und die lebensversicherung*. Zeitschr. f. die Ges. Versicherungswiss., Feb., 1941. Pp. 10.
- LORENZ, P. *Planmassige finanzgestaltung von gefolgschafts-fürsorgeeinrichtungen*. Zeitschr. f. die Ges. Versicherungswiss., June, 1940. Pp. 26.
- MANDT, H. *Deutsche und englische auslandsversicherung*. Zeitschr. f. die Ges. Versicherungswiss., Feb., 1941. Pp. 13.
- NÖBEL, H. *Die aufrechterhaltung der lebensversicherung während des krieges durch zahlung des sicherungsbeitrages (Kriegsstundung)*. Zeitschr. f. die Ges. Versicherungswiss., Oct., 1940. Pp. 19.
- ORE, T. K. *Das kriegsrisiko in der skandinavischen lebensversicherung (ausser Schweden). Eine übersicht*. Zeitschr. f. die Ges. Versicherungswiss., Oct., 1940. Pp. 12.
- PARTHIER, H. *Die rechnungsfaktoren der lebensversicherungsprämie in ihrer wirkung auf die prämiebestandteile*. Blätter f. Versicherungsmath., Feb., 1941. Pp. 25.
- REEDMAN, J. N. and GUENAUT, P. H. *The war and the budget*. So. African Jour. Econ., Dec., 1940. Pp. 8.
- RIEBESELL, P. *Die versicherungstechnischen rücklagen und ihre steuerliche behandlung*. Zeitschr. f. die Ges. Versicherungswiss., June, 1940. Pp. 11.
- ROBINSON, L. R. *Corporate earnings on share and borrowed capital in percentages of gross income (1918-1940)*. Jour. Am. Stat. Assoc., June, 1941. Pp. 12.
- SUVIRANTA, BR. *War indemnities and capital levy in Finland*. Index, Svenska Handelsbanken—Supplement, Mar., 1941. Pp. 21.
- WOOSLEY, J. B. *The capital problem of small and medium-sized businesses*. So. Econ. Jour., Apr., 1941. Pp. 14.

Public Control of Business; Public Administration

- BALOGH, T. *Industrial conscription and democracy*. Fabian Quart., Spring, 1941. Pp. 6.
- BRADY, R. A. *Policies of national manufacturing Spitzenverbände—I*. Pol. Sci. Quart., June, 1941. Pp. 27.
- BURROWS, H. R., HALLIDAY, I. G. and SMITH, R. H. *Price control in wartime*. So. African Jour. Econ., Dec., 1940. Pp. 31.
- CORRY, J. A. *The federal dilemma*. Canadian Jour. Econ. and Pol. Sci., May, 1941. Pp. 14.
- CUSHMAN, R. E. *Constitutional law in 1939-1940*. Am. Pol. Sci. Rev., Apr., 1941. Pp. 34.
- ENKE, S. *Reducing gasoline prices: British Columbia's experiment*. Quart. Jour. Econ., May, 1941. Pp. 17.

- GAINSBURGH, M. R. and HANSEN, H. E. *National defense contracts awarded*. Conf. Bd. Econ. Record, June 25, 1941. Pp. 4.
- HARRIS, J. P. *The relations of political scientists with public officials*. Am. Pol. Sci. Rev., Apr., 1941. Pp. 10.
- HENDERSON, L. and NELSON, D. M. *Prices, profits, and government*. Harvard Bus. Rev., Summer, 1941. Pp. 16.
- KRIPKE, H. *Accountants' financial statements and fact-finding in the law of corporate regulation*. Yale Law Jour., May, 1941. Pp. 26.
- LEWIS, H. T. *Subcontracting: the current problem*. Harvard Bus. Rev., Summer, 1941. Pp. 14.
- MACMAHON, A. W. *Taking stock of federalism in the United States*. Canadian Jour. Econ. and Pol. Sci., May, 1941. Pp. 26.
- MARTIN, J. H. *Administration of priorities*. Harvard Bus. Rev., Summer, 1941. Pp. 10.
- NEHEMKIS, P. R., JR. *Subcontracting—one problem in defense production*. Dun's Rev., May, 1941. Pp. 8.
- PABST, W. R., JR. *Interstate trade barriers and state oleomargarine taxes*. So. Econ. Jour., Apr., 1941. Pp. 13.
- RAUSING, R. *Några synpunkter vid prissättning av krigsleveranser*. Econ. Tids., Mar., 1941. Pp. 11.
- REDDICK, F. M. *Third session of the seventy-sixth Congress*. Am. Pol. Sci. Rev., Apr., 1941. Pp. 20.
- RICHBERG, D. R. *Should the power of the federal government be increased*. Michigan Law Rev., Apr., 1941. Pp. 11.
- TAYLOR, K. W. *Price controls in Canada*. Canadian Banker, Apr., 1941. Pp. 16.
- Energy, sources and consumption in the United States*. Index, New York Trust Co., Summer, 1941. Pp. 8.

Marketing; Domestic Trade

- TIMBERG, S. *Insurances and interstate commerce*. Yale Law Jour., Apr., 1941. Pp. 59.

Mining; Manufacturing; Construction

- ARAMBURU, M. G. *El desarrollo de las industrias de transformación en México*. Rev. de Econ., June, 1941. Pp. 8.
- GILBERT, H. N. *The emergency in aircraft manufacture*. Harvard Bus. Rev., Summer, 1941. Pp. 12.
- VERMILYA, H. P. *Building codes: administration vs. techniques*. Jour. Land and Pub. Util. Econ., May, 1941. Pp. 9.

Transportation; Communication; Public Utilities

- AKSELSSON, L. *Samhällsekonomi och företagsekonomi i kommunikationspolitiken*. Ekon. Tids., Mar., 1941. Pp. 7.
- BARTON, F. L. *Length of haul and farm commodity prices*. Jour. Farm Econ., May, 1941. Pp. 12.
- BERLE, A. A., JR. *Great Lakes-St. Lawrence waterway project*. Vital Speeches, July 1, 1941. Pp. 2.
- BRYAN, L. A. *Transportation legislation of 1940*. Am. Law School Rev., May, 1941. Pp. 5.
- CUTLER, H. A. *The elasticity of residential demand for electricity*. Jour. Land and Pub. Econ., May, 1941. Pp. 3.
- DIEBOLD, W., JR. *The wartime use of shipping*. Foreign Affairs, July, 1941. Pp. 13.
- DUERDOTH, H. A. *Unfallversicherung, beamtenunfallfürsorge und reichsbahn*. Archiv f. Eisenbahn., Mar.-Apr., 1941. Pp. 58.
- FREDERICK, J. H. and LEWIS, A. D. *Air routes and public policy*. Harvard Bus. Rev., Summer, 1941. Pp. 14.
- GEORGE, J. J. and BOLDT, J. R., JR. II. *Certification of motor common carriers by the Interstate Commerce Commission*. Jour. Land and Pub. Util. Econ., May, 1941. Pp. 11.

- HOMBERGER, L. M. *Coördination of road and rail transport and the organization of the trucking industry: a survey*. Jour. Land and Pub. Util. Econ., May, 1941. Pp. 10.
- JEMING, J. *Public utility rates on a reproduction-cost-of-service principle*. Jour. Land and Pub. Util. Econ., May, 1941. Pp. 13.
- KENNEDY, W. F. *Regulation of utility servicing under the holding company act of 1935: II—allocation of costs*. Jour. Land and Pub. Util. Econ., May, 1941. Pp. 17.
- MACMAHON, A. W. *The New York City transit system: public ownership, civil service, and collective bargaining*. Pol. Sci. Quart., June, 1941. Pp. 38.
- MEEK, J. F., JR. and BOGUE, R. W. *Federal regulation of motor carrier unification*. Yale Law Jour., June, 1941. Pp. 12.
- DE MORAES, K. A. *Serviços industriais do estado*. Rev. Serv. Pub., May, 1941. Pp. 50.
- PERRY, H. S. *Ocean shipping*. Harvard Bus. Rev., Summer, 1941. Pp. 13.
- SPIESS, W. *Der eisenbahngütertarif in der volkswirtschaft*. Archiv f. Eisenbahnw., Mar.-Apr., 1941. Pp. 78.
- Distribution of voting power under the public utility holding company act*. Yale Law Jour., May, 1941. Pp. 9.
- Federal Power Act. Jurisdiction and functions of the Federal Power Commission*. Michigan Law Rev., Apr., 1941. Pp. 26.
- Geographic integration under public utility holding company act*. Yale Law Jour., Apr., 1941. Pp. 11.
- Our merchant marine, a defense essential*. Index, New York Trust Co., Summer, 1941. Pp. 9.

Agriculture; Forestry; Fisheries

- COLOMBAIN, M. *Land tenure and agricultural unemployment in the United States: the work of the Farm Security Administration*. Internat. Lab. Rev., June, 1941. Pp. 42.
- DANHOF, C. H. *Farm-making costs and the "safety valve": 1850-60*. Jour. Pol. Econ., June, 1941. Pp. 44.
- FERRERO, R. A. *Política agraria contemporánea*. El Trimestre Econ., Apr.-June, 1941. Pp. 26.
- FOLWEILER, A. D. *Cotton, wood pulp and the man-land ratio in the Deep South*. So. Econ. Jour., Apr., 1941. Pp. 11.
- GATES, P. W. *Land policy and tenancy in the prairie states*. Jour. Econ. Hist., May, 1941. Pp. 22.
- HAZEN, N. W. *Wartime aspects of Egyptian agricultural policy*. Foreign Agric., June, 1941. Pp. 33.
- LANGE, G. *A neglected point in the economics of the soil*. Jour. Farm Econ., May, 1941. Pp. 8.
- LEWIS, J. D. *Democratic planning in agriculture—I*. Am. Pol. Sci. Rev., Apr., 1941. Pp. 18.
- LEWIS, J. D. *Democratic planning in agriculture, II*. Am. Pol. Sci. Rev., June, 1941. Pp. 16.
- MABBUN, P. N. *Marketing Philippine farm products*. Philippine Soc. Sci. Rev., Feb., 1941. Pp. 17.
- MCDUGALL, J. L. *The position of the farmer in a war economy*. Canadian Banker, Apr., 1941. Pp. 10.
- MUKHERJEE, B. *The control of soil erosion in the West—and its lesson for India*. Indian Jour. Econ., Jan., 1941. Pp. 16.
- NEUMARK, S. D. *The war and its effect on agricultural prices and surpluses in South Africa*. So. African Jour. Econ., Dec., 1940. Pp. 15.
- OGDON, M. *Wartime policies and controls affecting agricultural trade*. Foreign Agric., May, 1941. Pp. 18.
- RICHTER, J. H. *Cotton control in the United Kingdom*. Foreign Agric., May, 1941. Pp. 12.
- Legal techniques for promoting soil conservation*. Yale Law Jour., Apr., 1941. Pp. 15.

Economic Geography; Regional Planning; Urban Land; Housing

- ANDREWS, R. B. *Low rent residential areas in a high rent city*. Jour. Land and Pub. Util. Econ., May, 1941. Pp. 4.

- DE CHAZEAU, M. G. *Electric power as a regional problem*. So. Econ. Jour., Apr., 1941. Pp. 11.
- CRIST, R. E. and CHARDON, C. E. *Changing patterns of land use in the Valencia Lake basin of Venezuela*. Geograph. Rev., July, 1941. Pp. 14.
- VAN ETTINGER, J. and ROMBOUTS, A. L. G. M. *De positie der belangrijke grondstoffen voor voeding en textielgoederen en Continentaal-Europa*. De Econ., Feb., 1941. Pp. 15.
- VON FRANGEŠ, C. *Die donastaaten südosteuropas und der deutsche grosswirtschaftsraum*. Weltwirtsch. Archiv, May, 1941. Pp. 37.
- HOYT, H. *Economic background of cities*. Jour. Land and Pub. Util. Econ., May, 1941. Pp. 8.
- . *Forces of urban centralization and decentralization*. Am. Jour. Soc., May, 1941. Pp. 10.
- NURNBERG, M. *Housing between boom and bottlenecks*. Soc. Research, May, 1941. Pp. 24.
- SPENGLER, J. J. *Regional differences and the future of manufacturing in America*. So. Econ. Jour., Apr., 1941. Pp. 19.
- TIERNEY, J. L. I. *War housing: the emergency fleet corporation experience*. Jour. Land and Pub. Util. Econ., May, 1941. Pp. 14.
- ULLMAN, E. *A theory of location for cities*. Am. Jour. Soc., May, 1941. Pp. 12.
- VEENSTRA, T. A. *Defense housing policies and progress*. Mo. Lab. Rev., May, 1941. Pp. 18.
- WEIMER, A. M. *Potential effects of the defense program on housing*. Jour. Land and Pub. Util. Econ., May, 1941. Pp. 9.

Labor and Industrial Relations

- BLELOCK, D. H. *Latin America and the international labour standards*. Internat. Lab. Rev., Apr., 1941. Pp. 24.
- CREAMER, D. *Recruiting contract laborers for the Amoskeag Mills*. Jour. Econ. Hist., May, 1941. Pp. 15.
- DAVENPORT, D. H. *War demands on the labor supply*. Harvard Bus. Rev., Summer, 1941. Pp. 7.
- DENISON, E. F. *The influence of the Walsh-Healey public contracts act upon labor conditions*. Jour. Pol. Econ., Apr., 1941. Pp. 22.
- DIMOCK, M. E. *Labor's part in war and reconstruction*. Am. Pol. Sci. Rev., Apr., 1941. Pp. 15.
- ELIEL, P. *Labor peace in Pacific ports*. Harvard Bus. Rev., Summer, 1941. Pp. 9.
- GOLDING, E. D. *The industry committee provisions of the fair labor standards act*. Yale Law Jour., May, 1941. Pp. 39.
- GUENAU, P. H. *Labour supply*. So. African Jour. Econ., Dec. Pp. 12.
- HINRICHS, A. F. *Employment trends and defense labor requirements*. Mo. Lab. Rev., May, 1941. Pp. 11.
- KOSSORIS, M. D. *Hours and efficiency in British industry*. Mo. Lab. Rev., June, 1941. Pp. 10.
- LEUHOFF, A. *The present status of collective contracts in the American legal system*. Michigan Law Rev., May, 1941. Pp. 45.
- MATER, D. H. *A statistical study of the effect of seniority upon employees' efficiency. Continued*. Jour. Bus. Univ. Chicago, Apr., 1941, Pt. 1. Pp. 35.
- MURPHY, K. R. *Federal personnel by types of work performed*. Mo. Lab. Rev., June, 1941. Pp. 15.
- MYERS, H. B. *Dynamics of labor supply*. Jour. Am. Stat. Assoc., June, 1941. Pp. 10.
- SCHMIDT, E. P. *Annual wage and income-security plans*. Jour. Bus. Univ. Chicago, Apr., 1941. Pp. 23.
- SCHOENFELD, M. H. *Development of British war labor policy*. Mo. Lab. Rev., May, 1941. Pp. 11.
- SCHWARTZ, H. *Organizational problems of agricultural labor unions*. Jour. Farm Econ., May, 1941. Pp. 11.
- SHARKEY, C. F. *Important Supreme Court labor decisions in 1941*. Lab. Inf. Bull., June, 1941. Pp. 4.

- SMITH, R. A. *The evolution of the "duty to bargain" concept in American law.* Michigan Law Rev., May, 1941. Pp. 44.
- WOYTINSKY, W. S. *Controversial aspects of unemployment estimates in the United States.* Rev. Econ. Stat., May, 1941. Pp. 10.
- ZINGLER, E. K. *The national labor relations board and the federal courts.* So. Econ. Jour., Apr., 1941. Pp. 18.
- Hours of labour in war industries.* Lab. Gazette, Apr., 1941. Pp. 9.
- Labor conditions in occupied Norway.* Internat. Lab. Rev., June, 1941. Pp. 14.
- Labor requirements for shipbuilding under defense program.* Mo. Lab. Rev., June, 1941. Pp. 15.
- Strikes in 1940.* Mo. Lab. Rev., May, 1941. Pp. 27.
- Union-management coöperation.* Mo. Lab. Rev., June, 1941. Pp. 9.

Social Insurance; Relief; Pensions; Public Welfare

- AUGUSTIN, G. *Die sozialversicherung in Osteuropa.* Zeitschr. f. die Ges. Versicherungswiss. June, 1940. Pp. 9.
- BRANDT, K. *How Europe is fighting famine.* Foreign Affairs, July, 1941. Pp. 12.
- DEUTSCH, A. *The sick poor in colonial times.* Am. Hist. Rev., Apr., 1941. Pp. 20.
- JONES, D. C. *Evolution of the social survey in England since Booth.* Am. Jour. Soc., May, 1941. Pp. 8.
- MEIDELL, B. *Über die soziale versicherung in Norwegen.* Zeitschr. f. der Ges. Versicherungswiss., Feb., 1941. Pp. 8.
- OWEN, A. D. K. *The end of the household means test in Great Britain.* Internat. Lab. Rev., June, 1941. Pp. 18.
- PARANHOS, R. DA R. *Assistência social aos servidores do estado.* Rev. Serv. Pub., May, 1941. Pp. 11.
- POLLAK, H. P. *State and private provisions for soldiers' dependents.* So. African Jour. Econ., Dec., 1940. Pp. 29.
- DE TUDDO, A. *Lariforma della previdenza sociale (considerazioni sui primi risultati economico sociali).* Riv. di Pol. Econ., Mar., 1941. Pp. 10.
- Commencement of unemployment insurance in Canada.* Lab. Gazette, June, 1941. Pp. 6.
- Eight years of C.C.C. operations, 1933-1941.* Mo. Lab. Rev., June, 1941. Pp. 9.
- Living conditions in Puerto Rico.* Mo. Lab. Rev., Apr., 1941. Pp. 25.
- Organization for seamen's welfare in Great Britain.* Internat. Lab. Rev., Apr., 1941. Pp. 14.
- Schweizerische sterbetafel 1933/37 und neueste entwicklung der todesursachen.* Zeitschr. f. Schweiz. Stat. und Volkswirtschaft, 1940, No. 4. Pp. 20.

Consumption; Income Distribution; Coöperation

- BENNETT, M. K. *International contrasts in food consumption.* Geograph. Rev., July, 1941. Pp. 12.
- BERNARD, L. L. *An early American theory of the standard of living.* Am. Sociological Rev., June, 1941. Pp. 7.
- BRANDT, W. *Economic and living standards: American and Asiatic.* Pacific Affairs, June, 1941. Pp. 19.
- CARROLL, J. M. *The distribution of efficiency savings.* Quart. Jour. Econ., May, 1941. Pp. 4.
- THORNE, A. C. *Evaluations of consumption in scale of living studies.* Social Forces, May, 1941. Pp. 8.
- Coöperatives in Newfoundland.* Mo. Lab. Rev., June, 1941. Pp. 4.
- Defense dollars and consumer markets.* Dun's Rev., June, 1941. Pp. 31.
- Development of coöperatives in Latin America.* Mo. Lab. Rev., Apr., 1941. Pp. 7.
- Farmers' coöperative purchasing in the United States, 1913 to 1939-40.* Mo. Lab. Rev., June, 1941. Pp. 2.
- Rôle of industrial coöperatives in China's war economy.* Mo. Lab. Rev., May, 1941. Pp. 6.

Population; Migration; Vital Statistics

- DUNN, H. L. *Deaths in hospitals and institutions in the United States, 1936*. Rev. de l'Inst. Internat. de Stat., 1940, No. 1-2. Pp. 9.
- JEFFERSON, M. *The great cities of the United States, 1940*. Geograph. Rev., July, 1941. Pp. 9.
- MCENTIRE, D. *Migration and resettlement in the far western states*. Jour. Farm Econ., May, 1941. Pp. 5.
- MORTARA, G. *Estudos sobre a utilização do censo demográfico para a reconstrução das estatísticas do movimento da população do Brasil*. Rev. Brasil de Estatística, Oct.-Dec., 1940. Pp. 20.
- PALMER, G. L. *The mobility of weavers in three textile centers*. Quart. Jour. Econ., Apr., 1941. Pp. 28.
- RHODES, E. C. *Secular changes in death rates*. Jour. Royal Stat. Soc., Part 1, 1941. Pp. 28.
- SKANG, A. *International migration and the formation of an international labor market*. Social Forces, May, 1941. Pp. 7.
- WRIGHT, J. K. *Certain changes in population distribution in the United States*. Geograph. Rev., July, 1941. Pp. 3.
- The interstate migration of workers*. Mo. Lab. Rev., June, 1941. Pp. 4.
- Tableaux statistiques: Population*. Rev. de l'Inst. Internat. de Stat. 1940, No. 1-2. Pp. 6.

Unclassified Items

- DORFMAN, J. *The Seligman correspondence-II*. Pol. Sci. Quart., June, 1941. Pp. 17.
- FRIES, H. S. *Science, ethics and democracy*. Jour. Soc. Philos., July, 1941. Pp. 23.

NOTES

Editorial Note—Having so briefly occupied the editorial chair, I feel somewhat apologetic in informing the members of the Association that I have accepted a temporary position with the Office of Production Management in Washington. Under the existing circumstances, they will perhaps feel with me that an opportunity to be of service in the defense program justifies some degree of neglect of the editorial duties. Under the new conditions I shall maintain primary editorial responsibility, but it will be necessary to postpone certain plans for constructive improvement of the *Review*.

In all matters relating to general editorial work, the address for the coming year will be in care of The Brookings Institution, 722 Jackson Place, N.W., Washington. For receipt of books and periodicals from publishers, the address will remain McGraw Hall, Cornell University, Ithaca, N.Y.—P. T. HOMAN

The following names have been recently added to the membership of the AMERICAN ECONOMIC ASSOCIATION:

- Alderfer, E. B., University of Pennsylvania, Logan Hall, Philadelphia, Pa.
 Bambrick, J. J., Jr., 152 W. 42nd St., New York, N.Y.
 Bell, R. M., University of Tennessee, Knoxville, Tenn.
 Brecht, R. P., Wharton School, University of Pennsylvania, Philadelphia, Pa.
 Brozen, Y., 1358 E. 58th St., Chicago, Ill.
 Bund, H., Graduate School for Social Research, 66 W. 12th St., New York, N.Y.
 Camitta, R., 6238 Carpenter St., Philadelphia, Pa.
 Canoyer, H. G., School of Bus. Admin., University of Minnesota, Minneapolis, Minn.
 Carman, W. W., Jr., Bur. of Foreign and Domestic Commerce, Washington, D.C.
 Close, J. A., Box 56, Babson Park, Fla.
 Corrigan, A. G., 710 Berkeley Ave., Orange, N.J.
 Davis, R. M., R.F.D. 1, Earlville, N.Y.
 Diebold, W., Jr., 311 E. 65th St., New York, N.Y.
 Dixon, R. C., 123 Patton Ave., Princeton, N.J.
 Dowd, L. P., College of Econ. and Bus., University of Washington, 210 Commerce Hall, Seattle, Wash.
 Duerr, W. A., 217-B Holden Green, Cambridge, Mass.
 Eskildon, H. N., Economic Research Office, University of Denver, 370 Lexington Ave., New York, N.Y.
 Finger, E., Fiske House, Wellesley College, Wellesley, Mass.
 Fischer, H. S., 290 Riverside Dr., New York, N.Y.
 Fishman, L., 1915 N St. NW, Washington, D.C.
 Gaumnitz, E. A., University of Wisconsin, Madison, Wis.
 Gibb, G. S., Harvard School of Business, Soldiers Field, Boston, Mass.
 Golovin, N. E., c/o R. H. Macy and Co., Inc., Herald Sq., New York, N.Y.
 Gresham, H. D., U. S. Tariff Commission, 7th and E Sts., Washington, D.C.
 Gruen, E. D., Office of Production Management, 2729 Social Security Bldg., Washington, D.C.
 Hall, O. J., Dept. of Rural Econ. and Soc., University of Arkansas, Fayetteville, Ark.
 Hall, R. O., 905 23rd St. NW, Washington, D.C.
 Hartman, G., 18 E. Division St., Chicago, Ill.
 Hellman, R., 1818 N St. NW, Washington, D.C.
 Holloway, C. W., Bur. of Labor Statistics, U. S. Dept. of Labor, Washington, D.C.
 Holm, E. E., Jr., Box 242-A, Lynnhaven, Va.
 Hoot, J. W., Box 14, Logan Hall, University of Pennsylvania, Philadelphia, Pa.
 Hurwicz, L., c/o Dept. of Econ., Massachusetts Institute of Technology, Cambridge, Mass.
 Jackson, H. M., 106 Walnut Pl., Syracuse, N.Y.
 Jenkins, A., 5637 15th Ave. NE, Seattle, Wash.
 Jeremiah, D. B., 102 Hare Bldg., University of Pennsylvania, Philadelphia, Pa.
 Jones, W. G., 4536 20th NE, Seattle, Wash.
 Kayden, E. M., University of the South, Sewanee, Tenn.

- Klint, W. E., 120 W. 84th St., Seattle, Wash.
 Koopmans, T., Princeton Surveys, 20 Nassau St., Princeton, N.J.
 Kramer, L., 19 W. 8th St., New York, N.Y.
 Lemon, S. C., Atoka, Okla.
 Lutzker, S., 1111 St. Johns Pl., Brooklyn, N.Y.
 MacMurphy, R. H., c/o Henry Holt and Co., 257 Fourth Ave., New York, N.Y.
 Marsh, D. B., Barnard College, Columbia University, New York, N.Y.
 Martino, J. R., Box 296, Bayamón, Puerto Rico.
 McCormack, A., Cravath, De Gersdorff, Swaine and Wood, 15 Broad St., New York, N.Y.
 McGuire, C. H., 5600 Kenwood Ave., Chicago, Ill.
 Meyer, W. T., Room 3020, 30 Rockefeller Plaza, New York, N.Y.
 Morley, B. R., Box 1994, University, Ala.
 Nelson, R. S., Dept. of Econ., University of Chicago, Chicago, Ill.
 Oderkirk, A. D., Dept. of Econ. and Soc., Iowa State College, Ames, Iowa.
 Pancoast, O., Jr., 430 W. 118th St., New York, N.Y.
 Parkinson, R., American Optical Co., Southbridge, Mass.
 Potter, E. L., 231 S. 9th St., Corvallis, Ore.
 Puffer, C. E., Dept. of Econ., University of Buffalo, Buffalo, N.Y.
 Qualls, L. L., University of Illinois Library, Urbana, Ill.
 Rath, J. J., Xavier University, Cincinnati, Ohio.
 Roller, J. A., Dept. of Econ., University of Michigan, Ann Arbor, Mich.
 Rosa, R., 15 Sumner Rd., Cambridge, Mass.
 Salz, A., Dept. of Econ., Ohio State University, Columbus, Ohio.
 Sawyer, R. L., 301 Hatton St., Jackson, Tenn.
 Scheinman, D., 7751 Yates Ave., Chicago, Ill.
 Schindler, J. S., 311 Commerce Hall, University of Washington, Seattle, Wash.
 Seltzer, G., 5635 Cottage Grove, Chicago, Ill.
 Seltzer, O., 5635 Cottage Grove, Chicago, Ill.
 Shahan, E. P., University of Miami, Coral Gables, Fla.
 Shirven, M. N., Research Div., U. S. Civil Service Commission, Washington, D.C.
 Skaug, A., Rockefeller Foundation, 49 W. 49th St., New York, N.Y.
 Smith, A. G., Jr., R.F.D. 4, Lexington, S.C.
 Smith, C. E., New York University, Washington Sq., New York, N.Y.
 Smith, G. A., Jr., Grad. School of Bus., Harvard University, Soldiers Field, Boston, Mass.
 Smythe, Mrs. M. M., 415 N. Murray St., Madison, Wis.
 Sorkin, Mrs. C. A., 520 Sappington Rd., Sappington, Mo.
 Stevenson, J. A., Penn Mutual Life Insurance Co., 530 Walnut St., Philadelphia, Pa.
 Staffet, A. M., 2026 Eye St. NW, Washington, D.C.
 Stone, E. A., Michigan State Employment Service, 112 E. Jefferson Ave., Detroit, Mich.
 Struever, M. N., 1852 53rd St., Brooklyn, N.Y.
 Tongue, W. W., 917 E. 56th St., Chicago, Ill.
 Toohey, P. G., Rockhurst College, 5225 Troost Ave., Kansas City, Mo.
 Turner, J. R., 706 Riverside Dr., New York, N.Y.
 Vatter, W. J., School of Business, University of Chicago, Chicago, Ill.
 Warburton, Mrs. A. A., McLean, Va.
 Wilcox, W. W., Agric. Econ., Iowa State College, Ames, Iowa.
 Willig, K. J., 412 E. Waverly Rd., Wyncote, Pa.
 Witcover, H. W., c/o Post Quartermaster, Fort Jackson, S.C.
 Wolf, R. H., 1203½ N. 45th St., Seattle, Wash.
 Yager, J. A., 530 S. Division St., Ann Arbor, Mich.

The Population Association of America has elected the following officers: president, P. K. Whelpton; first vice-president, Frederick Osborn; second vice-president, Dorothy S. Thomas; secretary, Conrad Taeuber; treasurer, Halbert L. Dunn.

The third annual Transportation Conference on "Interterritorial Freight Rates," sponsored by the College of Business Administration of the University of Nebraska, was held in Lincoln on April 7.

A conference on Business Education, discussing "The New Economic Education," was held on June 26 and 27 by the University of Chicago in conjunction with its fiftieth anniversary celebration.

Some two hundred and fifty executives of the Pacific Coast participated in the fifth annual Stanford Business Conference held under the auspices of the Graduate School of Business on the Stanford campus July 21 to 25. The general theme was "American Business in a World at War."

The seventeenth institute under the Norman Wait Harris Memorial Foundation was held at the University of Chicago from July 7 to 15. The subject was "The Political and Economic Implications of Inter-American Solidarity." Participating were experts in the field of inter-American relations from the United States, Canada, and Latin America. As in the past, the Institute consisted of both round-table discussions and public lectures.

The seventeenth summer session of the University of Wisconsin School for Workers enrolled students representing twenty different unions in eleven mid-west states. In addition to the general six weeks' session, special one- and two-week institutes were held. Guest tutor and lecturer was Joseph Mire, formerly of Ruskin College, Oxford. Guest speakers included Carlestone Warne of Consumers' Union and Amherst College, Ralph Teffteller of the Amalgamated Clothing Workers of America, and Sheila Mackay of England.

The University of Chicago is holding a five-day series of symposia beginning September 22, in conjunction with the observation of its fiftieth anniversary. Various sessions will be devoted to the social sciences. Among the speakers and subjects to be discussed are the following:

"The Public Social Services: Fifty Years of Progress"—Martha Eliot, Children's Bureau, United States Department of Labor; Florence Allen, judge of the United States circuit court of appeals, Cincinnati; Carter Goodrich, Columbia University; Helen R. Wright, University of Chicago; Edith Abbott, chairman.

"The Changing Bases of National Economy"—John M. Clark, Columbia University; Frank H. Knight and Theodore O. Yntema, University of Chicago; Paul H. Douglas, chairman.

"Management's Adjustment to the Changing National Economy"—Willard L. Thorp, Dun and Bradstreet; Lewis C. Sorrell, Raleigh W. Stone, and James W. Young, University of Chicago; William N. Mitchell, chairman.

"Administrative Agencies: Recommendations of the Attorney-General's Committee"—John F. Dulles, New York; Walter Gellhorn, Columbia University; John Dickinson, University of Pennsylvania; Wilber G. Katz, chairman.

"The Place of Ethics in Social Science"—Richard H. Tawney, University of London (tentative); Charles H. McIlwain, Harvard University; Jacques Maritain, Catholic Institute of Paris, Columbia University; Robert M. Hutchins, University of Chicago; John U. Nef, chairman.

The Institute of Labor Studies was established by a group of economists and other social scientists in the fall of 1940 as a clearing house and organizing medium for the encouragement of research in the labor field. For the program and services of the institute, apply to Katharine D. Lumpkin, Research Director, 54 Prospect Street, Northampton, Mass.

Appointments and Resignations

Albert Abrahamson, on leave from Bowdoin College for the year 1941-42, is to serve as executive director of the National Refugee Service in New York.

Gardner Ackley, instructor in economics at the University of Michigan, has been appointed economist in the non-ferrous metals division with the Office of Price Administration and Civilian Supply in Washington.

Lloyd C. Alkema has been appointed instructor in business administration at the Emory University School of Business Administration.

Clark Lee Allen has been appointed instructor of economics at Duke University for the year 1941-42.

W. H. Andrews, instructor in economics at Purdue University, has been granted a leave of absence for the academic year 1941-42, to do graduate work at the University of Chicago.

D. Harry Angney has resigned his position as instructor of economics at Brown University to accept a research position with the Rhode Island Textile Association.

John H. Ashworth, associated with the University of Maine since 1919 as head of the department of economics and sociology and as professor of economics, retired from active service in June, 1941.

C. Canby Balderston, professor of industry, has been elected dean of the Wharton School of Finance and Commerce of the University of Pennsylvania. Harry J. Loman, professor of insurance, was reelected associate dean and Thomas A. Budd, professor of finance, vice-dean, at the same time.

Robert B. Bangs, formerly instructor of economics at Brown University, has accepted an appointment as research economist with the National Income Unit of the Department of Commerce, Washington.

J. Cullen Barton, instructor in economics at the University of Alabama, has resigned.

Anthony Basch, visiting professor of economics at Brown University, delivered a series of lectures at the summer session of Columbia University.

William Hubert Baughn has been appointed instructor in economics at the University of Alabama.

Robert J. Baxter, instructor in economics at the University of Pittsburgh, is now a First Lieutenant, Third Corps Area, United States Army, stationed at Baltimore.

B. Haggart Beckhart of Columbia University will continue as economist with the Chase National Bank, New York, on a part-time basis.

John S. Bickley, instructor in economics at the University of Alabama, has resigned.

M. L. Black, Jr., associate professor of accounting at Duke University, will be absent on a National Defense Leave for the 1941-42 term, serving as princi-

pal cost accountant in the Office of Price Administration and Civilian Supply, Washington.

J. Russell Boner, instructor in economics, has been granted leave of absence for 1941-42 to teach part-time and pursue graduate study in the College of Commerce and Business Administration department of economics at the University of Illinois.

D. O. Bowman has resigned as instructor in economics at Purdue University to accept a position at the University of Michigan.

Howard A. Bridgman has accepted a teaching position in the department of economics at Connecticut College.

Robert P. Briggs, associate professor of economics at the University of Michigan, will spend the year as chief accountant with the War Department, assigned to the Detroit Ordnance District.

Arthur A. Briglet has been appointed instructor in economics at Massachusetts Institute of Technology.

J. Douglas Brown, director of the industrial relations section in Princeton University, is consultant to Sidney Hillman, Labor Division of the Office of Production Management.

Weir M. Brown, who held the Brown-Brookings Fellowship during the past academic year, has been awarded a Social Science Research Council Fellowship for the current year.

William Adams Brown, Jr., has been promoted from associate professor to Eastman professor of political economy at Brown University. During the summer he served as collaborating editor of the financial and economic section of the League of Nations at Princeton, New Jersey.

Louis F. Buckley has resigned his position as associate professor of economics at Notre Dame University to accept a position as legislative adviser in the Bureau of Employment Security, Social Security Board, Washington.

Roy J. Bullock has been appointed director of the School of Business Economics at the Johns Hopkins University.

Robert D. Calkins, formerly dean of the College of Commerce of the University of California at Berkeley, was appointed dean of the School of Business at Columbia University, effective July 1.

Charles C. Center of the University of Wisconsin has been appointed instructor in economics at the University of Alabama, where he will teach courses in insurance.

C. Lawrence Christenson is on leave from Indiana University for the first semester of the current school year to engage in research in trade unionism in Berkeley, California, and Washington.

John D. Clark, of Cheyenne, Wyoming, has been appointed dean of the College of Business Administration of the University of Nebraska to succeed Dean J. E. LeRossignol. Dean LeRossignol will continue as professor of economics, teaching part-time, with the rank of dean emeritus.

Almand R. Coleman has been promoted from associate professor to professor of accounting at Washington and Lee University.

Arthur G. Coons, professor of economics of the Graduate School, Claremont Colleges, has been named director of studies of the Graduate School effective in September, 1941.

Howard E. Cooper has been appointed director of the evening courses in business economics at the Johns Hopkins University.

Earl C. Crockett has been promoted to professor of economics and elected chairman of the department of economics, political science, sociology and anthropology at the University of Colorado, for the year 1941-42.

Kenneth J. Curran of Princeton University has been promoted to the grade of assistant professor.

Edward F. Denison, Jr., has resigned his position as instructor of economics at Brown University to accept a position as research economist in the National Income Unit of the Department of Commerce, Washington.

Ralph L. Dewey has resumed the position of principal economist in charge of the Transportation Section of the Bureau of Agricultural Economics of the United States Department of Agriculture after a year's absence spent at the National Resources Planning Board, participating in its study of transportation policy.

Dudley Dillard, instructor in economics at the University of Colorado during the past year, has been appointed assistant professor of economics at the University of Delaware.

George W. Dowrie, professor of finance in the Graduate School of Business, Stanford University, was visiting professor at the University of California in Los Angeles during the summer session.

James S. Earley of the University of Wisconsin has been promoted to the rank of associate professor of economics. Mr. Earley, who has been on leave of absence to work with the Advisory Commission to the National Defense Council since June, 1940, will resume his work at the University of Wisconsin this fall.

J. Franklin Ebersole, professor of finance at the Harvard Graduate School of Business Administration, has been appointed Edmund Cogswell Converse professor of banking and finance, to succeed O. M. W. Sprague who retired March 1, 1941, and was appointed Edmund Cogswell Converse professor emeritus.

Curtis M. Elliott, of Oregon State College, has been appointed instructor in economics and insurance in the College of Business Administration of the University of Nebraska.

François H. Elvinger of the University of Louvain will be at Columbia during the academic year 1941-42 as visiting lecturer in the field of marketing.

Nathanael H. Engle has been appointed professor and director of the Bureau of Business Research in the College of Economics and Business at the University of Washington, effective September, 1941.

Clyde Olin Fisher, of the department of economics at Wesleyan University, has been appointed to a six-year term on the Public Utilities Commission of the State of Connecticut. During this period Professor Fisher will continue on a part-time basis at Wesleyan University, where he will teach money and banking and economic theory.

Morris E. Garnsey of the University of Colorado, has been appointed consultant with the National Resources Planning Board, Rocky Mountain region, for the summer of 1941.

Carter Goodrich of Columbia University left for London July 15, to conduct a study, lasting about six weeks, as special assistant to Ambassador Winant.

Wytze Gorter, who has served as teaching assistant in economics at Stanford University, has resigned to become an instructor in economics at Central Washington College, Ellensburg, Washington.

Robert H. Gray, assistant professor of economics and commerce at Washington and Lee University, has returned to his teaching duties after a year's leave of absence.

Harold M. Groves of the department of economics of the University of Wisconsin, has been granted a leave of absence for the academic year 1941-42 to serve as consultant to the United States Treasury Department.

John A. Guthrie, assistant professor of economics at the State College of Washington, was on leave of absence the second semester of 1940-41 and served as economist on the Bureau of Agricultural Economics' investigation of the economic aspects of the Coulee irrigation project. He will return to the State College of Washington for the fall semester.

Charles A. Hales has been promoted to professor of economics at Colorado State College of Education.

B. F. Haley, head of the department of economics at Stanford University since 1931, has resigned the headship, but will remain at Stanford as professor of economics.

Ray Ovid Hall has recently been appointed economist in the Monetary Research Division of the Treasury Department.

Clifford M. Hardin, formerly of Purdue University, has been appointed extension specialist in marketing, with the rank of instructor, in the department of agricultural economics, University of Wisconsin.

Ralph Murray Havens, instructor of economics at Duke University during the past three years, has accepted a position at Baldwin-Wallace College in Berea, Ohio.

Walter W. Heller has been appointed instructor in economics at the University of Wisconsin and will give courses in public finance.

Charles W. Herald, instructor in business law at the University of Pittsburgh, is now connected with the Ordnance Department of the United States government. He is stationed in Pittsburgh.

James C. Hill has been appointed instructor of economics at Wellesley College.

Henry F. Holtzclaw, professor of commerce at University of Kansas, has resigned to accept an administrative position with the United States Railroad Retirement Board.

Ralph C. Hon, professor of economics at Southwestern University, taught at Duke University during the 1941 summer session and will remain during the 1941-42 academic year. Professor Hon is the president of the Southern Economics Association.

Sidney Hoos has resigned from the University of California to accept a position as economist with the Commodity Credit Corporation, Division of Economics, United States Department of Agriculture, Washington.

Calvin B. Hoover, dean of the Graduate School and professor of economics at Duke University, is at present an economic adviser in the Office of Price Administration and Civilian Supply, Washington.

Richard S. Howey has been promoted from associate professor to professor of economics at the University of Kansas.

John Ise, professor of economics at the University of Kansas, will be on leave during the academic year 1941-42 to teach at Amherst College.

F. B. Jensen has been promoted from instructor to assistant professor of economics at the University of Kansas.

Russell E. Johnson, business analyst for the Bureau of Business Research at the University of Alabama, has been granted leave of absence for 1941-42 to take an instructorship and pursue graduate study in the department of economics at the University of Minnesota.

Jerome J. Kesselman has been promoted from instructor to assistant professor of accounting at the University of Kansas.

A. Lowell Kirkpatrick, instructor of economics at Brown University, has been awarded the Brown-Brookings Fellowship and will study at the Brookings Institution during the coming academic year.

Irving Knickerbocker, formerly engaged in consultant work, has been appointed an instructor in the industrial relations section of the Massachusetts Institute of Technology department of economics and social science.

Theodore J. Kreps, professor of business economics in the Graduate School of Business, Stanford University, served as assistant to Leon Henderson in the Office of Price Control and Civilian Supply, Washington, during the summer months of 1941.

Vincent W. Lanfear, dean of men at the University of Pittsburgh, has been appointed dean of the School of Business Administration.

Simeon E. Leland taught courses in public finance and the economics of fiscal policies in the summer session at the University of Washington, and was lecturer at the Pacific Northwest Banking School, held on the University of Washington campus, August 18 to 29.

Don D. Lescohier has been appointed chairman of the department of economics at the University of Wisconsin.

Richard A. Lester, assistant professor of economics at Duke University, spent the summer in Washington, in the Office of Price Administration and Civilian Supply. During the 1941-42 term he will be on leave to do post-doctoral research in wage and employment policies and their effects on labor markets on a Social Science Research fellowship.

Oscar F. Litterer of the University of Wisconsin has been appointed instructor in statistics and business research in the College of Business Administration of the University of Nebraska.

Arthur N. Lorig spent the summer as a special accountant in the United States Engineers Office, Geiger Field, Spokane, Washington.

James W. Martin, director of the Bureau of Business Research at the University of Kentucky, was made available during the summer to the Governor and newly authorized Director of Revenue of Colorado to work out and install an administrative plan, which became operative July 1, for handling Colorado state revenues, heretofore scattered among numerous agencies.

James A. Maxwell, professor of economics at Clark University, spent the summer in New York with the National Bureau of Economic Research on a project for financing the defense program.

R. C. McCrea retired July 1, as dean of the School of Business at Columbia University.

J. Milton McDaniel has been promoted to professor of economics at Dartmouth College.

B. T. McGraw, professor of economics of Lincoln University since December, 1940, who has been serving as a senior economic consultant on French War Finance Policies in the Price Stabilization Division of the Council of National Defense, recently changed to the Office of Price Administration and Civilian Supply.

Eliot G. Mears of Stanford University was a delegate of the Department of State at the Third General Assembly, Pan American Institute of Geography and History, held at Lima, Peru, March 30-April 8.

Otto von Mering will lecture in economics at Tufts College during the year 1941-42.

H. B. Moore of the University of Kentucky has accepted a temporary appointment as industrial analyst in the Bureau of Labor Statistics, Washington.

Herbert C. Morse has been appointed assistant professor of economics at Antioch College.

Donald F. Mulvihill has been appointed instructor in economics at the University of Alabama.

Harold G. Murphy, instructor in economics at Emory University School of Business Administration, has received a fellowship from the General Educa-

tion Board to study and do special research work in marketing at the Harvard University Graduate School of Business Administration during the year 1941-42.

Alfred C. Neal has returned to Brown University to take up his teaching duties in the department of economics after being absent for study under a Social Science Research Council fellowship.

William Hord Nicholls, assistant professor of economics, Iowa State College, has received a Social Science Research Council fellowship for post-doctoral research training in economics, sociology and law.

Paul H. Nystrom of Columbia University will be on leave of absence during the academic year 1941-42.

Albert L. Olson has been advanced to the rank of professor and head of the department of economics at Marshall College.

John E. Orchard of Columbia University is working with the National Resources Planning Board, Washington.

Melchior Palyi has been appointed visiting professor of economics at the University of Wisconsin for the year 1941-42 and will give courses in international trade, international finance, and development of economic policies.

M. Ogden Phillips has been promoted from associate professor to professor of economics and commerce at Washington and Lee University.

Paul Pigors, formerly of Tufts College, has been appointed associate professor in the industrial relations section of the department of economics and social science at Massachusetts Institute of Technology.

Kenyon E. Poole of the department of economics, Brown University, served in a research capacity in the Division of Monetary Research of the Treasury Department during the summer.

Robert G. Rodkey, professor of banking and finance in the School of Business Administration, University of Michigan, was visiting professor in the Graduate School of Business, Stanford University, during the 1941 summer quarter.

Robert Vincent Rosa of Harvard University has been named assistant in statistics in the department of economics and social science, Massachusetts Institute of Technology.

J. Wilner Sanderson has been advanced to the rank of assistant professor of economics at Rutgers University.

Oliver Sarosi spent the 1940-41 academic year as visiting fellow of the Graduate School of Princeton University.

James D. Scott of Hobart College has been appointed associate professor in political economy at the Johns Hopkins University.

Joseph C. Seibert, lecturer at Northwestern University and economist for Shaw and Company of Chicago, has been appointed assistant professor of Business Administration at the Emory University School of Business Administration.

Leroy A. Shattuck, instructor in economics at Dartmouth College, took a position with the duPont de Nemours Company at Deepwater Point, New Jersey, for the summer.

Edward S. Shaw, associate professor of economics at Stanford University, has been appointed acting head of the department of economics.

James H. Shoemaker of the department of economics, Brown University, was engaged in research work for the Office of Administrator of Export Control during the spring and summer.

Edward C. Simmons, assistant professor of economics at the University of Michigan, has received a Social Science Research Council fellowship for post-doctoral research training in federal monetary policy and will spend the academic year 1941-42 in Washington.

Arne Skaug of the University of Oslo, who has been in the United States on a Rockefeller Fellowship for nearly two years, has been appointed assistant professor of economics at the University of Wisconsin and will give courses in statistics and business cycles the second semester of 1941-42.

Sumner H. Slichter, professor of business economics in the Graduate School of Business Administration, Harvard University, was visiting professor in the Graduate School of Business, Stanford University, during the first term of the 1941 summer quarter.

Margaret G. Smith has been appointed instructor in the department of economics and sociology at the New Jersey College for Women.

T. H. Smith of the University of Wisconsin has been appointed instructor in economics at Purdue University.

Clifford D. Spangler, assistant professor of economics in the College of Business Administration of the University of Nebraska, has resigned to accept a position as actuary with the Royal Highlanders Insurance Company of Lincoln.

Joseph J. Spengler, professor of economics at Duke University, will be on leave during the first term of the 1941-42 academic year.

W. A. Spurr, associate professor of statistics and acting chairman of the department of business research of the College of Business Administration of the University of Nebraska, has been granted a year's leave of absence to accept a position as business consultant with the Regional Research Unit of the Department of Commerce in Washington.

Sydney Sufrin has resigned as an instructor at Ohio State University to accept employment with the Office of Production Management.

William G. Sutcliffe has been appointed dean of Boston University College of Business Administration to succeed Dean Everett W. Lord.

Ernst W. Swanson has been promoted from assistant professor to associate professor of business administration at the State College of Washington.

J. H. Taggart of the University of Kansas has been granted leave of absence to accept an appointment as a regional business adviser for the Bureau of Foreign and Domestic Commerce.

Lorie Tarshis has returned to Tufts College after a year's leave of absence spent with the National Bureau of Economic Research.

Howard M. Teaf, Jr., of Haverford College has been granted a leave of absence for the first term of the year 1941-42 to serve with the Federal Home Loan Bank Board in New York.

Herman P. Thomas of the University of Richmond will spend the coming year in the Graduate School of Business Administration of Harvard University, studying monetary and banking theory and practice and carrying on research on a grant by the General Education Board of New York.

D. W. Thompson, who last year acted as head of the department of economics at Howard University, Birmingham, has been appointed assistant professor of accounting at Butler University for the year 1941-42.

Harold Tipton, instructor in economics at the University of Colorado, has resigned to take a position assisting the House of Representatives committee investigating national defense migration.

William W. Tongue of the University of Chicago has accepted a position as instructor in economics at Coe College.

Kenneth Lewis Trefftz of the Carnegie Institute of Technology has been appointed assistant professor of banking and finance in the College of Commerce, University of Southern California, for the year 1941-42.

Daniel C. Vandermeulen of Harvard University has been appointed instructor in the industrial relations section of the department of economics and social science, Massachusetts Institute of Technology.

Robert Henry Van Voorhis has been appointed as an instructor of accounting at Duke University for 1941-42.

Weldon Welfling, instructor in economics at Duke University during the past three years, has accepted a position at Baldwin-Wallace College in Berea, Ohio.

Miriam E. West, assistant professor of economics, New Jersey College for Women, has been granted leave of absence during the first semester of the year 1941-42 in order to undertake research for the Federal Works Agency on the economics of defense housing projects.

Alfred H. Williams has resigned as dean of the Wharton School of Finance and Commerce of the University of Pennsylvania and on July 1 became president of the Federal Reserve Bank of Philadelphia.

Edwin E. Witte of the department of economics at the University of Wisconsin has been granted a leave of absence for the first semester of the coming academic year to work on a book on the history of social security.

J. Raymond Ylitalo, instructor in economics at the University of Alabama, has resigned to accept a position with the Federal Bureau of Investigation.

THIRTY-EIGHTH LIST OF DOCTORAL DISSERTATIONS IN POLITICAL ECONOMY IN PROGRESS IN AMERICAN UNIVERSITIES AND COLLEGES

Students whose period of continuous non-residence exceeds three years are omitted from the list. The last date given is the probable date of completion.

The first list of this kind was dated January 1, 1904, and was sent to all members, but not regularly bound in the publications. A notation as to the earlier lists, extending from 1905 to 1927, may be found in the *Review* for September, 1927, page 574. Annual lists thereafter are to be found in the September number of the *Review* for each year.

The present list specifies doctoral dissertations completed and accepted by the various universities, and, in cases where a publishing company was reported, this has been given. Titles not marked "completed" are assumed to be still in preparation. The list represents the status of the several theses on May 1, 1940, except for a few items later reported as completed or published.

Economic Theory; General Works

- ADOLPH GRAUDAN ABRAMSON, A.B., West Virginia, 1929; A.M., Brown, 1936. Theories and measures of competition. 1941. *Brown*. Completed.
- SIDNEY S. ALEXANDER, S.B., Harvard, 1936; A.M., 1938. Theory of resource utilization. 1942. *Harvard*.
- CLAY J. ANDERSON, Ph.D., Michigan, 1941. Economic stabilization by means of public works: a historical view. Accepted.
- IVAR AXELSON, A.B., Yale, 1919; A.M., Oklahoma, 1928. Process of savings and investment. 1942. *Columbia*.
- ROBERT BABBITT BANGS, A.B., Coe, 1935; A.M. Tufts, 1937. Leading problems in the theory of capital, income and employment. 1941. *Brown*. Completed.
- ROBERT M. BIGGS, A.B., Wayne, 1939; A.M., Michigan, 1940. The historical development of the concept of capital. 1944. *Michigan*.
- JOHN M. BLAIR, B.A., Tulane, 1936. A study of value and wages in selected industries. *American*. Accepted.
- SAMUEL E. M. BRENHOUSE, A.B., McGill, 1933; M.A., 1934. Profit and equilibrium—a study in the dynamics of balance. 1943. *Columbia*.
- WEIR MESSICK BROWN, A.B., Oberlin, 1936; A.M., Brown, 1938. An examination of the concept and measures of economic maturity. 1942. *Brown*.
- YALE BROZEN, A.B., Chicago, 1939. Some economic aspects of technological change. 1941. *Chicago*.
- JOSEPH CARWELL, A.B., N.Y., 1935; A.M., Columbia, 1939. History of post-Marxian socialism. 1942. *Columbia*.
- JOEL G. COLTON, A.B., College of the City of New York, 1937; M.S., 1938; M.A., Columbia, 1940. Position of the laborer in French mercantilist thought, 1700-1750. 1942. *Columbia*.
- WILLIAM HENRY CONLEY, B.C.S., Loyola, 1930; M.B.A., Northwestern, 1932. Modern interpretation of the economics of Thomas Aquinas. 1941. *Northwestern*.
- BERNARD WILLIAM DEMPSEY, Ph.D., Harvard, 1940. A comparative study in interest theories. Accepted.
- WILLIAM DIAMOND, A.B., Johns Hopkins, 1937. President Wilson's concept of American economy. 1942. *Johns Hopkins*.
- LEONARD DOYLE, A.B., Antioch; A.M., Ohio, 1937. The relationship between cost and selling price for the individual firm in economic theory and in cost accounting theory. *Ohio State*.
- JAMES S. DUESENBERY, A.B., Michigan, 1939. Wages in the automobile industry. 1944. *Michigan*.
- LEE GLOVER, B.S., Alabama, 1922; A.B., 1922; A.M., Chicago, 1928. Fixed and variable costs and their application in cost analysis. 1944. *Columbia*.

- EVERETT EINAR HAGEN, A.B., St. Olaf, 1927; A.M., Wisconsin, 1932. Capital accumulation and the distribution of income. 1941. *Wisconsin*. Completed.
- GEORGE HERBERT HILDEBRAND, JR., A.B., California, 1934. Development and present status of wage theory, with application to public policy. 1941. *Cornell*.
- M. THOMAS KENNEDY, A.B., Swarthmore, 1934. Theory of unemployment due to mechanization. 1942. *Pennsylvania*.
- ELIZABETH P. LAM, A.B., William and Mary, 1928; A.M., Chicago, 1930. The place of Marxist ideology in Christian social philosophy. 1941. Chicago.
- J. L. LOVE, B.S., North East State Teachers College of Missouri, 1932; M.A., Texas, 1937. History of incremental cost-price theory. 1942. *Texas*.
- GEORGE B. MCGOWEN, Ph.D., Illinois, 1940. Logical transaction analysis. Accepted.
- GEORGE T. MATTHEWS, A.B., Columbia, 1939; A.M., 1940. Economic ideas of the philosophers. 1942. *Columbia*.
- MAX FRANKLIN MILLIKAN, B.S., Yale, 1935. The equilibrium of the firm under conditions of imperfect competition. 1941. *Yale*.
- HERBERT CARPENTER MORSE, A.B., Oberlin, 1932; A.M., Columbia, 1941. Essays in the theory of trade. 1942. *Columbia*.
- WILLIAM HORD NICHOLLS, Ph.D., Harvard, 1941. A theoretical analysis of imperfect competition, with special application to the agricultural industries. Accepted.
- RUSSELL TOULMIN NICHOLS, A.B., DePauw, 1929. Theory and measurement of national income. 1941. *Chicago*.
- ALFRED RICHARD OXENFELDT, B.S., Pennsylvania, 1937; A.M., Columbia, 1938. The workings of free enterprise. 1941. *Columbia*.
- ALAN L. RITTER, A.B., DePauw, 1935. A study of the flow of capital required to maintain the proper balance in our economic organization. 1942. *Wisconsin*.
- DAVID ROCKEFELLER, Ph.D., Chicago, 1940. Unused capital resources and waste. Accepted.
- PAUL A. SAMUELSON, Ph.D., Harvard, 1941. The observational significance of economic theory: a study in the foundations of analytical economics. Accepted.
- MICHAEL SAPIR, A.B., Yale, 1934. Economic theory and the concept of exploitation in selected writers. 1941. *Chicago*.
- GEORGE SCHULLER, B.S., New York, 1931. Bargaining power in relation to the determination of prices and incomes. 1941. *Columbia*.
- WILLIAM H. SHAW, A.B., Columbia, 1930; A.M., 1931. Commodity flow and capital formation, 1879-1919. 1942. *Columbia*.
- VIRGINIA B. SLOAN, B.A., Texas, 1925; M.A., 1928. Social attitudes toward poverty and class distinctions implicit in classical economic literature. *Texas*. Accepted.
- WILLIAM JORDAN JOSEPH SMITH, A.B., Texas. Theories of capital formation between the two world wars. 1943. *Duke*.
- HAROLD M. SOMERS, B. of Com., Toronto, 1937. Statistical and theoretical analysis of national income. *California*.
- JAMES HARTMANN STAUSS, A.B., Grinnell, 1936; S.M., Iowa State, 1937. History and criticism of American theories of profit. 1942. *Wisconsin*.
- MABEL FRANCES TIMLIN, Ph.D., Washington, 1940. Keynesian economics: a synthesis. Accepted.
- WILLIAM SPENCER VICKERY, B.S., Yale, 1935; A.M., Columbia, 1937. Behavior of marginal costs. 1941. *Columbia*.
- RAMSAY WOOD, M.A., New College, Columbia, 1936. Conditions of oligopoly and oligopsony. 1942. *Columbia*.
- DAVID MCCORD WRIGHT, Ph.D., Harvard, 1940. The creation of purchasing power. Accepted.

Economic History

- PAUL H. BEIK, A.B., Union, 1935; A.M., New York Teachers, 1938; A.M., Columbia, 1939. Public finance in Provence before the French Revolution. 1942. *Columbia*.

- WYATT W. BELCHER, A.B., Oklahoma, 1932; A.M., 1932. Economic rivalry between St. Louis and Chicago, 1850-1880. 1942. *Columbia*.
- MARION D. BONZI, A.B., Rockford, 1928; A.M., Illinois, 1929. George M. Pullman and the Pullman Company. 1941. *Chicago*.
- GEORGE HAY BROWN, A.B., Oberlin, 1929; M.B.A., Harvard, 1931. The economic position of New Zealand. 1941. *Chicago*.
- MIRON BURGIN, S.B., Harvard, 1929. The economic aspects of Argentine federalism, 1820-1852. 1941. *Harvard*.
- THEODORE COHEN, B.S.S., College of the City of New York, 1938; A.M., Columbia, 1939. Merchant capital in feudal Japan. 1942. *Columbia*.
- PHILIP A. CROWL, A.B., Swarthmore, 1936; M.A., Iowa, 1939. The critical period in Maryland, 1782-1787. 1941. *Johns Hopkins*.
- RANDLE EDWIN DAHL, A.B., Clark, 1929; A.M., 1933. A history of the watch industry in the United States. 1941. *Clark*.
- EDWARD G. DANIEL, A.B., Oregon, 1929; A.M., 1929. History of the United States postal policy, 1829-1862. 1942. *Harvard*.
- PETER H. DELANEY II, A.B., Yale, 1937; A.M., 1939. Economic readjustments in Rhode Island, 1783-1800. 1942. *Columbia*.
- FREDERICK LEWIS DEMING, A.B., Washington University, 1934; A.M., 1935. Boatmen's National Bank, 1847. 1941. *Washington University*.
- DUDLEY DILLARD, B.S., California, 1935. Proudhon Gesell and Keynes; an investigation of some "anti-Marxian socialist" antecedents of Keynes's General Theory of Employment, Interest and Money. *California*. Accepted.
- JAMES H. EASTERBY, A.B., Charleston, 1920; A.M., Harvard, 1922. The South Carolina rice plantation as revealed in the papers of Robert F. W. Allston. 1941. *Chicago*.
- FREDERIC JOEL ERICSON, Ph.D., Chicago, 1940. The British colonial system and the question of change of policy on the eve of the American revolution. Accepted.
- E. BLAND FAIRCLOTH, B.S., Virginia, 1939; A.M., Chicago, 1939. A history of the stock-yards of Chicago. 1941. *Chicago*.
- ERNST FLOTOW, B.A., Valparaiso, 1936. The congress of German economists and its influence on the economic and social legislation of Prussia and Germany. 1942. *American*.
- JOHN WILLIAM FREDRICKSON, S.B., Northwestern, 1938. The American merchant marine, 1820-1860. 1942. *Chicago*.
- RUDOLF W. FREYHAN. Reciprocal reactions and repercussions of the economic and political decay of the ruling class in the early Victorian age. 1941. *Chicago*.
- WILLIAM BRYAN GATES, JR., A.B., Williams, 1939. Government reorientation of social and economic life during the Civil War: a study of federal, state, and local controls over economic activity in the North, 1861-1865. 1941. *Chicago*.
- LEON GOLDENBERG, Ph.D., Northwestern, 1941. Income and savings in France, 1871-1914. *Northwestern*. Accepted.
- CLYDE E. HEWITT, A.B., Aurora, 1937; A.M., Chicago, 1939. Venezuela and the origins of dollar diplomacy. 1941. *Chicago*.
- WILLERY JACKSON, A.B., Mississippi State College for Women, 1921. The repudiation of the Planters' Bank and the Mississippi Union Bank bonds. 1942. *Columbia*.
- DOUGLAS JAMES, B.S., Princeton, 1929; A.M., Columbia, 1931. The commercial relations of the Levant with Western Europe, 1815-1869. 1942. *Columbia*.
- MADISON ALEXANDER KUHN, Ph.D., Chicago, 1940. Economic issues and the rise of the Republican Party in the Northwest. Accepted.
- JOHN A. LEVANDIS, B.S., Delaware, 1921; A.M., Columbia, 1922. The history of international financial control in Greece. 1942. *Columbia*.
- D. E. MCCOWN, A.B., California, 1932. An historical study of the material culture of Iran before the middle of the third millennium B.C. 1941. *Chicago*.
- HUGH SAGER MEAD, A.B., Chicago, 1900. The economic development of the Philippine Islands during the American administration. 1941. *Chicago*.
- EUGENE ABRAHAM MYERS, A.B., Pittsburgh, 1934; A.M., 1936. An analysis of constitutional and legislative tax provisions in Pennsylvania, 1682-1790. 1942. *Pittsburgh*.

- JAMES W. PAUL, B.S.S.T.C., Troy (Alabama), 1932; B.D., Southern Methodist, 1935; A.M., 1935. Trade and politics in Palestine during the bronze age. 1941. *Chicago*.
- ANDREW WARREN PIERPONT, A.B., Washington and Lee, 1928; M.B.A., Harvard, 1931. The economic history of Burlington, North Carolina; a case study in recent industrialization. 1942. *North Carolina*.
- RAYMOND ADRIEN DE ROOVER, L.S.C.F., Institut Sup. de Commerce, 1924; M.B.A., Harvard, 1938. Banking, money, and credit in medieval Bruges; merchant-bankers, lombards, money-changers, and usurers. 1942. *Chicago*.
- ORVIS ADRIAN SCHMIDT, A.B., Lawrence, 1933; A.M., Tufts, 1935. The economic development of Brazil. 1941. *Chicago*.
- WARREN CANDLER SCOVILLE, Ph.D., Chicago, 1940. A history of the French glass industry from 1640 to 1740. Accepted.
- SHIGETO TSURU, Ph.D., Harvard, 1940. Development of capitalism and of business cycles in Japan, 1868-1897. Accepted.
- WILLIAM C. WILBUR, JR., A.B., Washington and Lee, 1937. The influence of Fabian socialism on the Liberal Party. 1942. *Columbia*.
- EDWARD B. WILLIAMS, A.B., Morehouse, 1927; A.M., Atlanta, 1937. The negro in industry in the ante-bellum South. 1942. *Columbia*.
- SEYMOUR L. WOLFBEIN, M.A., Columbia, 1937. The New Bedford depressed area. 1942. *Columbia*.
- PATON WESLEY YODER, A.B., Goshen, 1935; A.M., Indiana, 1936. The paper money movement in colonial and revolutionary Pennsylvania. 1942. *Indiana*.
- ROBERT MAURICE YORK, A.B., Bates, 1937; A.M., Clark, 1939. George B. Cheever. 1941. *Clark*.

Statistics; Economic Mathematics; Accounting

- WENDELL M. ADAMSON, A.B., Indiana, 1928; A.M., 1937. The measurement of income in small geographic areas. 1943. *Columbia*.
- HAROLD G. AVERY, Ph.D., Columbia, 1940. Accounting for depreciable fixed assets. Accepted. (Printed privately.)
- NOBERT G. BAUSCH, B.S., Creighton, 1932; M.S., Illinois, 1933. The relation between accounting and certain recent developments in the statutory law of business corporations. 1941. *Illinois*.
- RALPH L. BOYD, B.S., Illinois State Normal, 1930; M.S., Illinois, 1932. A study of C.P.A. legislation in the United States—1896-1940. 1941. *Illinois*.
- VICTOR BRINK, Ph.D., Columbia, 1941. Internal auditing. Accepted. (Ronald Press, New York, 1941.)
- LESLIE JAMES BUCHAN, B.S., Illinois, 1922; M.S., 1923. A critical analysis of certain formulations of accounting principles. *Illinois*.
- ARLEIGH ROY BURTON, B.S., Kansas State Teachers, 1927; M.S., 1935. Life insurance accounting in selected states. 1941. *Nebraska*.
- WALKER E. CAMPBELL, B.S., Illinois, 1928; M.S., 1932. Educational preparation for professional accountancy. 1941. *Illinois*.
- JAMES M. CARRITHERS, A.B., Coe, 1936; M.S., Iowa State, 1937. The accounting view of the nature of business transactions. 1942. *Illinois*.
- THOMAS GREGORY CHARTERS, A.B., Manhattan, 1927; M.A., Canisius, 1929. Financial statements. 1944. *Columbia*.
- A. JOSEPH CRESHKOFF, B.A., Pennsylvania, 1937. Statistics of the national measurement of wealth and debt. 1942. *Pennsylvania*.
- ROBERT I. DICKEY, B.S., Connecticut Wesleyan, 1930; M.S., Illinois, 1939. Accounting aspects of federal incorporation. 1942. *Illinois*.
- ROBERT LIVINGSTON DIXON, B.A., Michigan, 1930; M.B.A., 1931. The income statement. 1941. *Yale*.
- WILBUR ROY GARRETT, B.S., 1932; M.B.A., 1933; A.M., 1934, California. A comparative study of the statutory provisions relating to selected phases of the net-worth section of the corporate balance sheet. 1941. *California*. Accepted.

- EVERETT H. JOHNSON, A.B., DePauw, 1926; A.M., Lehigh, 1929. The time factor in correlation with reference to certain forecasting problems in business. 1942. *Michigan*.
- LOUIS M. KESSLER, B.S., Illinois, 1935; M.S., 1937. The influence upon accounting theory and practice of the regulatory control administered by the securities and exchange commission. 1942. *Illinois*.
- EDWARD J. KIRKHAM, B.S., Miami, 1934; M.S., Illinois, 1936. Changing concepts of depreciation. 1942. *Illinois*.
- HENRY AUGUST KRIEBEL, B.S., Lehigh, 1932; A.M., 1937. Special purpose financial statements. 1942. *Columbia*.
- CHARLES LAMDEN, A.B., California, 1937; M.A., 1939. Legal problems in corporate accounting. *California*.
- DANIEL LIPSKY, A.B., Columbia, 1931; M.S., 1934. A reëxamination of accounting principles and some applications with particular reference to published reports: in part, a synthesis of several controversial suggestions. 1942. *Columbia*.
- DONALD R. LONGMAN, A.B., Oberlin, 1932; M.B.A., Harvard, 1934. Accounting for distribution costs. *Columbia*.
- NILAN E. NORRIS, Ph.D., Stanford, 1930; A.M., 1932. Some contributions to the theory of statistical averages. 1940. *Stanford*. Accepted.
- LEO ROSENBLUM, B.S., Columbia, 1926; M.S., 1927. The accounting problems underlying the adjustment of merchandise losses. 1942. *Columbia*.
- CHARLES P. SLATER, B.S., Illinois, 1928; M.S., 1936. Divergencies in the accounting concepts of cost. 1942. *Illinois*.
- JOHN HENRY SMITH, A.B., Iowa State Teachers, 1935; M.B.A., Chicago, 1939. The general problem of deflation in analyses of economic series. 1941. *Chicago*.
- VICTOR EARLE SMITH, Ph.D., Northwestern, 1940. An application and critique of certain methods for the determination of a statistical production function for the Canadian automobile industry, 1917-1930. 1940. *Northwestern*. Accepted.
- WILLIAM JOSEPH VATTER, B.S., Miami, 1934; M.B.A., Chicago, 1937. An application of measurement theory to accounting procedures. 1941. *Chicago*.
- HERSCHEL LEE WALDRON, A.B., Hendrix, 1924; S.M., Oklahoma Agricultural and Mechanical College, 1932; S.B., Central State Teachers, 1938. State supervision of municipal accounting. 1941. *Chicago*.
- HAROLD H. WEIN, B.S.S., College of the City of New York, 1936; A.M., Columbia, 1939. Reliability of statistical formulae. 1942. *Columbia*.

Business Cycles and Fluctuations

- CLAY J. ANDERSON, Ph.D., Michigan, 1941. Economic stabilization by means of public works: a historical view. Accepted.
- GEORGE LELAND BACH, Ph.D., Chicago, 1940. Price level stabilization: some theoretical and practical considerations. Accepted.
- PAUL BARNETT, Ph.D., Chicago, 1940. Business cycle theory in the United States from 1860 to 1900. Accepted.
- ROLAND BUFORD BRANDIS, JR., A.B., Richmond, 1937; A.M., Duke, 1939. War and prices. 1942. *Duke*.
- COURTNEY C. BROWN, B.S., Dartmouth, 1926. Liquidity and instability. *Columbia*. Accepted. (Columbia University Press.)
- WESLEY C. CLARK, A.B., Marietta (Ohio), 1930; M.A., Pennsylvania, 1938. The effects of economic changes on a president's popularity. 1942. *Pennsylvania*.
- SHERWOOD MONROE FINE, A.B., New York, 1936; A.M., Columbia, 1937. Compensatory spending policy and business activity. 1942. *Columbia*.
- JOHN MITCHELL FIRESTONE, B.S., College of the City of New York, 1930; M.B.A., 1933. A statistical analysis of cyclical behavior of federal revenues. 1941. *Columbia*.
- SHAN-KWEI FONG, B.S., Chiao-Tung, 1936; A.M., Harvard, 1938. International aspects of business cycles. 1941. *Harvard*.
- JOHN WADSWORTH GUNTER, B.S., North Carolina, 1935; A.M. 1939. A factor analysis of wholesale commodity price movements. 1942. *North Carolina*.

- GERTRUDE GUYTON, A.B., Colorado State College of Education, 1940. Business annals of Baltimore and Maryland, 1943. *Johns Hopkins*.
- BERTON CROSBY HALLOWELL, A.B., Wesleyan, 1936; A.M., 1938. International capital movements and business fluctuations. 1941. *Princeton*.
- EVAN B. HANNAY, A.B., Washington, 1936; A.M., Stanford, 1937. The rôle of machine-tool industry in business cycles. 1942. *Princeton*.
- RALPH MURRAY HAVENS, Ph.D., Duke, 1941. Laissez-faire in the United States during nineteenth century depressions. 1941. *Duke*. Accepted.
- HAROLD BURKE HORTON, B.B.A., Texas, 1937; M.B.A., 1938. The relationship between agricultural commodity price fluctuations and business cycles in the United States (1918-1939). 1944. *Columbia*.
- CHIANG HSIEH, B.A., Yenching, 1934; A.M., Harvard, 1938. The downturn of 1929. An attempt at verification of some leading cycle theories. 1941. *Harvard*.
- AUGUST W. KNAUBER, B.S., City College of New York, 1939; M.S., 1940. The economic implications of deficit financing. 1942. *Fordham*.
- FRANK LEROY KIDNER, A.B., California, 1938. A study of California business cycles, 1918-1938. 1941. *Columbia*.
- SVEND LAURSEN, Stud., U. of Copenhagen, 1930-36; London School of Economics, 1938. International propagation of business cycles. 1941. *Harvard*.
- DUNBAR SIMMS MCLAURIN, A.B., Southwestern College, 1937; A.M., Kansas, 1938. An examination of the genesis and nature of recent recovery and reform proposals. 1941. *Illinois*.
- THOMAS HAYES MOORE, B.S., Roanoke, 1938. The position of economists concerning wage changes at various stages of conjecture. 1942. *Duke*.
- ERNEST L. OSBORNE, Ph.B., Yale, 1912; B.S., Massachusetts Institute of Technology, 1914. South American trade cycles. 1944. *Columbia*.
- ALAN POPE, A.B., Columbia, 1935. The problems of causation in business cycle analysis. 1942. *Columbia*.
- WILLIAM W. REMINGTON, A.B., Dartmouth, 1939. The economic effects of deficit spending. 1942. *Columbia*.
- SONIA D. RISOFF, M.A., Columbia, 1937. Problems of economic stability. 1943. *Columbia*.
- HAROLD W. SASSÉ, B.S., New York, 1924; A.M., Columbia, 1928. Toward an understanding of business forecasting. 1943. *Columbia*.
- JOSEPH CHARLES SEIBERT, B.S., Miami, 1932; M.B.A., Northwestern, 1933. Price behavior and industrial activity. 1941. *Northwestern*.
- JULIUS SHISHKIN, A.B., Rutgers, 1934; A.M., 1936. The relation between seasonal and cyclical movements. 1942. *Columbia*.
- THOMAS HARVEY SMITH, A.B., Columbia, 1922; A.M., Harvard, 1924. Economic recovery in the United States and Great Britain during the 1930's—a comparative study. 1941. *Wisconsin*. Completed.
- ERNST W. SWANSON, Ph.D., Chicago, 1940. Scandinavian business cycle theory, 1898-1936. Accepted.
- HENRY HILGARD VILLARD, A.B., Yale, 1932; B.A., Cambridge, 1934. Deficit spending and the national income. *Columbia*. (Published by Farrar and Rinehart.)
- DAN RUTLEDGE VINING, B.B.A., Texas, 1931; A.M., 1935. The regional transmission of economic disturbances. 1941. *Chicago*.
- ROBERT JAMES WEST, B.S., Illinois, 1931; M.S., 1933; B.S., 1934. The relationship between business cycles in Great Britain and the United States as indicated by ratios of moving averages. 1941. *Pittsburgh*.
- CHARLES ASHLEY WRIGHT, A.B., Princeton, 1928; A.M., 1929. Central bank policy and economic stability, 1943. *Columbia*.

Public Finance; Fiscal Policy; Taxation

- MARVIN A. BACON, A.B., Michigan, 1929; A.M., Ohio State, 1931. The shifting of the gasoline tax and its effect on gasoline consumption: an inductive study. 1941. *Michigan*.
- DOROTHY BEAL, A.B., Chicago, 1937. Federal lending, 1916-40. 1941. *Columbia*.

- CECIL NATHANIEL BRENNAN, B.Com., British Columbia, 1933; M.S., Columbia, 1939. Taxation of corporate income in the British Empire. 1946. *Columbia*.
- ROYAL JAY BRIGGS, B.S., Knox, 1931; M.A., Illinois, 1933. Direct and indirect taxation in Missouri fiscal system. 1942. *Missouri*.
- R. JEAN BROWNLEE, B.S., Philadelphia Normal, 1934; M.A., Pennsylvania, 1936. Income taxation in Delaware. 1941. *Pennsylvania*.
- HARRY N. BULOW, B.S., New York; M.B.A. Analysis of municipal reserve bonds. 1941. *New York*.
- JESSE VERLYN BURKHEAD, A.B., Carleton, 1938; A.M., Wisconsin, 1939. Public utility taxation in Wisconsin. 1942. *Wisconsin*.
- KEITH BUTTERS, A.B., Chicago, 1937; A.M., Harvard, 1939. Federal taxation of corporate profits. 1941. *Harvard*.
- REYNOLD E. CARLSON, S.B., Northwestern, 1936; A.M., 1937. Fiscal capacity of local government. 1942. *Harvard*.
- YAU PIK CHAU, A.B., Lingnan, 1929; A.M., Michigan, 1938. The taxation reform of Chinese national government in decade 1927-37. 1941. *Chicago*.
- JEROME B. COHEN, B.S.S., College of the City of New York, 1934; A.M., Columbia, 1935. The finances of the City of New York, 1929-1940. 1942. *Columbia*.
- MARSHALL R. COLBERG, A.B., Chicago, 1934; A.M., 1938. The theory of tax shifting. 1942. *Michigan*.
- KENNETH J. CURRAN, Ph.D., Princeton, 1941. The history of the taxation of excess profits by the United States. Accepted.
- ALBERT CARL DAMBRUN, Ph.D., Princeton, 1941. A survey of the theory and technique of railroad taxation in the United States. Accepted.
- JAMES B. ECKERT, A.B., Oberlin, 1934; M.A., Cincinnati, 1936. The Reconstruction Finance Corporation. 1941. *Cornell*.
- MARION HAMILTON GILLIM, A.B., Mt. Holyoke, 1930; A.M., Columbia, 1938. Excess profits taxation and the price level. 1942. *Columbia*.
- RICHARD BENJAMIN GOODE, A.B., Baylor, 1937; A.M., Kentucky, 1939. The corporate institution and the tax problem. 1943. *Wisconsin*.
- ARCHIE BRISTOL GOODMAN, S.B., Oklahoma Agricultural and Mechanical, 1936; A.M., Wisconsin, 1939. Property tax administration in Wisconsin. 1942. *Wisconsin*.
- ANDREW GRAJDANZEV, Andrei, M. of Economics, Harbin, 1932; M.A., California, 1938. Financing of war by Japan. 1942. *Columbia*.
- ARTHUR GWYNN GRIFFIN, A.B., North Carolina, 1921; A.M., 1923. Financing old age annuities and assistance under social security legislation. 1942. *North Carolina*.
- FRANKLIN P. HALL, A.B., Oregon, 1929. Indiana gross income tax. 1942. *Wisconsin*.
- FRANK ALLAN HANNA, A.B., Oklahoma, 1933; Ph.M., Wisconsin, 1934. A critical analysis of Wisconsin individual income tax statistics. 1941. *Wisconsin*. Completed.
- HERBERT WALTER HARGREAVES, A.B., Nevada, 1935; A.M., Clark, 1936. Federal fiscal policy and the guaranteed debt, 1932-1940. *Duke*. Accepted.
- CLEMENT LOWELL HARRISS, B.D., Harvard, 1934. Gift taxation in the United States. *Columbia*. Accepted. (American Council on Public Affairs.)
- JOHN HART, A.B., Ohio State, 1931; A.M., 1932. Taxation of business corporations in Ohio. *Ohio State*.
- WALTER WOLFGANG HELLER, A.B., Oberlin, 1935; A.M., Wisconsin, 1938. State income tax administration. 1941. *Wisconsin*.
- VERNON L. ISRAELSON, A.B., Utah State Agricultural, 1929; A.M., Brigham Young, 1937. Social and economic aspects of homestead tax exemption. 1941. *Wisconsin*.
- JAMES RUDOLPH KAY, B.A., Birmingham-Southern, 1938. Administrative aspects of sales taxes, with special reference to the State of Alabama. 1942. *Virginia*.
- HERBERT ELIAS KLARMAN, A.B., Columbia, 1939; A.M., Wisconsin, 1941. Excess and war profits taxes. 1942. *Wisconsin*.
- RICHARD WADSWORTH LINDHOLM, B.A., Gustavus Adolphus, 1935; M.A., Minnesota, 1938. Franchise as the basis of taxing the corporation. 1942. *Texas*.
- OSCAR FREDERICK LITTERER, A.B., Cornell, 1929; A.M., Minnesota, 1932. The treatment of capital gains and losses in the income tax. 1941. *Wisconsin*.

- JOSEPH ORACE MCCLINTIC, A.B., Central College (Missouri), 1924; A.M., Missouri, 1937. Migration to escape taxation with special reference to individual income and inheritance tax burdens. 1940. *Wisconsin*. Completed.
- MATILDA L. MILNE, A.B., Wellesley; M.B.A., New York. Defense borrowing and the control of credit. 1942. *New York*.
- FLOYD WAYNE MOORE, A.B., Albion, 1910; M.A., Michigan, 1922. Kalamazoo, Michigan: the evolution of a modern city free from general fund indebtedness. 1941. *Northwestern*. Accepted.
- ALFRED NORMAN NYBROTEN, A.B., Platteville State Teachers, 1935. Tax assessment and equalization with special reference to the Wisconsin system. 1941. *Wisconsin*.
- MARTIN DUDLEY PALM, B.A., Oklahoma, 1936; M.A., 1938. Some aspects of government financial policy. 1942. *Texas*.
- J. R. PETRIE, B.A., New Brunswick, 1930; M.A., 1932. Canadian finance. 1941. *McGill*.
- LELAND JAMES PRITCHARD, B.A., Cornell, 1929; M.A., Syracuse, 1930. The short-run shifting of unit taxes with special reference to the processing taxes levied under the agricultural adjustment act. 1941. *Illinois*.
- WILLIE HAROLD READ, B.S.C., Tennessee, 1930; M.B.A., Northwestern, 1935. A plan for state supervision of local finance in Tennessee. 1942. *Northwestern*.
- THOMAS JESSE REYNOLDS, A.B., Swarthmore, 1933; A.M., Columbia, 1935. Cyclical change in property taxation. 1942. *Columbia*.
- SAMUEL ROSENBERG, B.S., Columbia, 1931; A.M., 1933. Tax exemptions of new housing. 1942. *Columbia*.
- DANIEL SCHEINMAN, A.B., Wisconsin, 1933. The division of the costs of unemployment relief in Massachusetts, Illinois, and Pennsylvania. 1941. *Chicago*.
- HAROLD ROBERT SPIEGEL, A.B., Albion, 1932; A.M., Tufts, 1934. An analysis of the fiscal program of the federal government in recent years. 1941. *Chicago*.
- PAUL JOHNSTONE STRAYER, A.B., Swarthmore, 1935; A.M., Columbia, 1935. The taxation of small incomes. *Columbia*. Accepted. (The Ronald Press.)
- ORBA FOREST TRAYLOR, A.B., Western State Teachers, 1930; M.A., Kentucky, 1932. Taxation of alcoholic beverages with special reference to Kentucky. 1942. *Kentucky*.
- CLAUDE J. WHITLOW, Ph.D., Michigan, 1941. The property tax in South Dakota. Accepted.

Money and Banking; Short-Term Credit

- WILLIAM JOSEPH ABBOTT, JR., A.B., Washington University, 1926; M.S.B.A., 1939. The evolution of the utility of banking. *Washington University*. Completed.
- WILLIAM EDWARD ALLEY, A.M., DePauw, 1926; M.A., Illinois, 1932. The nationalization of central banks with particular reference to developments in Canada, England, and the United States. 1941. *Illinois*.
- DAVID HARRY ANGNEY, A.B., Idaho, 1932; A.M., Brown, 1934. The economics of unit commercial banking and bank unification in the United States, 1928-40. 1941. *Brown*.
- PAUL ARNOLDS-PATRON, B.S., New York; M.B.A., New York. The theory and practice of commercial bank reserves in the United States. 1942. *New York*.
- WESLEY CHARLES BALLAINE, Ph.D., Chicago, 1940. Development and economic aspects of the laws regulating investments of mutual savings banks. Accepted.
- WYLLIS BANDLER, A.B., Columbia, 1937. The nature, operation and over-all control of the modern money economy. 1941. *Columbia*.
- MARCUS BEAN, A.B., Brigham Young, 1925; M.S., Columbia, 1928. Government policy in banking and credit since 1929. 1943. *Columbia*.
- EDWARD G. BENNION, A.B., California, 1930; A.M., 1934. Changing member-bank requirements. 1941. *Harvard*.
- RICHARD CARLTON BERNHARD, B.A., Reed, 1932; M.Sc., London School of Economics and Political Science, 1936. A critique of official notions about capital and their influence on monetary policies. 1940. *Northwestern*. Accepted.
- MANOAH BIALIK, Ph.D., Columbia, 1940. The coöperative credit movement in Palestine. Accepted. (Published by Edwards Brothers, Ann Arbor, Michigan.)

- EDWARD BISHARA, B.C.S., New York; M.C.S., New York. Credit analysis. 1942. *New York*.
- J. RUSSELL BONER, Illinois, 1928; A.M., 1937. Background, extent, and consequences of federalization of savings and loan associations. 1942. *Illinois*.
- BRANT BONNER, Ph.D., Chicago, 1931. An analysis of southern banking statistics and facilities. 1942. *North Carolina*.
- WILBER CLARENCE BOTHWELL, A.B., Drury, 1931; A.M., Washington University, 1933. The Federal Reserve Bank of St. Louis. *Washington University*. Completed.
- D. R. CAWTHORNE, Ph.D., Ohio State, 1940. Bank credit and capital accumulation. Accepted.
- LINCOLN H. CLARK, Ph. D., Chicago, 1940. Credit unions in the United States. Accepted.
- CHARLES G. COIT, A.B., Michigan, 1921; M.A., Columbia, 1929. History of the Federal Reserve Bank of Richmond. *Columbia*. Accepted. (Columbia University Press.)
- LEONARD T. CONWAY, A.B., Bethany, 1929; M.B.A., Pennsylvania, 1931. The international position of the London money market. 1941. *Pennsylvania*.
- JOSEPH DAVID COPPOCK, A.B., Swarthmore, 1933; A.M., Columbia, 1934. Government agencies of consumer instalment credit. *Columbia*. Accepted. (National Bureau of Economic Research.)
- C. A. COSTANZO, B.A., Birmingham-Southern, 1937; M.A., Virginia, 1940. Recent developments in Italian monetary policy. 1941. *Virginia*. Accepted.
- ELIZABETH WHITBECK DONOVAN, A.B., North Carolina, 1934; A.M., 1936. Banking in North Carolina since the Civil War. 1942. *North Carolina*.
- PHIL S. ECKERT, B.S., Ohio State, 1934; M.S., 1936. Short-term farm credit in Ohio. 1941. *Ohio State*.
- JAMES L. FITZGERALD, B.A., Union; M.A., Fordham. Relation between commercial banking and small enterprise. 1942. *Fordham*.
- WALTER ATHERTON FOY, Ph.B., Yale, 1925; M.B.A., Northwestern, 1934. Corporation bond price and fluctuations and commercial bank investment policy. 1940. *Northwestern*. Accepted.
- FRED GARLOCK, A.B., Iowa, 1920; A.M., Columbia, 1921. Country banks in Wisconsin during the depression. *Columbia*. Accepted. (United States Department of Agriculture.)
- WILLIAM GILOANE. Credit facilities for farmers' coöperatives. 1941. *Johns Hopkins*.
- RICHARD MURPHEY GOODWIN, A.B., Harvard, 1934; B.A., Oxford, 1936; B.Litt., Oxford, 1937; A.M., Harvard, 1939. Studies in money: England and Wales, 1919 to 1938. 1941. *Harvard*.
- ALBERT GRIFFIN, B.S., Pennsylvania, 1930; M.A., 1933. Florida land booms and banking. 1942. *Pennsylvania*.
- JOEL W. C. HARPER, B.S., Missouri, 1922; A.M., 1927. Scripp and other forms of local money. 1941. *Chicago*.
- GABRIEL SYLFEST HAUGE, A.B., Concordia, 1935; A.M., Harvard, 1938. Deficit financing and the banking system. *Harvard*.
- HERVEY HOTCHKISS, B.S., Buffalo; M.A., Cornell. The guaranty of bank deposits. 1942. *New York*.
- ANNE ELIZABETH HULSE, B.S., New York, 1926; M.A., 1927. Bankers' balances: theory and practice of commercial bank reserves in the United States. 1942. *Columbia*.
- BAEN ELMER LEE, A.M., Chicago, 1921; M.B.A., New York, 1922. Modern banking reforms in China. 1940. *Columbia*.
- JOSEPH E. LOFTUS, A.B., Notre Dame, 1937. The financial structure of commercial banks. 1941. *Johns Hopkins*.
- SISTER M. GRACE MADELEINE, A.B., Immaculate, 1929; A.M., Pennsylvania, 1936. Monetary and banking theories of Jacksonian democracy. 1942. *Pennsylvania*.
- JOHN GILDER MCGREW, A.B., West Virginia Institute of Technology, 1932; M.A., West Virginia, 1937. The scope and significance of monetary and banking investigations in the United States and Great Britain since 1900. 1941. *Illinois*.
- REV. BERNARD ALOYSIUS McLAUGHLIN, O.P., A.B., Holy Cross, 1916; A.M., Catholic, 1924. Financial trends of commercial banks of the state of Rhode Island, 1915-1937. *Catholic*. Completed.

- HELEN J. MELLON, A.B., Brooklyn, 1935; A.M., Columbia, 1936. Development of qualitative credit theory. *Columbia*. Accepted. (The American Council on Public Affairs.)
- FREDERICK WILLIAM MUELLER, JR., B.A., Minnesota, 1925; M.B.A., Northwestern, 1933. A study of the behavior of the earning assets of forty-one banks in the Chicago area. 1942. *Northwestern*.
- GUY EMERSON NOYES, B.A., Missouri, 1934. Investment policy of mutual savings banks. 1941. *Yale*.
- JAMES JOHN O'LEARY, A.B., Wesleyan, 1936; A.M., 1937. Federal deposit insurance. 1941. *Duke*. Accepted.
- RAYMOND J. PENN, E.B., River Falls State Teachers, 1932. South Dakota rural credit department. *Wisconsin*. Completed.
- L. C. PERARA, B.S., Haverford; M.B.A., Harvard. Current banking developments in Great Britain and the United States. 1942. *New York*.
- WILLIAM TAYLOR PHILLIPS, A.B., Allegheny, 1931. History and application of the office of the comptroller of the currency. 1941. *Cornell*.
- WILLIAM HAROLD POOLE, A.B., Alberta, 1932; A.M., 1934. The supply and control of money in Canada. 1941. *Chicago*.
- MARJORIE D. POSTON, Ph.D., Ohio State, 1941. Bank deposits and the supply of money. Accepted.
- JULIUS WAYNE REITZ, S.B., Colorado State, 1930; S.M., Illinois, 1935. A study of production credit in Florida citrus and vegetable areas. *Wisconsin*. Completed.
- ROBERT V. ROSA, A.B., Michigan, 1939; A.M., 1940. The monetary powers of some federal agencies outside the Federal Reserve System. 1942. *Michigan*.
- ALEXANDER MOSES ROSENSON, B.S., California, 1937; A.M., 1938. The Argentine banking system since 1935. 1942. *Chicago*.
- IRVING G. RUDD, B.S., Harvard, 1929; A.M., Columbia, 1931. Investment operations of commercial banks in the United States, 1923-1936. 1942. *Columbia*.
- LOUISE SISSMAN, A.B., Cornell, 1928. Development of the postal savings system. 1942. *Columbia*.
- ELI SHAPIRO, A.B., Brooklyn, 1936; A.M., Columbia, 1937. Credit union movement in Wisconsin: a statistical study. 1942. *Columbia*.
- RICHARD E. SLITOR, Ph.D., Harvard, 1940. Some aspects of the problem of excess reserves, 1931-39. Accepted.
- CYLVIA AARON SORKIN, B.S.B.A., Washington University, 1935; M.S.B.A., 1936. Banking theories of John Maynard Keynes. *Washington University*. Completed.
- KENNETH M. SPANG, A.B., Dartmouth, 1933; A.M., Columbia, 1936. Money: as a store of value. 1942. *Columbia*.
- SAUL R. SROLE, S.B., Harvard, 1936. The liquidity problem in American commercial banking. 1942. *Harvard*.
- GUNTHER STEINBERG, A.B., Iowa State Teachers, 1936; M.B.A., Chicago, 1938. A statistical analysis of the seasonal and cyclical behavior of the assets and liabilities of banks, and related economic time series. 1941. *Chicago*.
- RICHARD TULLOSS STEVENS, A.B., Ohio State, 1926; M.A., 1931. Economic implications of the changing character of bank assets. 1942. *Ohio State*.
- FRANK J. TAMBY, B.C.C., New York, 1931. Federal Reserve Bank of Philadelphia. 1942. *Columbia*.
- ALBERT STETSON THOMAS, B.S., Massachusetts State, 1937; M.A., Wesleyan, 1938. Gold and the Federal Reserve System. 1941. *Columbia*.
- HURSHIEL UNDERHILL, B.S., Oklahoma, 1927; M.B.A., Kansas, 1930. The Federal Reserve Bank of Kansas City. 1942. *Columbia*.
- PROCOPIO VICTORIANO, B.B.A., Washington, 1930; M.B.A., 1933. Money and banking in the Philippine Islands. 1942. *Columbia*.
- ROBERT C. WEEMS, JR., B.S., Mississippi State, 1931; M.B.A., Northwestern, 1934. Principles and practices followed by small banks in utilizing funds available for investment. 1942. *Columbia*.
- J. BROOKE WILLIS, A.B., Dartmouth, 1930; B.S., Columbia, 1932; M.S., 1933. The func-

tions of the commercial banking system—with particular attention to its use as a source of credit for capital purposes. 1942. *Columbia*.

International Trade, Finance and Economic Policy

- RAYMOND KING ADAMSON, A.B., Wisconsin, 1932. A comparison of the determinants of foreign exchange rates and their effects under free and managed foreign exchange systems. 1941. *Wisconsin*. Completed.
- KATHRYN DERBY TOOMEY BARTIMO, B.S., State Teachers, Worcester, 1937; A.M., Clark, 1938. A study of isolationist sentiment in the United States at the time of the World War. 1941. *Clark*.
- W. T. M. BEALE, A.B., Princeton, 1931; M.B.A., Pennsylvania, 1933. British protective policy 1942. *Pennsylvania*.
- SAMUEL EDWARD BRADEN, A.B., Oklahoma, 1932; A.M., Wisconsin, 1935. Difficulties of international trade under managed paper standards. 1941. *Wisconsin*. Completed.
- CHARLES B. BREAM, A.B., Midland, 1936; A.M., Chicago, 1939. Relations of the United States and Latin America in respect to the munitions trade. 1941. *Chicago*.
- SAMUEL J. DENNIS, S.B., Dartmouth, 1928; A.M., Harvard, 1939. Measure of the volume of international trade. 1942. *Harvard*.
- JAMES GILBERT EVANS, A.B., Simpson, 1921; A.M., Illinois, 1924. United States agricultural export dumping policy. 1941. *Chicago*.
- WILLIAM T. R. FOX, Ph.D., Chicago, 1940. Some effects upon international law of the governmentalization of private enterprise. Accepted.
- CHARLES E. GALBREATH, Ph.D., Cornell. 1941. The sterling area. Accepted.
- WYTZE GORTER, A.B., Stanford, 1936. An attempted verification of certain international trade theories. 1942. *Stanford*.
- J. E. L. GRAHAM, B.A., Toronto, 1936; B.A., Oxford, 1938; B.Lit., Oxford, 1939. Basis of Canadian international exchange. *Toronto*.
- W. LAWRENCE HEBBARD, B.S., Northern State Teachers, 1934; A.M., Michigan, 1935. International aspects of national policies relating to capital accumulation. 1942. *Michigan*.
- VICTOR CRAWFORD HECK, B.S., California, 1936; M.A., 1937. Anglo-American-German trade relations in Mexico in the post-war period. 1942. *Cornell*.
- HENRY IRVIN JORGENSEN, A.B., Stanford, 1937; A.M., Columbia, 1940. German trade rivalries in Latin America, 1930-1940. *Columbia*.
- ALFRED EDWARD KAHN, B.A., New York, 1936; M.A., 1937. Effects of the international position of Great Britain, 1919-1939. 1941. *Yale*.
- CARL JONAS KREIDER, Ph.D., Princeton, 1941. The Anglo-American trade agreement. Accepted.
- J. EDWARD LUNDY, A.B., Iowa State, 1936. The theory of international values. 1941. *Princeton*.
- WILLIAM MCALEER, A.B., Buffalo, 1936. America's interests in the unconditional most favored nation policy. 1941. *Clark*.
- WILFRED MALENBAUM, A.B., Harvard, 1934; A.M., 1935. Equilibrating factors in the world wheat market. 1941. *Harvard*.
- JESSIE ASHWORTH MILLER, Ph.D., Clark, 1940. Sino-American relations, 1906-1913. Accepted.
- AUSTIN DE LA SALLE MURPHY, A.B., St. Francis, 1938; M.A., Fordham, 1940. The problems and possible procedures of transition from international currency control to a system of free money exchange. 1942. *Fordham*.
- LOWELL MASON PUMPHREY, Ph.D., Princeton, 1941. The British exchange equalization account, 1932-1939. Accepted.
- JOSEPH REED ROUTTEN, B.S., Mississippi State, 1912; M.A., George Washington, 1935. German interest in Latin America prior to the World War, 1898-1914. 1941. *American*.
- VIRGIL SALERA, B.S., California, 1935; M.A., 1936. Exchange control and the Argentine market. *Columbia*. Accepted. (Published as No. 485 in *Columbia Studies in History, Economics, and Public Law*.)

- ROBERT SAUNDERS, B.B.A., Boston; M.C.S., New York. The materials for a study of British foreign investments. *New York*.
- RALPH ELBERTON SMITH, A.B., Wooster, 1935. The valuation of imports in the United States: a study in tariff administration. 1941. *Chicago*.
- EDWARD D. W. SPINGARN, Ph.D., Harvard, 1940. Equilibrium analysis and international trade. Accepted.
- MARVIN MEYER VAN STOCK, M.B.A., Chicago, 1939. German methods in international trade and the structure of American foreign commerce. 1941. *Chicago*.
- F. J. WESTOCOTT, B.A., Brandon, 1925. The tariff in the Canadian economy. *Toronto*.
- THOMAS F. WIESEN, B.S., Texas Agricultural and Mechanical, 1920; M.B.A., Pennsylvania, 1935. Japanese competition in the foreign trade markets of the United States, 1942. *Pennsylvania*.

Business Finance; Insurance; Investments; Securities Markets

- H. H. BENEKE, Ph.D., Ohio State, 1940. Corporate stock characteristics. Accepted.
- FRANCIS JOSEPH CALKINS, A.B., Loyola, 1932; A.M., 1933. Some aspects of the earnings capitalization theory of stock prices. 1942. *Northwestern*.
- CHARLES CONVERSE CENTER, S.B., Knox, 1932; A.M., Wisconsin, 1938. Private and social insurance: a comparative analysis of their theories and methods. 1942. *Wisconsin*.
- SHING LEUNG CHAU. A study of operating profits and of profits resulting from price changes. 1941. *Chicago*.
- HOMER V. CHERRINGTON, Ph.D., Harvard, 1940. The securities act of 1933. Accepted.
- CLYDE JULIAN CROBAUGH, A.B., Stanford, 1920; A.M., 1921. Cost comparisons and trends in life insurance. 1941. *Pittsburgh*.
- THOMAS F. DEBNAM, B.S., Virginia, 1923; M.S., 1928. Corporate management and the taxation of stockholders with respect to the undistributed earnings of corporations. 1941. *Chicago*.
- CARL T. DEVINE, Ph.D., Michigan, 1940. Inventory valuation and business income. Accepted.
- LUCILE DERRICK, B.S., Eastern Kentucky State Teachers, 1931; A.M., Peabody, 1934. Tax exemption and the yields from investment. 1941. *Chicago*.
- JACK B. DONIS, A.B., Chicago, 1938; M.B.A., Peabody, 1939. Corporate promotion and reorganization in subnormal business. 1941. *Chicago*.
- ALLEN B. EDWARDS, B.A., Centre, 1935; M.A., Duke, 1939. Investment policies of major life insurance companies. 1942. *Virginia*.
- RAYMOND EINHORN, B.S., Florida, 1935; M.S., Illinois, 1937. Background of financial policy in the declaration of dividends. *Illinois*.
- DONALD J. EMBLEN, A.B., Ohio, 1932; M.B.A., Pennsylvania, 1935. Competitive bidding for corporate issues. 1942. *Columbia*.
- RAYMOND W. ESORTHY, B.S., Illinois, 1929; M.S., 1930. An historical view of the accounting aspects of the securities and exchange legislation of 1933-1934. 1942. *Illinois*.
- PAUL FRANCIS GEREN, A.B., Baylor, 1936; A.M., Louisiana State, 1937; A.M., Harvard, 1940. An analysis of life insurance savings in the American economy. 1941. *Harvard*.
- MORTIMER GLEESON, B.B.A., City College of New York; M.B.A., New York. Securities of air transport companies. 1942. *New York*.
- LOUIS FREDERICK HAMPEL, B.S., Akron, 1930; M.B.A., Northwestern, 1931. Some supply and demand factors in high grade bond yields. 1942. *Northwestern*.
- NORMAN S. HEANEY, B.S., Johns Hopkins, 1934. The public trustee. 1941. *Johns Hopkins*.
- CHARLES HOUSTON, A.B., Drury; M.A., Clark. An investment study of corporate income bonds. *New York*.
- L. B. JACK, B.A., B.C., 1932; B.A., Oxford, 1935. Insurance investments. 1942. *McGill*.
- RICHARD B. JOHNSON, B.A., Texas, 1934; M.A., 1936. The life insurance reserve and its effect upon the community. 1942. *Texas*.
- CLIFFORD DOUGLAS JACOBS, Ph.B., Chicago, 1921. Recent tendencies in long-term corporate finance. 1941. *Chicago*.

- ANNA JACOBSON (SCHWARTS), A.B., Barnard, 1934; A.M., Columbia, 1935. British share prices and joint stock enterprise. 1942. *Columbia*.
- ACIS JENKINSON, 3RD, B.S., Pennsylvania, 1935; M.A., 1937. Factors involved in measuring the amount of life insurance to be carried on the life of an individual for business purposes. 1942. *Pennsylvania*.
- LOUIS F. KACMARYNSKI, A.B., Buena Vista; A.M., Iowa State. The securities act of 1933 in theory and practice. 1941. *New York*.
- CLIFFORD KAWULITSKI, B.S., Rutgers. Securities of companies in the building industries. 1942. *New York*.
- ALBERT RALPH KOCH, A.B., Oberlin, 1936; A.M., Columbia, 1937. Financial requirements of large business corporations. 1942. *Columbia*.
- GEORGE KOHEL, B.S., Columbia, 1936; M.S., 1937. Corporate reorganization and the financial plan. 1942. *Columbia*.
- ARNOLD LAFORCE, B.S., Middlebury; M.B.A., New York. Operation of syndicates in the distribution of securities. 1942. *New York*.
- JOHN A. LEAVITT, B.S., Oklahoma, 1936; M.S., Columbia, 1937. Voting trust. *Columbia*. Accepted.
- ARTHUR LESSER, M.E., Stevens Institute of Technology; M.B.A., New York. Representation of corporate security holders. 1942. *New York*.
- JOHN A. LOFTUS, Ph.D., Johns Hopkins, 1940. An analysis of American management investment trust experience. Accepted.
- ALBERT H. MARVILL, B.S., Pennsylvania. Priorities in corporate reorganization. 1942. *New York*.
- EDWARD THEODORE MCCORMICK, B.S., Arizona, 1931; M.S., California, 1933. An analysis of the securities act of 1933. *Duke*. Accepted.
- JOHN HOLMES MYERS, B.S., Northwestern, 1937; M.B.A., 1938. The effect on the prices of financing corporate expansion by issues of securities. 1942. *Northwestern*.
- JAMES J. O'BRIEN, B.S., New York. Securities of fire insurance companies. 1942. *New York*.
- HENRY T. OWEN, B.S., Furman; A.M., Louisiana State. Loans secured by life insurance policies. 1942. *New York*.
- LEO F. PHILLIPS, B.S., Washington and Jefferson, 1938. Investment practice: a study of the estates probated in the Orphans Court of Baltimore. 1941. *Johns Hopkins*.
- WILBUR K. PIERPONT, A.B., Central State Teachers, 1934; M.B.A., Michigan, 1938. Accounting for investors in the administration of the Securities and Exchange Commission. 1942. *Michigan*.
- WILLIAM A. SCHRAG, B.S., Temple; M.B.A., Harvard. The financial policies of the American rayon industry. 1942. *New York*.
- ROBERT LYMAN SMITH, A.B., Oberlin, 1933; A.M., 1934. Fixed asset valuations and the securities act of 1933. 1941. *Cornell*.
- LEO SPURRIER, Ph.D., Chicago, 1940. Common stocks and bonds listed on the New York Stock Exchange as long-term investments. Accepted.
- JOHN WESLEY STERNBERG, B.A., DePauw, 1919. Disposition of funded debt of corporations undergoing reorganization, 1918-1938. 1942. *American*.
- RAYMOND VERNON, Ph.D., Columbia, 1941. The regulation of stock exchange members. Accepted. (Published by Columbia University Press.)
- PAUL FRANCIS WENDT, M.A., Columbia, 1935. The classification and experience of the customers of a typical New York Stock Exchange firm. *Columbia*. Accepted.
- JOHN B. WILLIAMS, Ph.D., Harvard, 1940. The theory of investment value. Accepted.
- A. C. WILT, B.S., Pennsylvania, 1925. A study of workmen's compensation carriers in Pennsylvania. 1942. *Pennsylvania*.

Public Control of Business; Public Administration

- GEORGE P. ADAMS, JR., A.B., Harvard, 1929. The scope and significance of governmental price control in wartime. 1940. *California*. Accepted.
- WILLIAM WAGER COOPER, A.B., Chicago, 1938. The economics of government corporations. 1944. *Columbia*.

- HARVEY T. DEINZER, A.B., Michigan, 1932; M.B.A., 1933. Government price fixing. 1944. *Michigan*.
- ISAAH FRANK, B.S.S., College of the City of New York, 1936; A.M., Columbia, 1938. War and the growth of industry. 1942. *Columbia*.
- RICHARD HELLMAN, A.B., Columbia, 1934. Regulation by government competition. 1942. *Columbia*.
- ROBERT W. JULY, A.B., Columbia, 1938; A.M., 1939. Government regulation of the beef trust. *Columbia*.
- JOHN H. KLINGENFELD, B.A., Amherst, 1913. The Walsh-Healy act: a case study in public administration. 1942. *American*.
- EASTIN NELSON, B.A., Stephen F. Austin State Teachers, 1928; M.A., Texas, 1929. Social control of business in Panama. 1942. *Texas*.
- JIM E. REESE, B.A., Texas, 1933; M.A., 1935. Economic effects of the American patent system. 1942. *Texas*.
- GEDDES WILLIAM RUTHERFORD, B.A., Missouri, 1913; M.A., Harvard, 1916. Metropolitan problems of the District of Columbia. 1942. *American*.
- HERBERT F. STEPP, A.B., Berea, 1938; M.A., Virginia, 1940. Economic and administrative aspects of milk marketing in Virginia under the state milk commission. 1942. *Virginia*.
- MOLLIE STRUM, B.B.A., College of the City of New York; LL.B., Brooklyn Law School, 1938; M.S., Columbia, 1940. The effect of antitrust laws on the motion picture industry. 1942. *Columbia*.
- EDWIN HARTZEL STYRON, B.A., Texas, 1939; M.A., 1940. Government in business. 1942. *Texas*.
- WILLIAM E. THOMAS, JR., B.S., Monmouth, 1936; M.S., Illinois, 1937. Accounting as an aid to compliance with the Robinson-Patman act. 1941. *Illinois*.

Industrial Organization; Business Methods and Policies

- AMOS L. ARCHIBALD, A.B., California, 1936. A study of price fixing from the point of view of the effects of price rigidities. *California*.
- KENNETH A. BEGGS, B.A., Washington, 1935. The concept of capacity in industrial plants. 1942. *Stanford*.
- GEORGE DEWALT BIEBER, B.S., Franklin and Marshall, 1937; M.A., Pittsburgh, 1940. The competitive position of cotton and the other textile fibers. 1941. *Pittsburgh*.
- EDMUND DE SCHWEINITZ BRUNNER, A.B., Dartmouth, 1935. Price policies in the meat-packing industry. 1942. *Columbia*.
- PETER J. CLARK, B.C.S., New York; M.C.S. Monopoly and competition in the American paper industry. 1941. *New York*. Accepted.
- SIEGFRIED GARBUNY, Diplomvolkswirt, Berlin, 1936. The function of the large corporation under the fascist and democratic systems, with particular reference to Germany. 1942. *Columbia*.
- DONALD R. GARDNER, A.B., Sioux Falls, 1939; A.M., South Dakota, 1940. The expansion of corporations. 1943. *Johns Hopkins*.
- MAYNARD GERTLER, B.A., Queens, 1939. Problems of Canadian industrial organization. 1943. *Columbia*.
- RICHARD G. GETTELL, A.B., Amherst, 1933. Pluralistic competition with an illustrative case study of the rubber tire industry. 1940. *California*. Accepted.
- EDWARD CLAYBROOK GRIFFITH, A.B., Hampden-Sydney, 1936; M.A., Virginia, 1939. Some aspects of the economic relations between the tin plate, tin can, and canning industries in Virginia. 1940. *Virginia*. Accepted.
- WILLIAM T. HOGAN, B.S., Fordham, 1939; M.A., 1940. The effect of imposed price stabilization on the steel industry. 1943. *Fordham*.
- GEORGE B. HURFF, A.B., Pennsylvania, 1927. The locus of entrepreneurship in large corporations. 1941. *Pennsylvania*.
- LEONARD KAMSKY, B.S., Richmond, 1939. Economic control in the motion picture industry. 1943. *Johns Hopkins*.

- ALAN C. LANYON, B.S., Johns Hopkins, 1936. Anthracite capital and labor, 1925-1940. 1941. *Johns Hopkins*.
- KENNETH G. MATHESON, JR., Ph.D., Pennsylvania, 1940. Monopoly as a cause of price rigidity. Accepted.
- MAURICE MOONITZ, Ph.D., California, 1941. Obsolescence, industrial policy and the problem of economic stability. Accepted.
- ALFRED CLARENCE NEAL, A.B., California, 1934. The economic consequences of industrial concentration and their relation to public theory. 1941. *Brown*.
- ROGER S. NELSON, B.A., Yankton, 1935. Rigid prices in the construction industry. *California*.
- GEORGE M. POLLARD, A.B., George Washington, 1934; A.M., 1939. Cotton seed oil in the industrial complex. 1942. *Columbia*.
- ROY A. PREWITT, A.B., Missouri, 1937. Pipe lines in relation to the structure and control of the petroleum industry. 1942. *Cornell*.
- ROYAL H. RAY, A.B., DePauw, 1927; A.M., Wisconsin, 1935. Integration in the American newspaper industry. 1942. *Columbia*.
- EVAN OWEN ROBERTS, A.B., Wisconsin, 1929; A.M., 1938. Corporate procurement policy: its practice and economic implications. 1943. *Wisconsin*.
- MARK N. ROSENFELT, A.B., Harvard, 1933. The theory of corporate enterprise. 1942. *Harvard*.
- GEORGE ROBERT TERRY, C.E., Cincinnati, 1930; M.B.A., Northwestern, 1939. Marketing activities in the petroleum industry of the United States, with particular reference to the subject of price stabilization. 1942. *Northwestern*.
- GEORGE W. TOMLIN, JR., B.S., South Carolina, 1935. Monopoly as a cause of price rigidity. 1942. *Pennsylvania*.
- SIDNEY WEINTRAUB, Ph.D., New York, 1941. Monopoly and the economic system. Accepted.
- WALTER McCAMPBELL WOOD, A.B., King, 1929. The effect of coöperative purchasing under conditions of imperfect competition. 1942. *Virginia*.

Marketing; Domestic Trade

- PHILIP CALVIN ALBERTSON, A.B., College of Idaho, 1927; A.M., California, 1938. Some economic aspects of the theory and practice of marketing control under the California pro-rate act, with special reference to dried fruits. 1940. *California*. Accepted.
- RICHARD M. ALT, A.B., Harvard, 1932; A.M., 1940. Retail price policies and the consumer. *Harvard*.
- JEANETTE MARIE AMIDON, A.B., Puget Sound, 1935; A.M., 1937. Marketing of quick-frozen foods. 1941. *Chicago*.
- CARL TRISTAN ARLT, A.B., Colgate, 1933. Intra-state discriminatory barriers to trade. 1941. *Cornell*.
- EDWARD KNOX AUSTIN, A.B., Alabama, 1925; M.S., Columbia, 1927. Pre-testing of advertisements. 1943. *Columbia*.
- FRANCIS BABIONE, B.S., Miami, 1931; M.A., Ohio State, 1932. Economic and marketing aspects of functional discounts. 1942. *Ohio State*.
- HAROLD BRUSS BAKER, A.B., Heidelberg, 1931; B.A., Northwestern, 1932. Tobacco marketing coöperatives in the Miami Valley, Ohio. 1940. *Northwestern*. Accepted.
- GEORGE A. BALLENTINE, A.B., Colgate, 1922; M.B.A., Harvard, 1924. Quotas—their use in planning and controlling selling activities. 1943. *Columbia*.
- ROBERT D. W. BARTELS, Ph.D., Ohio State, 1941. The development of marketing theory. Accepted.
- GEORGE MAX BEAL, S.B., Utah State Agricultural; S.M., Wisconsin, 1938. Contractual relations between growers and cannerys in the sale of cash crops. 1942. *Wisconsin*.
- H. WAYNE BITTING, B.S., Illinois, 1933; M.S., Iowa State, 1937. The livestock market structure and its relation to price. 1942. *Minnesota*.
- HORACE BRIGHTBERRY BROWN, JR., B.S.C., Mississippi, 1931; M.B.A. Northwestern,

1932. The development and present status of the coöperative marketing of cotton in the state of Mississippi. 1941. *Northwestern*.
- W. K. BRYDEN, B. A., Toronto, 1937; Oxford, 1939; M.A., Toronto, 1940. Development of wholesale trade in Toronto. *Toronto*.
- PHILIP HALL COOMBS, A.B., Amherst, 1937. The causes, nature, and future of the price maintenance movement. 1941. *Chicago*.
- ELISABETH ARMOUR CURTISS, A.B., Wellesley, 1928; A.M., Columbia, 1930. The protection of consumer interests as the ostensible basis for market-restricting legislation. 1942. *Chicago*.
- E. O. DILLE, B.S., 1922; M.A., Ohio State, 1930. Knoxville, Tennessee, as a wholesale center. 1941. *Ohio State*.
- R. PARKER EASTWOOD, Ph.D., Columbia, 1941. The use of qualitative methods in the control of sales. Accepted. (Columbia University Press, 1941.)
- JAMES FEW, B.S., Ohio State, 1932; M.B.A., 1935. The negro in retailing. 1942. *Ohio State*.
- HAROLD A. FREY, A.B., Wisconsin, 1923; A.M., 1925. Basic market analysis of a selected commercial area. 1941. *Wisconsin*.
- JAY G. HALL, A.B., Western Ontario, 1934. A history of Marshall Field and Company. 1941. *Chicago*.
- GOULD LEACH HARRIS, A.B., Ohio State, 1914; A.M., 1916. Marketing costs. 1943. *Columbia*.
- RICHARD J. L. HERSON, B.S., College of the City of New York, 1938; M.S., Columbia, 1939. Factoring. 1943. *Columbia*.
- LELAND HESS, A.B., Ripon, 1938. A study af the mail order business. 1941. *Chicago*.
- H. WEBSTER JOHNSON, Ph.D., Ohio State, 1941. Quota setting for wholesale drug houses. Accepted.
- LEWIS K. JOHNSON, B.A., Virginia; M.A. History of marketing legislation in Virginia. 1942. *Ohio State*.
- TOM F. JONES, B.S., Ohio State; M.A., Columbia. Buying policies in the smaller department stores. 1942. *Ohio State*.
- CHARLES W. LEWIS, B.A., Vanderbilt, 1928; M.A., 1929. A measurement of efficiency in distribution. 1943. *Pennsylvania*.
- EDWIN H. LEWIS, B.S., Drexel, 1932; M.B.A., Pennsylvania, 1933. The Philadelphia wholesale market, a study in trading area determination. 1942. *Pennsylvania*.
- JOHN H. LILES, JR., S.B., Alabama Polytechnic, 1936; S.M., Illinois, 1937. Problems in marketing base milk in Alabama. 1942. *Wisconsin*.
- C. S. LOGDSON, Ph.D., Ohio State, 1940. Interstate barriers to trade. Accepted.
- EDEN CHRISTIAN LORENTZEN, B.S., Utah Agricultural, 1921; M.A., California, 1923. Effects of legislation aimed at price regulations and at chain stores, with special emphasis on food distribution. 1941. *Northwestern*.
- J. W. LUCAS, B.S., Ohio State, 1929; M.B.A., 1935. Cost of operating a mercantile credit department. 1942. *Ohio State*.
- DONALD FRANCIS McMILLEN, B.S., Illinois, 1936; M.S., California, 1937. An economic analysis of marketing control programs used in the canning cling peach industry of California. 1941. *California*.
- L. K. MANHART, B.A., Bowling Green State; M.A., Ohio State. Retail credit management—some case studies. 1942. *Ohio State*.
- CHARLES A. MATTHEWS, B.S., Washington and Lee, 1937; M.A., Virginia, 1939. Fiscal barriers in interstate commerce, with special reference to oleomargarine. 1941. *Virginia*. Accepted.
- GEORGE LOUIS MEHREN, A.B., California, 1938. An economic analysis of orange marketing control programs. 1942. *California*.
- HARRY A. MITCHELL, A.B., Michigan, 1925; M.B.A., 1938. New Orleans as a wholesale center. 1942. *Michigan*.
- RICHARD ERIC MOODY, S.B., Rutgers, 1925. An efficiency study of the Platteville (Wisconsin) trade area. 1940. *Wisconsin*. Completed.

- RICHARD L. MORSE, A.B., Wisconsin, 1938. Egg grading practices and consumer egg preferences in Iowa—a study of demand of market standards. 1941. *Iowa State or Chicago*.
- FRANK HOMER MOSSMAN, B.A., Southwestern, 1936; M.B.A., Northwestern, 1938. Development and status of grade labeling of canned fruits and vegetables by a national chain to consumers in Chicago. 1942. *Northwestern*.
- ALVAN D. ODERKIRK, B.S., North Dakota Agricultural, 1926; M.S., Iowa State, 1928. A study of frozen and dried eggs as a market outlet for midwest poultry producers. 1943. *Minnesota*.
- CYRIL O'DONNELL, B.C., Alberta, 1924; A.M., 1926. Recent trends in the consumption of textile fibers with special reference to cotton. 1941. *Chicago*.
- CARROLL D. PHILLIPS, B.S., Colorado, 1923; M.S.A., Purdue, 1928. The organization of the wholesale fruit and vegetable market of Louisville, Kentucky. 1941. *Minnesota*.
- WARREN CLYDE PRANCE, B.S.A., Georgia, 1938; M.S.A., Georgia, 1939. An analysis of spot cotton and cotton textile prices. 1942. *Virginia and Virginia Polytechnic Institute*.
- DAVID ALLEN REVZAN, Ph.B., Chicago, 1930; A.M., 1935. The wholesale price structure for oranges with special reference to the Chicago market. 1941. *Chicago*.
- RALPH W. SHERMAN, B.A., Ohio State, 1929; M.S., Ohio State, 1932. Seasonal fluctuations in the farm sales of milk. 1943. *Ohio State*.
- GORDON W. SPRAGUE, Ph.D., Minnesota, 1941. Butter price quotations at Chicago. Accepted.
- EDWARD A. STONE, A.B., Michigan, 1936; A.M., 1940. The annual inter-regional balance of payments on a county basis. 1942. *Michigan*.
- RAYBURN DEAN TOUSLEY, B.S., Missouri, 1931; M.A., 1933. Methods of marketing fruits and vegetables with their application to Washington apples. 1941. *Northwestern*.
- G. MAXWELL ULE, M.B.A., Chicago, 1937. The statistical allocation of advertising appropriations for a durable consumer good. 1941. *Chicago*.
- HUGH GREGORY WALES, A.B., Washburn, 1932; M.B.A., Harvard, 1934. Kansas City fruit and vegetable market. 1942. *Northwestern*.
- LOUISE D. WALKER, A.B., Smith, 1926; A.M., Chicago, 1930. A history of the Chicago Association of Commerce. 1941. *Chicago*.
- WILLIAM NEAL WATERSTREET, S.B., Northwestern, 1931; S.M., Wisconsin, 1932. Flexibility in the operation of milk plants. 1942. *Wisconsin*.
- WILLIAM C. WELDEN, S.B., Alabama Polytechnic, 1930; S.M., North Carolina State, 1934. The marketing of dairy products in the southern states. *Harvard*.
- JOHN H. WESTING, A.B., Calvin, 1932; M.B.A., Michigan, 1935. Marketing problems in the sugar refining industry. 1942. *Michigan*.

Mining; Manufacturing; Construction

- CLARK LEE ALLEN, A.B., McKendree, 1932; A.M., Washington, 1938. Effects of the utilization of synthetic fibers upon the organization of the southern textile industry. 1942. *Duke*.
- RICHARD M. CLEWETT, A.B., Nebraska, 1934. A study of the set-up paper box industry of Pennsylvania with particular reference to the elasticity of demand. 1942. *Pennsylvania*.
- FELICIA JOHNSON DEYRUP, A.B., Barnard, 1938; A.M., Columbia, 1939. Small arms manufacture in the Connecticut valley. 1942. *Columbia*.
- ROSCOE RAYMOND GIFFIN, JR., B.S., Illinois, 1936; M.S., 1937. The relation of increasing productivity to prices and payments to the production factors in the flour-milling and other grain products industry, 1909-1935. 1941. *Illinois*.
- BELA GOLD, B.S., New York, 1934. The machine-tool industry. 1942. *Columbia*.
- THEODORE S. HALTEMAN, B.S., Pennsylvania, 1933; M.B.A., 1934. Development and finance of the chemical industry. 1942. *Pennsylvania*.
- ARTHUR HIGHMAN, B.S., Armour Institute of Technology, 1935; M.B.A., Chicago, 1939. Mobilization of the chemical industry for the national defense. 1941. *Chicago*.
- MAB S. HUETTIG, A.B., California, 1931. Historical background of the motion picture industry. 1943. *Pennsylvania*.

- WILLIAM NORRIS LEONARD, B.A., Virginia, 1936; A.M., Texas, 1938. Economics of aircraft production. 1942. *Columbia*.
- MYER LYNSKY, B.S., Massachusetts State, 1928. The United States sugar industry. 1942. *Columbia*.
- DONALD FRASER MARTIN, A.B., Davidson, 1929; A.M., North Carolina, 1932. The economics of the naval stores industry. 1941. *North Carolina*.
- OLIN TERRILL MOUZON, Ph.D., North Carolina, 1940. Recent developments in the southern pulp and paper industries and their economic and social implication. Accepted.
- ROBERT J. RIDDLE, B.S., Drexel, 1933; A.M., Pennsylvania, 1936. Controlling the cost of product research and development. 1942. *Pennsylvania*.
- ARTHUR M. SOWDER, B.S., Idaho, 1925; M.F., Yale, 1935; M.S., Idaho, 1927. Timber requirements of the cooperage industry. 1942. *American*.

Transportation; Communication; Public Utilities

- HAROLD A. BAKER, B.C.S., New York, 1918; B.S., 1930; A.M., Fordham, 1939. Financing of public utility enterprise. 1942. *Fordham*.
- JAMES CYRIL DICKSON BLAINE, B. Com., Queens, 1934; M.S., North Carolina, 1939. Air passenger traffic on the scheduled domestic airlines of the United States, 1935-40. 1942. *North Carolina*.
- FLOYD A. BOND, A.B., Michigan, 1938; A.M., 1940. Regulation in operation: problems and practices of the Michigan Consolidated Gas Company. 1943. *Michigan*.
- WILLIAM R. BUCKWALTER, Ph.D., Pennsylvania, 1940. Valuation of public utilities in Pennsylvania for rate making purposes, 1914-1937. Accepted.
- JAMES WHITNEY BUNTING, B.S., Pennsylvania, 1934; M.A., 1936; M.B.A., 1937. Economic theory and development of railroad distance rate scales. 1942. *Pennsylvania*.
- DAVID WILEE BUSSELL, Ph.D., Ohio State, 1941. The transportation of liquid petroleum products. Accepted.
- WILLIAM F. BUTLER, B.A., Cornell, 1937. Some aspects of the governmental power policy in the Tennessee valley. 1941. *Virginia*. Accepted.
- HANS PETER CARSTENSEN, B.A., Ohio State, 1937; B.S., 1937; M.B.A., 1938. Certain economic aspects of gas rates in Ohio. 1941. *Ohio State*.
- JOHN MOWBRAY CRAWFORD, A.B., Reed, 1935. Railroad reorganization with special references to problems of valuation under the Chandler act. 1942. *Cornell*.
- GEORGE S. CREMER, B.S., New York; M.B.A. Accounting jurisprudence in public utility regulation. 1941. *New York*.
- RICHARD WILLIAM DITTMER, B.A., Colgate, 1938. The public utility service company. 1942. *Yale*.
- ROGER COIT DIXON, A.B., Princeton, 1936; A.M., 1940. The position of the freight forwarders in the transportation field. 1941. *Princeton*.
- HUGH NORMAN EMERSON, A.B., Johns Hopkins, 1930; M.B.A., Pennsylvania, 1932. Petroleum transportation, 1942. *Pennsylvania*.
- ANATOLE R. GRUEHR, B.S., Massachusetts Institute of Technology; M.B.A., New York. History of the treatment of depreciation in public utility rate making. 1942. *New York*.
- ROLAND F. HARTMAN, B.S., Lehigh, 1928; M.A., 1933. Financial development of the Electric Bond and Share Company. 1942. *Columbia*.
- CLARENCE EDGAR HEFFELFINGER, A.B., Ursinus, 1920; M.S., Columbia, 1931. Transportation and the development of modern China. 1943. *Columbia*.
- HENRY WELDON HEWETSON, A.B., Toronto, 1924; A.M., British Columbia, 1925. The financial history of the Canadian National Railway. 1942. *Chicago*.
- REGINALD VYVYAN HOBBAH, B.S., Pittsburgh, 1931. The legal and economic aspects of railroad transit privileges. 1941. *Chicago*.
- HERSCHEL FEDERMAN JONES, A.B., Antioch, 1931; A.M., Nebraska, 1937. The policy of the federal government and its agencies regarding the integration of power resources in the United States. 1942. *Wisconsin*.

- WILLIAM HENRY JOUBERT, B.S., Florida, 1933; M.S., 1935. A history of the Seaboard Airline Railway Company. 1942. *North Carolina*.
- HAROLD KELSO, A.B., Kansas, 1930; A.M., Wisconsin, 1935. Government policy in relation to waterways. 1942. *Wisconsin*.
- WILLIAM FRANCIS KENNEDY, A.B., Columbia, 1933; A.M., 1936. Regulation of utility servicing by the Securities and Exchange Commission. 1941. *Wisconsin*. Completed.
- CLARENCE EUGENE KUHLMAN, A.B., Texas, 1933; A.M., 1933. Municipally owned public utilities in North Carolina. *North Carolina*. Accepted.
- MARION S. LEWIS, A.B., Trinity, 1918; A.M., 1921. An evaluation of the holding company abuses alleged in the public utilities act of 1935. 1941. *Chicago*.
- EZEKIEL LIMMER, B.A., Brown, 1933; M.A., Columbia, 1934. The agricultural exemptions from economic regulation of the federal motor carrier act. 1941. *American*.
- DANIEL MARX, JR., A.B., Dartmouth, 1929. United States Maritime Commission, 1936-40. *California*.
- JOHN TALBOT MASTEN, B.S., Illinois, 1936; M.S., 1937. The Commonwealth and Southern Company: a case study in public utility finance. 1942. *North Carolina*.
- ROLLAND H. MAYBEE, A.B., Columbia, 1925; A.M., 1927. Railroad competition and the rise of petroleum refining monopoly, 1862-1879. 1942. *Columbia*.
- JOHN LESTER MILLER, A.B., Pennsylvania, 1925; Ph.M., Wisconsin, 1930. The history of the telephone industry as a regulated business in Wisconsin. 1940. *Wisconsin*. Completed.
- WILLIAM PARDRIDGE. The development of commercial aviation in Latin America. 1941. *Chicago*.
- E. B. POLING, B.S., Ohio State, 1937. The motor transportation of livestock in Ohio. 1943. *Ohio State*.
- CLAUDE E. PUFFER, A.B., Washington, 1932; M.A., 1933. Federal regulation of scheduled air transportation. 1940. *Stanford*. Accepted.
- JOSEPH S. RANSMEIER, A.B., Oberlin, 1936. The theory of multiple-purpose enterprise in waterway development with particular reference to the TVA. 1942. *Columbia*.
- W. C. RIBBLE, B.A., Hardin Simmons, 1927; M.A., Texas, 1931. Discriminatory freight rates in the southwest territory. 1942. *Texas*.
- GEORGE ALEXANDER SCOTT, B.A., Alberta, 1938; M.B.A., Pennsylvania, 1940. Railroad reorganization under section 77. 1942. *Pennsylvania*.
- PAUL B. SIMPSON, B.S., Reed, 1936. Economics of rate making under government ownership of the railroads. 1942. *Cornell*.
- FRANCIS AUTEN SPENCER, Ph.D., Princeton, 1931. The control of air mail compensation. Accepted.
- IRENE M. SPRY, B.A., Cambridge, 1928; M.A., Bryn Mawr, 1929. The development of electrical power in Canada. *Toronto*.
- GORDON J. STEINER, B.S., Manhattan, 1933; M.S., Columbia, 1940. New York State regulation of railroads. 1943. *Fordham*.
- JOSEPH A. YAGER, A.B., Michigan, 1937; LL.B., 1939; A.M., 1940. Public utility integration under the holding company act. 1944. *Michigan*.

Agriculture; Forestry; Fisheries

- FRANK VICTOR BECK, S.B., Cornell, 1937; S.M., 1938. An economic analysis of the grass seed industry. 1943. *Wisconsin*.
- DEAN W. BLACKBURN, S.B., Arkansas, 1930; S.M., Iowa State, 1931. Land use planning in the Mississippi delta. 1942. *Wisconsin*.
- RAYMOND T. BURDICK, B.S., Cornell, 1912; M.S., Colorado State, 1922. A consideration of the effect of different combinations of enterprises upon net profits from irrigated farming in northern Colorado. 1941. *Chicago*.
- EUGENIO CASTILLO. The banana industry, 1943. *Johns Hopkins*.
- ROBERT MARION CLAWSON, S.B., Nevada, 1926; S.M., 1929. Economic organization of the range livestock industry of the United States. *Harvard*.

- WALTER P. COTTON, B.S.A., Tennessee, 1932; M.S., 1933. A study of subsidies to agriculture provided by governmental credit agencies. 1942. *Minnesota*.
- GLENN HORACE CRAIG, B.A., Alberta, 1930; M.A., McGill, 1933. Utilization of the arid plains of western Canada. *Harvard*.
- AMANDO M. DALISAY, S.B., University of the Philippines, 1937. Supervised credit for low-income farm groups in the United States. 1942. *Harvard*.
- M. M. DAUGHERTY, B.S., Texas Agricultural and Mechanical, 1916; M.S., 1925; M.A., Harvard, 1930. Farm mortgage delinquencies. 1942. *Pennsylvania*.
- JOHN H. DAVIS, B.S., Iowa, 1928; M.A., Minnesota, 1935. An analysis of the policies of insurance companies in the management and resale of foreclosed farms in Iowa since 1920. 1942. *Minnesota*.
- SELMER A. ENGEL, Ph.D., Minnesota, 1940. An analysis of the relationship of the relative ranking of management factors to farm earnings. Accepted.
- ABRAM W. EPP, B.S., Nebraska, 1933; M.A., 1937. An economic study of the place of forage production in the southeast grain and livestock area of Nebraska. 1942. *Minnesota*.
- VERNON C. FOWKE, B.A., Saskatchewan, 1928; M.A., 1929. Federal aid to agriculture in Canada. *Washington*.
- SYLVESTER M. FRIZOL, B.C.S., 1931; A.M., 1933, Loyola (Chicago). The development of a policy of agricultural mercantilism in the United States. 1941. *California*. Accepted.
- PORTER L. GADDIS, B.S., Nebraska, 1916; M.A., 1920. The principles of agricultural real estate valuation. *American*. Accepted.
- JACOB BARNARD GIBBS, B.S., Missouri, 1924; A.M., Columbia, 1930. Tobacco production and consumption in Asia. 1941. *Columbia*.
- ROBERT EDWARD GRAHAM, JR., B.S., Clemson, 1936; M.S., Virginia, 1937. The representative farm-budgetary analysis in farm management research. 1941. *Virginia and Virginia Polytechnic Institute*. Accepted.
- SETH HAMMOND, A.B., Ohio State, 1935; A.M., 1935; A.M., Harvard, 1937. The cotton industry of this century. 1941. *Harvard*.
- CHING-YUEN HSIANG, A.B., Tsing Hua, 1934. Tenure of land in China: a preface to China's land problems and policies. 1941. *Wisconsin*. Completed.
- BERNHARDT M. JENSEN, A.B., Stanford, 1927; A.M., 1928. The United States winter wheat belt: its development and economic prospects. 1942. *Stanford*.
- BARNES F. LATHROP, A.B., Rice, 1930; A.M., Chicago, 1931. The Pugh plantations on Bayou Lafourche, Louisiana. 1941. *Chicago*.
- JOHN VINCENT MACHELL, JR., B.S., Temple, 1935; A.M., Illinois, 1938. The history, economics, and prospects of coöperative farming in the United States, with reference to the European and Russian experience. 1942. *Illinois*.
- ALAN G. MACLEOD, B.A., Saskatchewan, 1927; M.A., 1927. The supply side of the New Hampshire milk markets. 1941. *Harvard*.
- JOHN GORDON MCNEELY, S.B., South Dakota, 1933; S.M., 1934. Tenancy in Arkansas. 1941. *Wisconsin*. Completed.
- DOUGLAS GRAY MILEY, B.S.A., Florida, 1935; M.S.A., 1939. Farm management research in the South. 1941. *Virginia and Virginia Polytechnic Institute*. Accepted.
- IRA W. MOOMAW, Ph.D., Ohio State, 1941. Farm organization and certain aspects of life among depressed class farmers of Broach district, India, 1940. Accepted.
- OTIS T. OSGOOD, B.A., Arkansas, 1931; M.S., Minnesota, 1938. Farm organizations for upland areas in the eastern Ozarks. 1942. *Minnesota*.
- CLARENCE EDWARD PHILBROOK, A.B., Chicago, 1936. The economics of conservation of natural resources. 1941. *Chicago*.
- ROY E. PROCTOR, B.S., Kentucky, 1927; M.S., 1930. Factors affecting changes in farm organization in a general livestock area in Kentucky, 1926 to 1939. 1942. *Minnesota*.
- J. LLOYD SPAULDING, B.S., Iowa, 1936; Ph.M., Wisconsin, 1938. Inheritance as a function of the agricultural ladder. 1942. *Minnesota*.
- THOMAS NOEL STERN, B.A., Swarthmore, 1934. Community forests in Pennsylvania. 1941. *Pennsylvania*.
- MELVIN LOUIS UPCHURCH, S.B., Texas Agricultural and Mechanical, 1936; S.M., 1937.

- Institutional factors of land use adjustments in Coos County, Oregon. 1941. *Wisconsin*. Completed.
- HADLEY VAN VLIET, B.S.A., Saskatchewan, 1934; S.M., 1936. An analysis of agricultural land tenure in Saskatchewan. 1943. *Wisconsin*.
- EVERETT CARL WEITZELL, S.B., Maryland, 1934; S.M., 1935. The economics of soil conservation in West Virginia. 1942. *Wisconsin*.
- JOHN W. WHITE, B.S., Arkansas, 1935; M.S., Minnesota, 1939. Economic changes in cotton production from 1929 to 1939 with particular reference to the Pine Bluff area in Arkansas. 1942. *Minnesota*.
- WILLIAM TATE WHITMAN, A.B., Duke, 1929; A.M., 1933. The potential volume of employment on forest industries of the Southeast under conditions of optimum utilization. 1942. *Duke*.
- RAMEY C. WHITNEY, B.S., Nebraska, 1931; M.A., 1936. An economic study of possible improvements in farming on the dryland plains of Colorado. 1942. *Minnesota*.
- THOMAS B. WORSLEY, B.S., Virginia, 1933; M.S., 1934. The effect of governmental action on cotton prices in the southern states. 1942. *Virginia*.
- SHU CHIA YANG, B.A., Central Political Institute (Nanking), 1933; M.S., Minnesota, 1939. A study of a satisfactory farm credit system for China: its nature and requirements. 1942. *Minnesota*.
- MOHAMMED MONIR MOHAMMED EL ZALAKI, Ph.D., California, 1940. An analysis of the organization of Egyptian agriculture and its influence on national economic and social institutions. Accepted.

Economic Geography; Regional Planning; Urban Land; Housing

- ALFORD ARCHER, B.S., Columbia, 1935; M.S., 1936. Economic regions of the Appalachian plateau. 1942. *Ohio State*.
- ELEANOR SAUER BAGLEY, A.B., Mt. Holyoke, 1936; A.M., Columbia, 1937. Federal housing administration. 1942. *Columbia*.
- KENNETH CHARLES BEEDE, B.A., George Washington, 1927; M.B.A., Harvard, 1929. Urban housing, quantitative and qualitative measures of demand and supply in local housing markets. 1942. *American*.
- EUNICE E. BISCHOF, A.B., Barnard, 1926; A.M., Columbia, 1927. Labor as a factor in industrial location. 1942. *Columbia*.
- FRANK BOURGIN, A.B., Minnesota, 1930; A.M., Claremont, 1932. The history of regional planning in the United States. 1941. *Chicago*.
- WILLIAM D. BRYANT, B.S., Northwestern; M.S., Northwestern. A city planning objective. 1941. *New York*. Accepted.
- MUZAFFER MEHMET ERSELCUK, A.B., Robert College (Istanbul), 1938; A.M., Indiana, 1940. Special problems in industrial location. 1942. *Indiana*.
- MILLARD FAUGHT, A.B., Columbia, 1938; M.S., 1939. The problems of a resort community—a socio-economic study of Falmouth, Massachusetts. 1941. *Columbia*.
- HOWARD NAYLOR FITZHUGH, B.S., Harvard, 1930; M.B.A., 1933. Improved housing for New York City's middle-class negro families. 1941. *Columbia*.
- PAUL MICHAEL GREGORY, A.B., Union, 1938; A.M., Clark, 1939. Strategic factors affecting land utilization in Worcester, Massachusetts, 1900-1940: a study in urban economics. 1942. *Clark*.
- LLOYD C. HALVORSON, B.S., Minnesota, 1939. The concept of normal value of land for appraisal purposes. 1943. *Minnesota*.
- WILLIAM M. HOAD, A.B., Michigan, 1927; A.M., 1930. Real estate prices: a study of real estate transfers in Lucas County, Ohio, 1917-1939. 1942. *Michigan*.
- LOUIS ALBERT KELLER, B.A., Carroll, 1927; M.B.A., Northwestern, 1928. The utilization of land for outdoor recreation: a study of the interrelations of urbanization and outdoor recreation in the Milwaukee area. 1942. *Northwestern*.

- E. WILLARD MILLER, B.S., Clarion State Teachers, 1937; M.A., Nebraska, 1939. Economic geography of the Bradford-Allegheny oil field. 1942. *Ohio State*.
- DONALD W. O'CONNELL, A.B., Columbia, 1937; A.M., 1938. The scope and applicability of the theory of industrial location. 1943. *Columbia*.
- WILLIAM K. SCHMELZLE, B.S., Juniata, 1930; M.B.A., Pennsylvania, 1931. The tax factor and the localization of industry in the Pacific Coast states. *California*.
- JOHN H. SITTERLEY, B.S., Ohio State, 1928; M.S., 1932. The trend in size of farm in Ohio. 1943. *Ohio State*.
- FRANK HUGH SPARKS, A.B., Butler, 1935; A.M., California, 1937. The location of industry; an analysis of some of the factors which have affected the location of industry in the ten southern counties of California. 1941. *California*. Accepted.
- WINFIELD LYLE WILLHITE, B.S., Lewis Institute, 1936; M.S., Illinois, 1937. The impact of oil development on an Illinois community. 1941. *Illinois*.

Labor and Industrial Relations

- JOHN C. ADAMS, Ph.D., Chicago, 1940. Pre-judicial settlement of collective labor conflicts under the Italian corporate system. Accepted.
- DANIEL J. AHEARN, A.B., Fordham, 1930; LL.B., 1933; J.S.D., New York, 1934. Wages, 1933-1937. 1942. *Columbia*.
- WARREN JOHN BAKER, S.B., Illinois, 1929; S.M., California, 1933. Labor relations legislation and trade unionism. 1943. *Wisconsin*.
- ABRAM BERGSON, Ph.D., Harvard, 1940. Wage variations among industrial workers in the Soviet Union: a study in socialist economics. Accepted.
- RUDOLF FRIEDRICH BERTRAM, A.B., Chicago, 1935; A.M., 1936. Labor relations in the Tennessee Valley Authority. 1941. *Chicago*.
- WALTER E. BOLES, JR., A.B., Southwestern, 1932; A.M., Vanderbilt, 1933. The fair labor standards act, with emphasis on certain regional aspects. 1939. *Vanderbilt*.
- GLADYS C. BOONE, B.A., Birmingham, 1916; A.M., 1917. The women's trade union league in Great Britain and the United States. *Columbia*. Accepted.
- DEAN O. BOWMAN, B.S., Purdue, 1933; M.S., 1934. Public control of labor relations: a study of the National Labor Relations Board. 1941. *Michigan*.
- BRILSFORD BRAZEAL, A.B., Morehouse, 1927; A.M., Columbia, 1928. Origin and development of the Brotherhood of Sleeping Car Porters. 1942. *Columbia*.
- REV. VINCENT IGNATIUS BREEN, A.B., St. Patrick's Seminary, 1932. The United States conciliation service and the rôle of the federal conciliator. *Catholic*.
- CHARLES T. BRODERICK, B.A., Fordham, 1932; M.A., 1940. Systematic approach to wage-rate determination. 1943. *Fordham*.
- GERALD ALTON BROWN, A.B., West Texas Teachers, 1935; A.M., Texas, 1938. Some economic and social effects of the fair standards act in North Carolina. 1942. *North Carolina*.
- LEO CYRIL BROWN, Ph.D., Harvard, 1940. Collective bargaining in the leather industry, with special reference to Massachusetts. *Harvard*. Accepted.
- EVERETT JOHNSON BURTT, JR., A.B., Berea, 1935; A.M., Duke, 1937. Collective bargaining among the paper and pulp workers in Maine. 1942. *Duke*.
- HOBART CECIL CARR, B.A., Iowa State, 1937; M.A., 1938. Economic analysis of employment and unemployment of agricultural labor in Champaign, Piatt and Douglas Counties. 1941. *Illinois*.
- JAMES EDWARD CHACE, JR., A.B., Amherst, 1923; M.B.A., Harvard, 1925. Industrial relations in Florida. 1941. *Chicago*.
- NEIL W. CHAMBERLAIN, A.B., 1938; A.M., Western Reserve, 1939. Collective bargaining procedure. 1942. *Ohio State*.
- ALPHONSE H. CLEMENS, Ph.D., St. Louis, 1941. (Field of labor and industrial relations.) *St. Louis*. Completed.
- RAYMOND R. COLTON, B.S., College of the City of New York, 1931; M.A., Columbia, 1932. Management and the national labor relations act. 1942. *Columbia*.

- ROBERT SANFORD CORNISH, A.B., Yale, 1916; A.M., Columbia, 1924. A critical review of the fair labor standards act. 1941. *Pittsburgh*.
- REV. BERNARD CORNELIUS CRONIN, A.B., St. Patrick's Seminary, 1936. Peter C. Yorke and the labor movement in San Francisco, 1900-10. *Catholic*.
- STANLEY CROOK, A.B., California, 1936. The right to work as a property right. *California*.
- LUCIEN SIMINGTON CURTIS, A.B., Howard, 1916; A.B., Harvard, 1919; A.M., Columbia, 1925. A critical examination of criteria for determining the salaries of teachers. 1942. *Chicago*.
- FRANCIS STEPHEN DOODY, A.B., Tufts, 1938; A.M., Harvard, 1940. Labor relations in the paper industry in Massachusetts, Connecticut and New Hampshire. *Harvard*.
- JAMES S. DUESENBERY, A.B., Michigan, 1939. Wages in the automobile industry. 1944. *Michigan*.
- GERALD JOHN FISCHER, A.B., Rutgers, 1939. A study of the cyclical behavior of labor productivity and unit labor cost in selected American industries. 1943. *Princeton*.
- ELBERT COURTS FLORA, A.B., North Dakota State Teachers, 1932; M.B.A., Chicago, 1940. Recent developments toward a more effective employment market. 1941. *Chicago*.
- JOSEPH GLATT, Licencie, Brussels, 1934 and 1937. The labor situation in Palestine. 1943. *Columbia*.
- JONATHAN GROSSMAN, B.S.S., College of the City of New York, 1936; A.M., Columbia, 1937. Sylvis and the labor movement. 1942. *Columbia*.
- LANGSTON THACKER HAWLEY, B.S., Alabama, 1932; M.S., 1933. Wage classification and compensation plans. 1942. *North Carolina*.
- JAMES CHRISTIAN HILL, A.B., Swarthmore, 1935. Emergence of an agricultural labor problem; with special reference to the cotton labor situation. 1941. *Columbia*.
- SAMUEL E. HILL, Ph.D., Harvard, 1940. Collective bargaining by the teamsters' union in the over-the-road trucking industry of New England. Accepted.
- RANDALL WESTON HINSHAW, A.B., Occidental, 1937; A.M., 1939. Wages and employment. 1942. *Princeton*.
- REV. CHARLES EDWARD HOGAN, A.B., St. Mary's Seminary, 1930. Collective bargaining in steel. *Catholic*.
- PHILIP L. HOWELL, B.A., Pennsylvania, 1934. Economic consequences of the closed shop. 1941. *Pennsylvania*.
- HOWARD L. HURWITZ, A.B., Brooklyn, 1936; A.M., Columbia, 1937. Theodore Roosevelt and labor. 1942. *Columbia*.
- STUART M. JAMIESON, A.B., British Columbia, 1932; M.A., McGill, 1938. History of agricultural labor organization in California. *California*.
- FINN BJORN JENSEN, A.B., California, 1934; A.M., 1935. Legislative machinery for controlling labor disputes in Norway. 1940. *California*. Accepted.
- HOWARD STANLEY KALTENBORN, A.B., Nebraska, 1937; A.M., 1938. Mediation in labor disputes. 1942. *Wisconsin*.
- VAN DUSEN KENNEDY, A.B., Swarthmore, 1935. Some aspects of union participation in wage incentive methods. 1942. *Columbia*.
- CHARLES E. KILLEEN, A.B., St. Norbert; A.M., Wisconsin, 1933. John Siney and early unionism amongst coal miners. 1942. *Wisconsin*.
- CHARLES CLINTON KILLINGSWORTH, A.B., Southwest Missouri State Teachers, 1938; A.M., Oklahoma Agricultural and Mechanical, 1939. State labor relations legislation. 1942. *Wisconsin*.
- PHILIP T. KING, A.B., Richmond, 1938. The seniority principle and the railway brotherhoods. 1941. *Johns Hopkins*.
- MARY KLEMM, A.B., Oregon, 1930. A.M., Wisconsin, 1940. Company and independent unionism. 1942. *Wisconsin*.
- THOMAS ANSON KNOWLTON, A.B., Maine, 1933; A.M., 1934. Railroad labor unions and the contraction of job opportunity—a study in union behavior. 1940. *Wisconsin*. Completed.
- ROBERT JOHN LANDRY, A.B., Amherst, 1935; A.M., Cornell, 1937. Employment opportunities as affected by cyclical and secular change in the automobile industry. 1941. *Cornell*.

- EDWARD R. LIVERNASH, A.B., Colorado, 1932; A.M., Tufts, 1934. An analysis of job evaluation procedures. 1941. *Harvard*.
- JACOB LOFT, B.S., College of the City of New York, 1937; A.M., Columbia, 1938. Labor in the printing trades, 1900-1939. 1942. *Columbia*.
- JOHN LOMBARDI, B.S., College of the City of New York, 1919; A.M., Columbia, 1935. A history of the Department of Labor from its origin. 1942. *Columbia*.
- MOSES LUKACZER, A.B., Columbia, 1932; A.M., 1935. The genesis and application of the doctrine of prevailing wages. 1942. *Columbia*.
- ARTHUR EDWARD MACE, JR., A.B., Amherst, 1938. Economics of wage differentials. 1941. *Chicago*.
- FRANK ANTHONY MANCINA, A.B., Chicago, 1936; M.B.A., 1938. The labor philosophy of the Catholic church. 1941. *Chicago*.
- NEIL MCKELLAR, B.Com., British Columbia, 1932; A.B., 1936. Control by organized labor of job opportunities. *California*.
- WAYNE LESLIE MCNAUGHTON, B.S., Illinois, 1927; M.S., Columbia, 1935. Development of labor relations law. *Columbia*. Accepted. (Published by American Council on Public Affairs, Washington, D.C., 1941.)
- FREDERIC MEYERS, A.B., North Carolina, 1938; A.M., 1939. The economic philosophy of organized labor. 1941. *North Carolina*.
- MAURICE P. MOFFATT, B.S., Pennsylvania Teachers, 1934; A.M., Pennsylvania State, 1935. Collective bargaining in the northern anthracite field of Pennsylvania. 1942. *Columbia*.
- OTIS E. MULLIKEN, A.B., Harvard, 1928; A.M., 1934. The Massachusetts board of conciliation and arbitration. 1942. *Harvard*.
- PHILIP C. NEWMAN, A.B., Columbia, 1938; A.M., 1940. The labor legislation of New Jersey. *Columbia*. Accepted.
- RUSSELL A. NIXON, Ph.D., Harvard, 1940. The problem of employability. Accepted.
- LAWRENCE PALMINTERI, A.B., New York, 1924; A.M., 1925. The organization of agricultural labor in the United States. 1942. *Columbia*.
- KURT PETSCHKE, Dr. Jur., Vienna, 1936; A.M., Harvard, 1940. The economics of industry-wide collective bargaining. 1942. *Harvard*.
- FRANK C. PIERSON, A.B., Swarthmore, 1934. The problem of union responsibility: a study of the violations of union contracts. *Columbia*. Accepted.
- JUDD POLK, A.B., Michigan, 1935; LL.B., 1935. Public control of wages. 1943. *Michigan*.
- SPENCER D. POLLARD, Ph.D., Harvard, 1940. Some problems of democracy in the government of labor unions, with special reference to the United Mine Workers of America and the United Automobile Workers of America. Accepted.
- GEORGE S. QUICK, A.B., Michigan, 1938; A.M., 1939. The historical development of labor in São Paulo, Brazil, with emphasis on the period since the abolition of slavery in 1888. 1943. *Michigan*.
- DAVID RENSHAW ROBERTS, S.B., Boston, 1933; A.M., Harvard, 1940. The Independent Textile Union of America. 1941. *Harvard*.
- ARTHUR ROSS, A.B., Harvard, 1937. Agricultural labor and the law: special reference to federal labor legislation. *California*.
- ERNEST EDWARD SCHWARTZTRAUBER, A.B., Miami, 1912; A.M., Columbia, 1913. Workers' education: a Wisconsin experiment. 1941. *Wisconsin*. Completed.
- JOSEPH SHISTER, Lic. Es-Sciences Commerciales, Montreal, P.Q., 1939; A.M., Harvard, 1941. Trade union wage policy in prosperity and depression. *Harvard*.
- MYRNA SIEGENDORF, A.B., New Jersey College for Women, 1939; A.M., Wisconsin, 1940. Unionism in public employment. 1943. *Wisconsin*.
- ROBERT SNIDER, A.B., Harvard, 1933; M.B.A., 1934. The management functions of labor unions—a case study in employee-employer coöperation. 1941. *Columbia*.
- EARL D. STRONG, Ph.B., Grinnell, 1909; A.M., Wisconsin, 1912. The Amalgamated Clothing Workers. *Columbia*. Accepted. (Herald Register Publishing Company, Grinnell, Iowa.)
- ROBERT TANNENBAUM, A.B., Chicago, 1937; M.B.A., 1938. A study of collective bargaining in the meat packing industry. 1941. *Chicago*.

- REV. JEROME LEO TONER, O.S.B., A.B., Washington, 1931; A.M., Catholic, 1935. The closed shop in American labor movement. *Catholic*. Completed.
- WILLIAM J. TRENT, A.B., Livingston, 1930. Occupational characteristics of white-collar workers among negroes. 1942. *Pennsylvania*.
- PHILIP H. TREZISE, A.B., Michigan, 1937; A.M., 1939. Union-management coöperation. 1944. *Michigan*.
- SAMUEL ENDERS WARREN, A.B., Allegheny, 1925; A.M., Wisconsin, 1929. Unionism and the negro workers. 1942. *Wisconsin*.
- CONSTANCE WILLIAMS, A.B., Vassar, 1930; M.S., Simmons, 1931. Some recent employment programs in four Massachusetts cities. 1941. *Chicago*.
- JOHN ADDISON WOLFARD, A.B., Washington, 1926; A.M., 1937. Stabilization of earnings and employment. 1942. *Wisconsin*.
- RICHARD HARVEY WOOD, A.B., Princeton, 1930. Profit sharing. 1942. *Princeton*.
- THOMAS WILMONT WOOD, B.S., Alabama, 1929; A.M., 1930. The contribution of Frederick W. Taylor to scientific personnel management. *North Carolina*. Accepted.

Social Insurance; Relief; Pensions; Public Welfare

- SAM ARNOLD, B.S., 1935; M.B.A., Ohio State, 1937. The applicability of experience rating in unemployment insurance to the objectives of employment stabilization. 1941. *Ohio State*.
- WILLIAM BLOOM, A.B., Indiana, 1938; M.S., Iowa State, 1939. Partial unemployment benefits in the coal mining industry of Colorado. 1941. *Colorado*.
- HENRY GAVENS, B.C.S., New York; M.C.S. Relationship between death rates and expenditures for health. 1942. *New York*.
- EDWARD JOHN KELLY, Ph.D., Stanford, 1941. A case study of hospital costs. 1941. *Stanford*. Accepted.
- JAMES RICHARD KELLY, A.B., Stanford, 1936. The significance of various social security policies with regard to credit control. 1942. *Stanford*.
- HILDA KESSLER GILBERT, A.B., California, 1936; A.M., 1938. The rôle of public employment offices in relation to employment security. 1942. *Wisconsin*.
- HARRIET GOLDBERG, LL.B., Minnesota, 1930. Support for relatives in public assistance. 1941. *Bryn Mawr*.
- BEATRICE GOMBERG, A.B., Brooklyn; A.M., Columbia. The war and economic insecurity in Great Britain. 1942. *Columbia*.
- ROGER S. HAMILTON, Ph.D., Harvard, 1940. Twenty-five years of workmen's compensation in Massachusetts. Accepted.
- CHARLES VINCENT KIDD, A.B., Princeton, 1935; A.M., 1937. Employer experience rating in unemployment insurance. 1942. *Princeton*.
- ANASTASIA LEIGHTIZER, B.A., St. Francis Xavier University, 1938; M.A., Clark, 1940. The food stamp plan and its significance for the problems of supply-demand adjustments. 1943. *Fordham*.
- HENRIETTA LIEBMAN, A.B., Cornell, 1932; A.M., Columbia, 1933. Relief and changes in national income. 1943. *Columbia*.
- HELEN SPITZ MARTZ, A.B., 1938; M.S.W., Pennsylvania School of Social Work, 1939. County boards of assistance in Pennsylvania, 1939-40. 1942. *Bryn Mawr*.
- TAULMAN A. MILLER, B.A., Amherst, 1931; M.A., Yale, 1934. The economic effects of the operation of merit rating in Indiana. 1942. *Yale*.
- JAMES STRONG PARKER, A.B., Beloit, 1922; B.A.M., Northwestern, 1928. Economic principles and policies of financial reserves in social security legislation. 1940. *Wisconsin*. Completed.
- ELIZABETH COMER RAPP, A.B., Bryn Mawr, 1925; M.A., Bryn Mawr, 1938. The history of welfare with colored children in the Philadelphia area; a study of changing concepts. 1942. *Bryn Mawr*.
- WILLIAM B. SHAFFER, A.B., Pennsylvania, 1927. Economic implications of the use of the reserve principle in financing old age and survivors' insurance. 1942. *Ohio State*.

- JAMES M. SILBERMAN, A.B., Wisconsin, 1938. History of unemployment compensation in the United States. 1943. *Wisconsin*.
 IRVING SWERDLOW, A.B., The N.Y.A. as an agency for social security. 1942. *Wisconsin*.

Consumption; Income Distribution; Coöperation

- BLANCHE BERNSTEIN, A.B., Hunter, 1933; A.M., Columbia, 1936. The pattern of consumer debt, 1935-36: a statistical analysis. 1940. *Columbia*. Accepted. (National Industrial Conference Board.)
 DONALD F. BLANKERTZ, A.B., Michigan, 1934; M.B.A., 1935. The economic significance of coöperative organization. 1942. *Michigan*.
 LENNARD GILBERT BRYNGELSSON, B.S., Knox, 1924; M.B.A., Northwestern, 1931. A survey of consumer coöperatives in the United States. *Columbia*. Accepted.
 MARY MAZEPPA CRAWFORD, A.B., Wellesley, 1922; A.M., Columbia, 1930. A study of student expenditures. *Columbia*.
 IVAN V. EMELIANOFF, Magister of Agricultural Economics, The Russian University of Prague, 1924. Economic theory of coöperation. *Columbia*. Accepted.
 ADLOWE L. LARSON, S.B., South Dakota State, 1934; S.M., 1934. The analysis of operations of coöperative elevators in Oklahoma. 1942. *Wisconsin*.
 ANASTASIA LEIGHTIZER, B.A., St. Francis Xavier University, 1938; M.A., Clark, 1940. The food stamp and its significance for the problems of supply-demand adjustments. 1943. *Fordham*.
 SIDNEY M. LERNER, A.B., Wisconsin, 1936; A.M., 1938. Geographic distribution of income in Wisconsin. 1942. *Wisconsin*.
 JANET HELEN MURRAY, A.B., Vassar, 1926; A.M., Stanford, 1930. A study of family expenditures in terms of income elasticities. 1941. *Chicago*.
 DONALD J. O'CONNOR, A.B., Syracuse, 1933; A.M., 1937. The consumer under the United States Food Administration. 1942. *Columbia*.
 JOSEPH AARON PECHMAN, S.B., College of City of New York, 1937. The distribution and patterns of income in Wisconsin. 1941. *Wisconsin*.
 HELEN POTTER, A.B., Vassar, 1933. Federal protection of the consumer. 1941. *Johns Hopkins*.
 MARTIN E. SCHIRBER, Ph.D., Harvard, 1940. The coöperative movement of Antigonish, Nova Scotia. Accepted.
 HELEN SORENSON, Ph.D., Radcliffe, 1941. An economic interpretation of the consumer movement. Accepted.
 WAYNE HAROLD STACKHOUSE, B.S., Indiana, 1930; M.B.A., Northwestern, 1937. A current measure of salary and wage income. 1942. *Northwestern*.
 H. HAINES TURNER, A.B., Swarthmore, 1930. Case studies of consumers' coöperatives. 1940. *Columbia*. Accepted. (Columbia Studies in History, Economics, and Public Law, No. 481.)
 HORACE HANSON WASHBURN, B.S.C., Wyoming, 1930. Coöperative credit for the consumer. 1943. *Wisconsin*.
 EDNA CLARK WENTWORTH, Ph.B., Chicago, 1920; M.A., 1922. Living conditions of Filipino families on an Hawaiian sugar plantation: a detailed analysis of incomes and adjustments. *Washington University*. Completed.

Population; Migration; Vital Statistics

- W. T. ALBRECHT, B.S., Carnegie Institute of Technology, 1929; A.M., Pittsburgh, 1934. The reaction to Malthus' essay on population. 1941. *Chicago*.
 RAFAEL DE J. CORDERO, A.B., Puerto Rico, 1927; A.M., Columbia, 1928. The problem of our population in Puerto Rico. 1941. *Columbia*.
 DAVID MOODY HARRISON, B.S., Ursinus, 1929; A.M., Duke, 1933. A survey of English population theory, 1800-1860. 1940. *Duke*. Accepted. . .
 JOSEPH DAVID MUNIER, A.B., California, 1931. Occupational groups in American practice. *Catholic*.

ACADEMIC VACANCIES AND APPLICATIONS

The Association is glad to render service to applicants who wish to make known their availability for teaching positions in the field of economics and to administrative officers of colleges and universities who are seeking to fill vacancies in this field.

The officers of the Association take no responsibility for making a selection among the applicants or following up the results. The Secretary's Office will merely afford a central point for clearing inquiries; and the *Review* will publish in this section brief descriptions of vacancies announced and of applications made. It is optional with those submitting such announcements to publish name and address or to use a key number.

Communications should be addressed to: The Secretary, American Economic Association, Northwestern University, Evanston, Illinois.

Vacancies

Wanted: A man between the ages of 28 and 35, Ph.D., school of commerce training, for an educational, administrative position. Prefer man with good personality, some practical business experience, and ability to do popular business writing. Give full information on training, experience, and salary desired. P101

Teachers Available

Public control of business, transportation, public utilities: Man, 37, married, Ph.D., 1931, Harvard. Thirteen years of teaching experience in universities and colleges. Numerous publications in economic and legal periodicals; price control research in progress. Employed, but desires professional advancement. E105

Consumption, theory, principles, social reforms: Man, 38, married, Ph.D., Illinois. Eight years of college teaching; 7 years of industrial experience; 1 year of social work. Employed, but desires change to college or university offering some opportunity for specialization and research, but where good teaching is given preference to research, preferably North Central or East. Can arrange immediate change if necessary. E127

Labor, theory: Man, 39, completing Ph.D. Has business experience and 10 years of college teaching. Now employed in an Eastern college. E128

History and theory of capitalism (Sombart's type of work), history of economic thought, economic history, introductory economics, agricultural economics: Man, 36, M.Agr., 1926, Prussian College of Agriculture, Berlin; Ph.D., 1937, Columbia. Years of experience in research work, farm management, and business enterprise; 2 years of educational and vocational guidance and teaching of economics in secondary schools and in adult education. References. E129

Money and banking, international economics and finance: Man, 46, married, J.D., 1920, Vienna, Austria. Wide experience in practical banking, teaching, and research. Now employed in New York but desires position with greater financial and academic opportunities. E138

Public regulation and control, taxation and public finance, corporation finance, theory: Man, married, Ph.D., Cornell. Several years of college teaching; also research, analysis, and writing for federal government, on which type of work he is now engaged. Broad training and interests. Available on short notice. E145

Economic theory and history of economics, money and banking, international economics and finance, public finance: Man, 37, M.B.A., M.A., New York; completed requirements for Ph.D. Two and one-half years of experience in research in international finance and economics; 6 years of college teaching. Collaborated on governmental studies. E149

General economics, international economics, history of economic thought, economic history: Man, 36, married. Undergraduate work in Belgian University; command of several languages. M.A., 1929, Chicago; Ph.D., Northwestern, 1941. Four years of part-time teaching in large Midwestern university. Available now. Desires full-time teaching position. E151

