UNIVERSAL
LIBRARY

OU_150550

UNIVERSAL
LIBRARY

HARVARD ECONOMIC STUDIES

1 The English Patents of Monopoly By W H. Price
2 The Lodging House Problem in Boston. By Albert B. Wolfe
3 The Stannaries A Study of the English Tin Miner. By George R Lewis
4 Railroad Reorganization. By S Daggett
5 Wool-Growing and the Tariff By C. W. Wright
6 Public Ownership of Telephones on the Continent of Europe By A N Holcombe
7 The History of the British Post Office By J C. Hemmeon
8. The Cotton Manufacturing Industry of the United States By M T. Copeland
9. The History of the Grain Trade in France By Abbott Payson Usher
10. Corporate Promotions and Reorganizations. By A S Dewing
11 The Anthracite Coal Combination in the United States By Eliot Jones.
12. Some Aspects of the Tariff Question By F W Taussig
13 The Evolution of the English Corn Market from the Twelfth to the Eighteenth Century By N. S B Gras
14 Social Adaptation By L M Bristol
15 The Financial History of Boston, from May 1, 1822, to January 31, 1909 By C. P Huse
16 Essays in the Earlier History of American Corporations By J S Davis 2 vols
17. The State Tax Commission By H L Lutz
18 The Early English Customs System By N. S B. Gras
19. Trade and Navigation between Spain and the Indies in the Time of the Hapsburgs By C H Haring
20 The Italian Emigration of Our Times By R F Foerster
21. The Mesta. By Julius Klein.
22. Argentine International Trade under Inconvertible Paper Money. 1880–1900 By J H Williams
23. The Organization of the Boot and Shoe Industry in Massachusetts before 1875 By Blanche E. Hazard.
24. Economic Motives By Z C Dickinson.
25. Monetary Theory before Adam Smith By Arthur E. Monroe.
26 Canada's Balance of International Indebtedness, 1900–1913. By Jacob Viner.
27. The History of the United States Post Office to the Year 1829 By W. E. Rich.
28. The Theory of International Prices. By James W Angell.
29. Forests and Sea Power. By R G Albion.
30. Banking Theories in the United States before 1860. By Harry E. Miller.
31. Karl Marx's Interpretation of History. By Mandell Morton Bober.
32. Grain Growers' Coöperation in Western Canada. By Harald S. Patton
33. The Assignats. By S. E. Harris
34. Economic and Social History of an English Village. By N. S. B Gras and E C Gras.
35. Direct Taxation in Austria. By John V. Van Sickle.
36. The Greenbacks and Resumption of Specie Payments, 1862–1879. By D C Barrett.
37. The Street Railway in Massachusetts By Edward S. Mason.
38. The Theory of Monopolistic Competition By Edward Chamberlin
39 Interregional and International Trade. By Bertil Ohlin.
40. The French International Accounts, 1880–1913 By Harry D. White
41. Twenty Years of Federal Reserve Policy. By S. E Harris. 2 vols
42. The Illinois Central Railroad and Its Colonization Work By Paul W Gates.
43 American Treasure and the Price Revolution in Spain, 1501–1650 By Earl J Hamilton
44 German Monetary Theory, 1905-1933 By Howard S. Ellis
45 Wages in Eighteenth Century England By Elizabeth W Gilboy
46 The Theory of Economic Development By J A Schumpeter.
47 The Supply and Control of Money in the United States By L Currie
48 British International Gold Movements and Banking Policy, 1881–1913 By W E Beach
49 State Control of Local Finance in Massachusetts. By Royal S Van de Woestyne
50 Fluctuations in American Business, 1790–1860 By Walter B Smith and Arthur H Cole
51 Money, Prices, and Wages in Valencia, Aragon, and Navarre, 1351–1500 By Earl J Hamilton
52 The Development of the Business Corporation in England, 1800–1867 By B C Hunt
53 Exchange Depreciation By S E Harris
54 A Study of Fluid Milk Prices By J M Cassels.
55 Location Theory and the Shoe and Leather Industries By Edgar M Hoover, Jr
56 Federal Subsidies to the Provincial Governments in Canada By J A Maxwell.
57 Studies in Massachusetts Town Finance By Eugene F Oakes
58 Market Control in the Aluminum Industry By Donald H Wallace
59. The New York Bond Market, 1920–1930 By Charles Cortez Abbott
60. The Commercial Paper House in the United States By Albert O Greef
61 The Middlesex Canal, 1793–1860 By Christopher Roberts
62 Fascist Economic Policy By W. G Welk.
63. Monopoly and Competition in the English Coal Trade, 1550–1850 By Paul M Sweezy
64 English Theories of Central Banking Control, 1819–1858 By Elmer Wood
65 Politics, Finance, and Consequences. By Charles Jesse Bullock
66. German Financial Policies, 1932–1939 By Kenyon E Poole.
67. Monopolistic Competition and General Equilibrium Theory. By Robert Triffin.
68. The Newsprint Paper Industry, An Economic Analysis By John A Guthrie.
69. Exchange Control in Central Europe By Howard S. Ellis.
70. The American Carpet Manufacture. By A H Cole and H. F. Williamson.
71 The American Maritime Industries and Public Policy, 1789–1914. By John G. B Hutchins

HARVARD ECONOMIC STUDIES

VOLUME LXXII

AWARDED THE DAVID A. WELLS PRIZE FOR THE YEAR 1940–41 AND PUBLISHED FROM THE INCOME OF THE DAVID A. WELLS FUND. THIS PRIZE IS OFFERED ANNUALLY, IN A COMPETITION OPEN TO SENIORS OF HARVARD COLLEGE AND GRADUATES OF ANY DEPARTMENT OF HARVARD UNIVERSITY OF NOT MORE THAN THREE YEARS STANDING, FOR THE BEST ESSAY IN CERTAIN SPECIFIED FIELDS OF ECONOMICS

THE STUDIES IN THIS SERIES ARE PUBLISHED BY THE DEPARTMENT OF ECONOMICS OF HARVARD UNIVERSITY, WHICH, HOWEVER, ASSUMES NO RESPONSIBILITY FOR THE VIEWS EXPRESSED

LONDON : HUMPHREY MILFORD
OXFORD UNIVERSITY PRESS

THE CREATION OF PURCHASING POWER

A Study in the Problem of Economic Stabilization

BY

DAVID McCORD WRIGHT

ASSISTANT PROFESSOR OF COMMERCE AND BUSINESS ADMINISTRATION
UNIVERSITY OF VIRGINIA



CAMBRIDGE · MASSACHUSETTS
HARVARD UNIVERSITY PRESS
1942

COPYRIGHT, 1942
BY THE PRESIDENT AND FELLOWS OF HARVARD COLLEGE

PRINTED AT THE HARVARD UNIVERSITY PRESS
CAMBRIDGE, MASSACHUSETTS, U.S.A.

To

MY FATHER AND MY MOTHER

PREFACE

THE writer feels that few explanations are needed in presenting, substantially unchanged, a study of methods of combating cyclical disturbance and secular stagnation written before the present conflict took so violent a turn. It is true that just at this time references to unemployment and stagnation may seem somewhat academic, but it is only too likely that the war will prove merely to have postponed our problems. The defense program will be apt, if anything, to increase the distortion of the capital goods industries, and, when peace is declared, vast problems of transfer will probably emerge, in the solution of which it is hoped some of the suggestions contained in this book may prove of value.

Looking at the matter more optimistically, there is, indeed, a possibility that the rebuilding of Europe after the war may keep all our resources employed for years to come. Perhaps in that case a more intelligent handling of the problem of foreign loans and foreign trade, in this country and abroad, may avoid some of the violence of the debacle of the thirties. But even under the most favorable of circumstances, serious students of the business cycle are bound to remain skeptical of any "new era" which will avoid, permanently, shorter or longer periods of stagnation. When these arrive, the problems here discussed will present themselves in full complexity.

The present volume marks not the termination, but at least a halt along the road, in a long pilgrimage commenced many years before I began the formal study of economics. The work crystallized in a doctor's thesis submitted at Harvard University in the spring of 1940. Since then it has been completely revised. Section 1 (b) of Chapter VII has appeared in much its present form in the *Quarterly Journal of Economics* for November 1940.

Special thanks are due to Professor Alvin H. Hansen, under

whose supervision the thesis was prepared. After my original draft had been completed, Professor Hansen allowed me to examine the first draft of his *Fiscal Policy and Business Cycles* and the enormous mass of information thus made available, as well as his own searching criticisms, was invaluable. Needless to say, neither Professor Hansen nor any of the others whose names follow are necessarily in agreement with everything that is said in the text.

I wish also to express my indebtedness to Professors J. A. Schumpeter and John H. Williams for their help and encouragement at critical points of the study. Professor Seymour Harris also read the entire original thesis carefully and made many valuable suggestions. I am especially indebted to Professor Paul A. Samuelson of the Massachusetts Institute of Technology for generous and penetrating criticism of the final manuscript. Finally, I cannot sufficiently express my sense of obligation to Professor H. H. Burbank for his constant personal interest, aid, and advice during my entire two years at Harvard.

I wish to acknowledge the assistance of the Institute for Research in the Social Sciences of the University of Virginia and of its Director, Dr. Wilson Gee. Dr. Gee's interest in my work has been far more direct and cordial than any mere professional duties need have required. The Institute not only aided me in preparing the manuscript for publication, and in supplementary research, but also furnished a substitute for some of my academic duties, greatly facilitating the final revision. It would be ungracious at this point to overlook the constant help of Miss Ruth Ritchie, the Institute's secretary, whose knowledge of the dark mysteries of footnotes, and loyal assistance, enabled me to overcome many obstacles.

Acknowledgment is due of the help of my colleagues of the Department of Economics and Commerce at the University of Virginia. Professor E. A. Kincaid and Professor T. R. Snavely each read part of the manuscript and made many valuable suggestions, while Professor George T. Starnes and Professor Clark Hyde, when time ran short, at great inconvenience

to themselves relieved me of many burdens which I would normally have borne. But to mention the particular contributions of these gentlemen is not to minimize the general cooperative interest and help of all members of the department in my work.

My wife has handled much of the correspondence connected with the revision and has aided me in innumerable ways. Most of all, however, I want to thank her for her unfailing patience while the work was going on.

I wish to thank the following writers and publishers for permission to reproduce passages from the material noted: The Brookings Institution, *The Formation of Capital*; The University of Chicago Press, *The Economic Meaning of the Townsend Plan*, and articles from the *Journal of Political Economy*; Chapman and Hall, Ltd., *The Problem of Credit Policy*; Farrar and Rinehart, *Essays in the Theory of Economic Fluctuations*, and *Fallacies of Professor Irving Fisher's 100 per cent Money Proposal*; Professor Irving Fisher, *A Program for Monetary Reform*; Free-Economy Publishing Company, San Antonio, Texas, *The Natural Economic Order*; Harper and Brothers, *The Reserve Banks and the Money Market*, and *Pensions or Penury*; Harcourt Brace and Company, *The General Theory of Employment, Interest and Money*; P. S. King and Son, Ltd., *Banking Policy and The Price Level*; Alfred A. Knopf, Inc., *Jobs for All*; The League of Nations, acting through International Documents Service, Columbia University Press, *Prosperity and Depression*; McGraw-Hill, *What Is Technocracy*; The National Industrial Conference Board, *Capital Formation and Its Elements*; W. W. Norton and Company, *Full Recovery or Stagnation?* and *Fiscal Policy and Business Cycles*; Oxford University Press, *Value and Capital*, and *Consumers' Credits and Unemployment*; Prentice-Hall Inc., *The Theory of Prices*; Townsend Plan Headquarters, pamphlets on the Townsend Plan; Vanguard Press, *An Economic Program for American Democracy*; Mr. G. R. Walker, *Toward Monetary Stability*. Detailed citation will be found in the bibliography.

More than to almost any other person, however, I want to record my debt to one who is not even an economist. It is never an easy thing to change professions, and when the transfer has been made and made successfully, one feels a special gratitude to the person whose advice proved the impelling factor in the final hour of indecision. When advice is accompanied by the proffer of tangible assistance, the obligation becomes indeed great, and therefore I wish to express my deep obligation to Judge Archibald Battle Lovett of Savannah, Georgia, but for whom it is likely that I would never have studied economics.

D. McC. W.

University of Virginia
July 4th, 1941

CONTENTS

PAGE

I. INTRODUCTION 3

II. THE PROBLEM OF STABILIZATION 12

1. Some Outlines of Dynamic Equilibrium 12

2. Saving-Investment Adjustment and Keynesian Equilibrium 22

3. The Cycle 29

III. REDISTRIBUTION AND PURCHASING POWER CREATION 38

1. Redistribution as a Cyclical Remedy 38

2 Redistribution as a Remedy for Secular Stagnation . . 40

3. The Level of Money Wages 45

IV. WHAT IS INFLATION? 60

1. Economic Analysis 60

Summary 69

2. Historical Note 69

V. BANK CREDIT AND CHANGES IN BANK POLICY . . 75

1. The Inadequacies of Bank Credit 75

2. Mr. Berle's "Capital Credit" Bank 77

3. Irving Fisher and 100 Per Cent Money 85

4. A Negative Rate of Interest and Subsidies to Producers 89

VI. VELOCITY STIMULATORS 99

1. Some Notes on the Meaning of Velocity 99

2. The Taxation of Hoarding and "Idle" Hoards . . . 104

3. Stamped Money 114

4. Pensions and Compulsory Spending — The Townsend Plan 116

5. Summary 120

PAGE

VII. PURCHASING POWER INJECTORS 122

1. Deficit Financing 128

a. The Mechanism of Injection 128

b. Is There an Economic Limit and Economic Burden to an Internally Held National Debt? . . . 131

c. Bonds, Bank Assets, and the Rate of Interest . . 149

d. Some Distributive and Political Difficulties of Deficit Financing and Public Works 157

2. Social Credit 162

3. Miscellaneous Schemes of Purchasing Power Injection 170

VIII. SYNTHESIS 176

1 Finance 179

2. Distribution and Redistribution 196

3. Some Notes on Political Administration 206

4. War and Post-War 209

IX. CRITICAL SUMMARY AND CONCLUSION 214

BIBLIOGRAPHY 233

INDEX 243

THE CREATION OF PURCHASING POWER

CHAPTER I

INTRODUCTION

DURING every depression for at least the past century and a half, groups of writers have advocated the creation of additional purchasing power as a means of stimulation; yet until relatively recently their proposals have always been dismissed as worthless by the majority of trained economists. Like many another economic argument, the initial difficulty lay in the fact that the opposing schools were talking about quite different things. The general misunderstanding can be traced to confusions concerning the actual nature of purchasing power, confusions which have by no means entirely disappeared even at the present time.

Purchasing power creation may be looked at from four principal points of view. First, in the most fundamental sense, purchasing power is a matter of barter and of the output of goods. It is obvious that at any moment of time no more goods can be bought than exist. Even if we allow an interval for adjustment, increases in the quantity of money spent *need* not increase the supply of goods. Also, from a very long-run social aspect, goods exchange against goods and not against money. Thus one might conclude that the problem of purchasing power is simply the problem of production. But, secondly, it is clearly legitimate at times to think of purchasing power as a matter of money. In a monetary economy, no matter how many goods one may possess, it is generally necessary to have money in order to effect a purchase. A shortage of money may therefore result in serious dislocation. Thirdly, purchasing power, even in a money economy, may be thought of in terms of prices and ability to buy. Granted a margin of unpurchased yet desired goods, purchasing power, under this definition, may be considered as being as well created by lower-

ing prices against a given money income as by increasing the money income itself. Finally purchasing power can be thought of as ability *plus* willingness to buy, and therefore it can be created by transferring funds from those who do not wish to buy to those who do.

Classical economists, whose attacks upon schemes of purchasing power creation were far and away the most patronizing and dogmatic, looked at the matter almost wholly from the barter point of view.[1] It is not therefore to be wondered at that they totally failed to understand their opponents who followed the monetary approach. The classical attitude is summed up in J. B. Say's famous dictum that "products exchange for products." The total amount of purchasing power was therefore simply the total supply of goods. If some writers still objected that there might be an oversupply of goods in a particular field, the reply was made that the problem would solve itself by means of price reductions. Thus the classical point of view was a combination of the first and third approaches — barter and price reduction.

Today we realize that Say's famous statement obscures a very important segment of the economic process. While it is, of course, true in an ultimate sense, immediately speaking the majority of exchanges are not of products for products, but of products *for money* for products, and the third step — the reëxchange of money for goods — may be indefinitely delayed. But, in the past, economics exhibited a marked bias against too strong an emphasis upon the money side of things. The first great achievement of the science had been to pierce the "money veil" and to focus attention upon those realities of physical production which had been obscured by mercantilist thought. It is not surprising, therefore, that to subordinate money to "real" phenomena was almost the hallmark of a trained economist. True, as time went on, practical problems obtruded themselves in such a way as to force the adoption of policies of credit and cycle control which were not wholly consistent with the classical point of view. Yet Say's law re-

[1] By classical I mean the "classical" writers down to and including J. S. Mill.

mained relatively unexamined. The theory of business stimulation was most imperfectly linked to the body of general economic theory, and, even in its own sphere, confined itself to the single narrow field of interest-rate manipulation and producer's loans.

At present a rapid integration of business cycle theory with the remainder of economic thought is bringing about a great change. Our attitude toward many schemes and persons once deemed absurd is being radically altered. It no longer seems nonsensical upon its face to wish to inject additional means of payment, or to change the distribution of wealth in order to create purchasing power. Two principal strands of thought contribute to this result. As economics developed, the inadequacies of a purely barter approach became increasingly apparent, and in consequence the emphasis shifted to price reductions and price flexibility. Today, however, we realize increasingly the frictions which a policy of price reduction must encounter, and — still more damaging to older modes of thought — study of the money flows themselves makes it appear highly probable that in some cases price reductions, even of the most drastic nature, may not serve to ensure *aggregate* economic stability.

Not merely because businessmen have "conspired" to create "monopolies" but also because modern industrial technique requires very large productive units, the modern economist is constantly faced with rigidities which make it increasingly difficult to rely, for stability, upon the processes of adaptation alone. As a result, many cherished monetary principles must be modified. Perhaps we have not always remembered how many of our doctrines are based in part upon the assumption of a frictionless, perfectly competitive world. For example, the definition of "inflation" as a net increase in "spending" or "MV" is, in a sense sometimes used, dependent upon the assumption of complete flexibility. For in a world of perfect competition, which is also free from elements which make for indefinite hoarding, any injection of money would be bound to diffuse itself over the entire system and result merely in

higher prices. As one writer puts it, "In the simpler discussions it seems that the elasticity of supply must have become zero and demand proportional to the quantity of money."[2] Yet many have pointed out that in a world of idle resources and lumpy factors, such as we have frequently had in recent times, it may be possible, within limits, for an injection of monetary purchasing power actually to lower prices because of reduction in unit cost due to increased output. The problems inherent in such a process cannot be developed at this point.[3] They will form a major portion of the questions dealt with in this study.

Even more fundamental than the realization of frictions is the decline in our confidence in price flexibility itself. Classical theory is based upon the idea of tendencies toward equilibrium. Everyone, indeed, must concede the logic of the classic contention that price reduction, *vis-à-vis* a given money income, will increase purchasing power just as well (barring frictions) as increasing the size of the money income. But that is not the point. Broadly speaking, the prices paid by each one of us determine the incomes of the rest. Reducing the prices *I* pay may reduce the incomes *you* receive. Ragnar Frisch has demonstrated that, once a vicious circle has started, it is theoretically possible, under certain rigid assumptions, that the system may *never* gain the breathing space necessary to recover of itself.[4] Thus we cannot rely too much upon tendencies toward equilibrium even if prices are highly flexible, nor can we be sure that a downswing will come to rest at any predeterminate level.[5] Equally important has been Keynes' demonstration that, under conditions of indefinite hoarding, a purely

[2] J. M. Keynes, *General Theory of Employment, Interest and Money* (1936), p. 292.

[3] For an extended treatment of these questions, see Chapter IV of this study, "What Is Inflation?"

[4] Ragnar Frisch, "Circulation Planning," *Econometrica*, vol. II (July 1934).

[5] Professor Gottfried Haberler argues (*Prosperity and Depression*, 1939, revised edition, p. 403), "With the fall in prices, existing money hoards rise in real value and, sooner or later, . . . even the most cautious individuals will find an irresistible temptation to stop hoarding." But it would be dangerous to rely on such a doctrine in the real world. Before "sooner or later" has arrived, political unrest may have blown the system to bits.

competitive, frictionless world might still experience unemployment. To summarize: The modern economist is forced to realize that we do not have perfect competition, and he must also admit that, even if we did, it would not always solve our problems.

Since less and less reliance can be placed on price adjustment, we come to believe more and more that a relative stabilization of aggregate monetary purchasing power is one of the necessary conditions of economic security in a modern world. "Aggregate monetary purchasing power," however, and similar phrases frequently used today, are vague concepts not susceptible of very close definition. Properly construed, the idea should embrace all of the four methods of approach previously outlined. It should not slur over the ultimate necessity for increases in production nor yet the frictions involved in price change. Likewise the role of velocity and alterations in the propensity to consume must not be forgotten. For purposes of this study the concept will derive maximum possible precision if we think in terms of a comparison of money flows and goods flows.[6] If the flow of money income increases faster than the flow of goods, price changes will occur which may be most unstabilizing. We may therefore conclude that legitimately to increase "aggregate monetary purchasing power" we must find that (1) there is a margin of unbought yet desired goods, either actually in existence or possible of production in the not too distant future, (2) price reductions for various reasons are either undesirable or futile, (3) therefore it is desirable to increase spending either by (a) adding to or (b) transferring money incomes. The concept is related to price stabilization but does not require rigid application of such an idea.

Since, then, we now recognize the advisability of sometimes injecting monetary purchasing power, the economist is able to give a more tolerant scrutiny than ever before to many of the schemes of his unorthodox brethren — and it is increasingly

[6] The "maximum amount of precision" is not very great. For a discussion of the difficulties inherent in the concept of goods flow and money flow, see Chapter IV.

necessary that he should do so. For, from the basic premise that aggregate purchasing power cannot be allowed to vary over too wide a range, still more novel ideas are taking root in "orthodox" circles. In the last few years we have seen banking policy pushed to its utmost extreme in a program of deficit financing. Today trained economists are beginning to ask whether it is necessary to borrow additional purchasing power, and also whether it is inevitable that interest be paid on the loan. Even more extraordinary to the shade of John Stuart Mill would be the methods of distribution advocated today by Mr. J. E. Meade and others.

If such revolutionary ideas are found among the "orthodox," who can be amazed at the spate of heretical theories brought forth in the last decade? Temporarily somewhat in abeyance, they can be counted upon to emerge with undiminished vigor when another depression occurs. Yet if we are to dispose of unsound money schemes when they appear, if we are to show the mistakes which they contain and to persuade their proponents to a sounder method of approach, then economists must revise their former attitude. All patronizing mannerisms must be put aside, all reversions to cruder and earlier methods of reasoning. It is no compliment to our pretensions to scientific detachment that, even now, certain economists should employ the barter approach toward purchasing power to ridicule the "unorthodox" theorists, when it has long since been abandoned by us, as insufficient, in every other connection.[7] We must be prepared to give credit where credit is due and to point to those common elements of truth which are likely to be found in nearly all plans. If we do not do so, their proponents will remain unconvinced and, pardonably, of the opinion that the contemptuous economist has not seen the point. Since those whom we casually call "money cranks" may sometimes rise to position of the greatest influence, it behooves us to find

[7] For example, Professor Walter Spahr speaks of increases in production as the "economically sound" method of creating purchasing power. It would be difficult to find a comparably deceptive platitude which would contain at once as much truth and as much error.

a more efficient method of persuasion. It is time to reëxamine, sympathetically, and in the light of modern theory, the case for purchasing-power stabilization, together with some of the many methods which have from time to time been suggested.

This study is primarily concerned with the creation and injection of monetary purchasing power *outside* the ordinary methods of banking. It is, to a considerable extent, an exploration of what has been called the "underworld" of monetary theory. Economists, on the whole, have usually been so preoccupied in refuting fallacious monetary theories of the cycle that they have spent little time on the practical proposals by which these theories were accompanied. In consequence a great deal of material which may turn out to be of value has been passed by. As a means of demonstrating the many aspects of the problem a number of (largely) unorthodox proposals for monetary reform have been selected, chosen not so much for their intrinsic scientific value, in some cases, as for the problems they bring to light.[8]

Oversimplification is the prevailing weakness of writers on purchasing-power creation. Beneath the smooth surface of so-called monetary equilibrium, there are usually disturbing forces which may become important at any time without the intervention of specifically monetary factors. Our inquiry, therefore, will begin by examining in Chapter II some of the characteristics of dynamic equilibrium in a world of changing techniques and constant disturbance. Through this procedure we can gain a more definite idea of the reasons why

[8] It should be stressed, however, that this study is not an attempt to write a history of "unorthodox" monetary theory (a monumental task in itself), nor is it a detailed presentation of contemporary plans. We shall be interested in *the problem* which the various schemes have attempted to solve rather than in a comparative survey of the plans themselves. Only a few samples of each group have been selected, and nothing invidious is to be inferred by either the exclusion or inclusion of a particular suggestion. For the most comprehensive discussion of contemporary plans known to the author, see Arthur Dahlberg, "Recovery Plans," *Monograph No. 25, Temporary National Economic Committee*, 76th Congress, 3d Session (1940). Dahlberg's work treats the matter from rather too exclusively monetary an approach but collects a great deal of interesting material.

periodic injections of purchasing power are desirable, and we can also obtain a better idea of the limitations real factors impose upon stabilization by monetary action alone.

It is my hope in this study to effect a synthesis of the real and monetary aspects of the problem. Such a synthesis, as has already been intimated, implies a consideration of purchasing-power creation, not from any single one of the four approaches earlier outlined, but with due weight ascribed to them all. It will be necessary, therefore, before considering purely money plans, to give some attention to purchasing power in the light of our fourth definition: Ability *plus* willingness to buy. There is a very large and vigorous school of thinkers to whom the problem of purchasing power is simply a matter of the redistribution of wealth. Accordingly in Chapter III we discuss in outline "Redistribution and Purchasing Power Creation." Also, in order to avoid terminological difficulties, Chapter IV is devoted to an examination of the phenomena of "inflation," and to setting up a definition of that elusive term which can be adhered to throughout the remainder of the study.

Having disposed of preliminary matters, we pass on to a discussion of the various money proposals. They have been grouped under three sections: Chapter V, "Bank Credit and Changes in Bank Policy"; Chapter VI, "Velocity Stimulators"; and Chapter VII, "Purchasing Power Injectors." This classification is, of course, somewhat arbitrary, for, as in business cycle theory, few writers are rigidly unilateral in their approach. However, it does bring out the three main roads by which the problem is usually attacked. After concluding a critical survey of theories, a general synthesis is attempted in Chapter VIII, and that in turn is carefully analyzed in Chapter IX in order to show the fundamental merits and demerits of the strand of thought we have been pursuing.

The implications of our field are enormous and might easily be expanded into a treatise covering the whole field of economics. Exigencies of space and time will force a certain incompleteness of treatment, but it is hoped that the loss involved

in any blurring of detail will be offset by a gain in perspective. Among the important gaps will be the omission of detailed treatment of the "inherent" purchasing power "lag" theories, and the failure to elaborate foreign trade considerations to any great length. Many plans, such as Social Credit, are so linked up with their peculiar diagnoses of the cycle that to discuss them by themselves is scarcely adequate. However, this is not a book on business cycle theory *per se*. The omission of detailed discussion of foreign trade is a more serious matter, but some division of labor is essential, and I have preferred to concentrate on those aspects of the problem which have received the least attention.

As this study has progressed, I have been increasingly impressed with the ramifications and the complexity of the problem. Every care has been taken to avoid mistakes; yet, inevitably, a certain amount of error is bound to be discovered. For this I ask the reader's indulgence. If, before publishing a book, one were required to wait until one were made absolutely certain that it contained nothing that could be found wrong, how many studies would ever see the light?

CHAPTER II

THE PROBLEM OF STABILIZATION

IN THIS CHAPTER I shall endeavor to set forth certain outlines of dynamic equilibrium and to apply them to a short discussion of Keynesian underemployment equilibrium and the cycle itself. It is rather difficult to avoid appearing either too repetitious of material elsewhere presented or else too superficial, but an attempt will be made to set forth the basic conditions which are apt to give rise to demands for injection of purchasing power, without attempting too detailed a discussion of the Keynesian theories or of the cycle itself.

I. SOME OUTLINES OF DYNAMIC EQUILIBRIUM

A writer today who introduces a new terminology should take care to see that his action is necessary before he further burdens our terminology-laden science. However, I have found it imperative, in understanding particular aspects of dynamic equilibrium and the savings-investment mechanism, to distinguish certain groups of factors and to give them a special nomenclature. In a progressive society the factors which compose the real structure of production may, for purposes of our analysis, be classed in four groups. We may call them *operating* factors, *replacing* factors, *expanding* factors, and *supplanting* factors.[1] The "replacing," "expanding," and "supplanting" factors taken as a group will be referred to as the "nonoperating" factors. This, it must be understood, does not mean that they are *inactive* or *unemployed*. It is merely a *name* for the three types taken together. I have been unable to think of any other sufficiently colorless to suit my purpose.

[1] This is a *cross* classification relative to the usual one of land, labor, capital, etc. I am concerned with groups of *uses* to which land, labor, and capital are put, and particularly with groups of investment outlets.

If, now, we conceive of the economic structure as a great machine for the delivery of final consumers' goods and services, then the operating factors are those which merely operate the machine. They turn the crank, as it were, and the goods and services are poured out and distributed. But a certain sector of the factors is not engaged in the direct production of consumers' goods but in the repair and maintenance of the machine. These factors are the replacing factors. If there were only replacing and operating factors, the national income of goods and services would remain forever the same.[2] But there is a third class, the expanding factors. These are the men and resources engaged in making the machine *larger* so that a greater quantity of goods and services can be delivered. Finally there are the supplanting factors. It was at first thought that the supplanting factors might be referred to as innovating factors, since their essential function is the changing of product and technique, but there is an interesting overlapping of replacement, innovation, and obsolescence which made the use of another word desirable in certain cases.

The classification of supplanting factors will have to be explained at greater length, but before we go further the reader must be cautioned against certain misconceptions. We must not think of these groups of factors as corresponding with any particular firm, enterprise, or industry. In the "higher" stages of production it is difficult to tell what type of production a given plant belongs to. Thus the same concern might make steel for certain types of toys, steel to replace worn-out machinery, steel to enlarge a factory, and steel to build a new factory of a new type. The concern would thus embrace all four types of activity, while the mine which produced the ore would be even more inseparably linked with all of them.

Nor are our classifications mutually exclusive. A factory might, at one and the same time, be engaged in expansion and in innovation and also in supplanting older products and tech-

[2] Barring, of course, changes in natural resources. Moreover, if the population were increasing, income *per head* would be shrinking.

niques. The most troublesome overlapping arises, however, in the case of supplanting factors, replacing factors, innovation and obsolescence. The important feature here is that, if old-type machinery and old-type goods are being replaced by new types *before* the old types are worn out, the average time for discarding items of our total equipment is speeded up and a larger supply of "nonoperating" factors will be needed than would otherwise be the case.[3]

Our classification is primarily concerned with outlets for saving, and, viewed from the point of view of the savers, the process of discarding items will have been partly provided for by saving for replacement (depreciation) and partly by charges for obsolescence. Let us assume that replacement saving and actual replacement coincide. If new techniques are installed as the old machinery wears out *without* calling for any increase in the number of replacing factors, or in funds set aside for replacement, the process is still essentially one of replacement.[4] It does not come under our head of "supplanting" factors. Likewise the process of speeding up will to some extent have been anticipated in "charges" for obsolescence and a certain number of factors may be employed from this source. Obsolescence and replacement may for our purposes be lumped together, insofar as the obsolescence has been foreseen and provided for. But there is a third class which will be referred

[3] This is a somewhat subtle point. Perhaps it can be made clear by using the automobile and the horse as examples. When autos first came in, a certain definite quantity of factors were being used for replacement of horses, wagons, wagon factories, etc. For a time it is likely that this continued unabated. In *addition* to it other resources were being used for autos, etc. Later on we have a gradual substitution and transfer, and replacement might return to its old level But if we assume a constant rate of invention, then, as the additional demand created by the overlapping of the auto and the horse subsided, some *other* new industry would begin to oust some *other* established one. From a purely static point of view the process entails a certain amount of "waste."

[4] It is important to realize that innovation — the switching to a new product or a new technique — might conceivably be carried through without any new investment. A man might carve walking sticks instead of dolls. A mere transfer of resources would be involved. But with highly specialized machinery some new funds and new resources are almost sure to be needed during the transfer.

to as the supplanting factors. It is found if there is saving in excess of saving for replacement plus anticipated obsolescence, and if this saving finds an outlet in the supplanting of old machinery by new types *before* the old is worn out. In consequence, that process which from a social point of view is essentially replacement is greatly speeded up. This class, the supplanting factors, is the excess of "nonoperating" factors over what would be needed in a "circular flow" or stationary state, minus those factors used for anticipated obsolescence, and for expansion.[5]

Having completed our classification, we pass on to ask ourselves what we can mean by "equilibrium" in a dynamic world in which saving of all the types outlined is occurring. Clearly the classic static equilibrium is impossible. This equilibrium has sometimes been defined as the condition "when there is no tendency for any factor of production to move to a more profitable employment." [6] But in a dynamic world factors are constantly being transferred back and forth. Old products are decaying and new ones coming in. There is constant motion; hence the strict static equilibrium is impossible. What can we put in its place? It is submitted that we may make use of the concept of a condition of "equilibrial" change or "current adaptation" in which, while there is constant motion, these changes in the aggregate occur at offsetting rates. No disturbances occur which cannot be *currently* absorbed. Our dynamic but equilibrial society may therefore be defined as noncyclical.[7] No cumulative distortions of the real structure of production are permitted to develop. No single line of industry expands in such a way as to result in a net increase

[5] The writer realizes that a great deal more discussion would be desirable to amplify and refine the classification given. But the outline here set forth is sufficient for purposes of the present study, and further elaboration must be postponed. I hope to present an amplification of the model used in this chapter in a later book.

[6] E. F. M. Durbin, *Purchasing Power and Trade Depression* (1934), revised edition, p. 53.

[7] I am aware that this definition — despite the qualifications in the text — is quasi-tautological, but to make it otherwise would require a book on business cycle theory. See, however, *infra*, note 8.

(decrease) in money income and general *sympathetic or secondary* expansion (contraction).[8]

It is, on the whole, generally agreed that, in a rigid economy with relatively fixed prices and large units, an equilibrium such as we have outlined is likely to require a constant rate of saving[9] or at least one which changes very slowly. A sharp distinction may be drawn between the "operating" and the "nonoperating" factors.[10] It is relatively easier to switch from one branch of consumer's goods production to another than it is to make a general shift in the proportion of factors devoted to operation, as distinguished from replacement, expansion, and supplanting of old techniques. The reasons for this distinction will be examined in greater detail when we come to study the savings-investment mechanism. Let us, for the present, merely assume that equilibrium requires a constant rate of savings and that a constant rate of savings requires a constant average rate of interest and prospective rate of profit on new investment.

A dynamic society which has become accustomed to saving for expansion, replacement, and the supplanting of older techniques and products must be able to find a constant outlet for its accumulating funds. The demand for this saving is influenced largely by the rate of prospective profit. It is worth noting here that the profit or lack of profit on investment already made is not important save as opportunity cost tends to equalize all earnings.[11] Primary interest centers in profits on new

[8] In order for the general expansion to occur there would have to be an elastic credit supply — either a greater M or a greater MV. The contraction, however, could come from a mistaken investment in a single field without any preliminary monetary expansion. It could also come from old processes being ousted by new ones so quickly as to cause *net* unemployment.

[9] Throughout this book the Robertsonian definitions of savings and investment are used. See D. H. Robertson, "Saving and Hoarding," *Economic Journal*, vol XLIII (September and December 1933).

[10] On this point see Durbin, *Purchasing Power*, pp. 82 *et seq.* and our discussion of the saving investment market in section 2 of this chapter.

[11] Of course, as Alfred Marshall says (*Principles of Economics*, 1920, eighth edition, p. 424), "The confident expectation of coming quasi-rents is a necessary condition for the investment of capital in machinery." A series of disastrous losses in old investment is likely to shake confidence in investment generally. Still new investment is the principal thing, and if existing products are only

investment, on the "marginal efficiency of capital." We might conceive of the profits derived from expansion as the result of a race between increasing demand for goods generally and the competition to satisfy it.[12] No changes of tastes or techniques need be involved. It is simply that more of everything is wanted, for example, by a larger population. The profits derived from supplanting factors, however, come from the savings in cost made possible by new inventions. These inventions are so cost saving or so desirable that they are installed regardless of the fact that existing equipment is still able to operate.[13] Equilibrium, if expansion and replacement are proceeding at a constant rate, may therefore depend on a constant *flow* of invention. By constant "flow" is meant not merely a constant *number* of inventions per annum, but a number of inventions per annum employing about the same average number of factors.[14]

Let us look a little more closely at income flow in our dynamic equilibrium. It was pointed out earlier that the flow of consumer's goods and services of existing types would remain unchanged in a dynamic world even though the expanding and supplanting factors ceased to work at all.[15] But, although the labor of these factors would not be needed, their money *income* would be.[16] If they ceased to receive a money income,

---

gradually pushed to the wall no dislocation need ensue. One might think of society as consisting of new industries earning large profits and losses, middle-aged industries earning average or "normal" profits, and old industries earning no profits at all or even losses. One might then speak not of the "representative firm" but of the "representative technique" or product

[12] Such competition need not be "pure" or "perfect." The fascinating problems involved in a discussion of monopolistic competition in relation to monetary theory cannot be dealt with here. Monopolistic competition may or may not hamper new investment But as long as investment is made in sufficient quantity to absorb current saving, the monetary theorist is largely unconcerned.

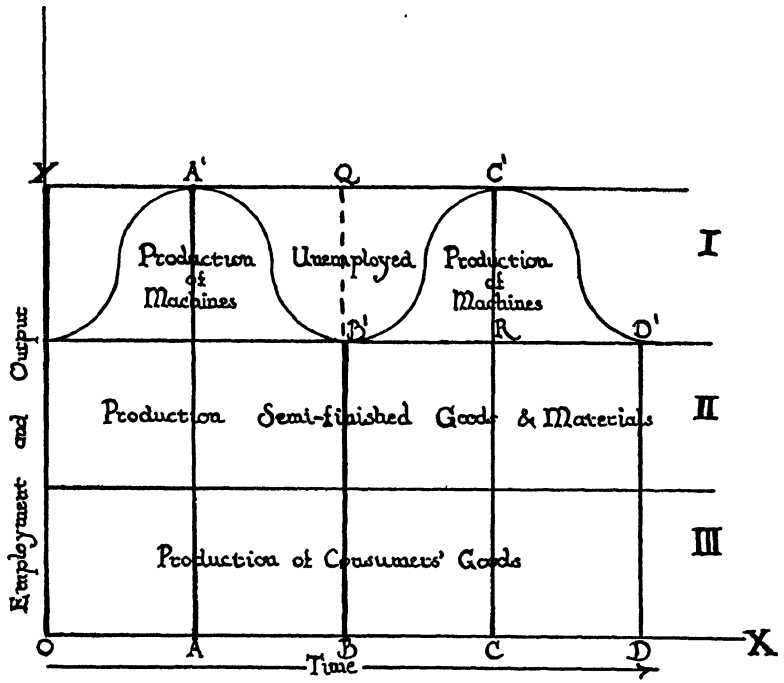
[13] It is by no means necessary that these inventions be socially desirable. They might consist of new methods of wasteful advertising, etc., etc.

[14] The problem of giving a quantitative classification of inventions is only suggested. Statistically, it would be a very hard thing to do.

[15] Subject to qualifications noted *supra*, note 2.

[16] By money income I mean the flow of money into the hands of consumers which is available for spending on final consumption. For our present analysis

then the total flow of final goods and services could not be sold without price reduction. This point is illustrated in the accompanying diagram.



On the Y axis we measure employment and income in Mr. Keynes' "wage units."[17] The X axis measures time. Strip number I is the employment given by the production of machines. Strip number II represents employment in raw materials and semi-finished goods. Strip number III represents

---

the important thing is not so much how much they receive as how much they spend.

[17] J. M. Keynes, *The General Theory of Employment, Interest and Money* (1936), p. 41. The use of Keynes' wage units raises a problem in that "wage units" change if the level of money wages changes. We will assume, therefore, that the level of money wages does not change despite the slump. This is, of course, quite unrealistic. Equally unrealistic is the assumption that strips II and III do not change. But the diagram does drive home the relative stability of consumer's goods production and the mutual interdependence of all industries.

employment in the consumer's goods producing industries.[18] Suppose now, for any reason, that the demand for machines is discontinuous. In the year A there is full employment and income AA^1. At the year B there is no demand for machines, and employment *and* money income have shrunk to BB^1. Yet suppose consumer's goods production (strip III) to be the same. Clearly a drastic reduction in consumer's goods prices will probably be needed if they are to be sold.

Only if the factors still employed had a money income large enough to buy *all* the consumer's goods, and only if they changed their saving so as to consume more than they did formerly, could the final income of goods and services be consumed without price reduction. The factors still employed must (a) have an income large enough to permit such a rearrangement, and (b) actually carry through the rearrangement of their savings habits.[19] In any one period of time the total money income of society is *greater* than the money value of the total current production of consumer's goods and services. The difference is accounted for by the money currently put aside out of current money income and spent (in times of full employment) on investment goods. But it is extremely unlikely that the rearrangement of savings could happen, or that it would happen if it were possible.

Writers who wished to demonstrate a "flaw" in the system have spent a great deal of time in showing that the final product of the supplanting factors and of the operating and replacing factors cannot be sold at the same time at a profit. Their statement is correct as far as it goes, but the truth is actually

[18] These strips cannot be rigidly identified with any of our four groups of factors. The production of machines can be replacement, expansion, or the supplanting of factors, while the production of raw materials and semi-finished goods is not exclusive to the operating factors. A similar diagram could be drawn to illustrate the mutual interdependence of any classification of the factors making up society, in which employment in one class is assumed to vary while others remain constant.

[19] Even if they did consume all the existing output, *full employment* would only be attained if they tried to consume even more and forced a transfer of factors. If the discontinuity in machine production were only temporary, the transfer of factors would produce violent dislocation and shortage of labor.

even more drastic. If population is stationary, it may be impossible that they can *both* be sold *at all*. There may be some net profit in the aggregate but *everyone* will not be making profits at the same time. For if we assume a constant rate of saving and full employment, then as soon as a new factory of a new type is built and ready to commence operation it must steal operating factors from *old* plants — and this means that production of some standard product or other *must* be discontinued. Only to the extent that new technical devices set resources free, can both old and new still operate. Thus if X be the total number of factors, N the number of factors always engaged in the "nonoperating" sector, and O the number engaged in the operating sector, we have $X = N + O$. If N be constant, then new equipment which it delivers can only be worked by stealing part of O from some other occupation. The monetary "flaw" theorists have overlooked that constant ousting of old products by new which is at once essential to monetary equilibrium and a prime source of dislocation. Yet *theoretically* if new inventions were introduced at the same rate at which old products declined all would be well.[20]

In an expanding world, that is, a world of increasing population and available resources, the reply to the "flaw" theorists is more difficult. Clearly both old and new plants could be operated to some extent, and, if money income avaliable for spending remains the same, a decline of prices would take place which might be avoided by increasing the amount of the monetary circulation.[21] The writer agrees with Mr. Durbin

[20] In practice we could scarcely expect a constant average mobility of factors. Nor could we expect the factors ousted always to correspond in number with the factors reëmployed A considerable degree of frictional unemployment to which the system had become accustomed and which did not vary in amount would be consistent with equilibrium.

[21] Even in the case of a fixed circulation it was argued by economists that, theoretically, *new invention* might lower costs sufficiently to offset the falling price level. *Cf.* Durbin, *Purchasing Power*, p. 78: "In such a condition of economic society the Rate of Saving, the Rate of Invention, and so the Rate of Interest are all constant; while the money prices and the money costs are falling by a percentage dictated by the physical productivity of capital."

Should we reject this reasoning and try to stabilize prices, the trouble re-

that "lag" difficulties in the flow of money *may* ensue if it is necessary to increase production from a stationary situation with general unemployment.[22] But, to avoid circular reasoning, we must first explain how we happened to have that unemployment.

Our explanation has shown the number and variety of places in which a monetary equilibrium is exposed to disturbing real phenomena. We should have a constant rate of expansion into new territory and constant growth of population. This should be accompanied by a constant flow of invention. Just the right number of inventions employing just the right number of factors must come at just the right time. Next there should be a constant rate of replacement, and the ousting of old products by new must be smooth and uniform with constant average frictional unemployment. Just, however, as a shift from one branch of consumer's goods production to another is relatively easier than a general shift in the proportion of operating to "nonoperating" factors, so these various outlets for investment do not all have to be constant relative to one another. Thus slowing-down of population growth, for example, might be offset by an increase in the flow of invention. But such a happy coincidence of timing would be purely fortuitous. The aggregate of investment demand *might* remain unchanged, but we have no grounds *a priori* to expect it to be constant or inconstant.

---

mains, in any price stabilization plan, that one is never likely to find a symmetrical proportionate expansion in all lines at once. If we did, aggregate increases in purchasing power need not cause great disturbance. But what actually happens is that production increases in some *one* line, necessitating a rearrangement of the pattern of preferences, which may do curious things to a particular price index, and which will create disturbances impossible to avoid completely by any increase in the money supply.

[22] Durbin, *The Problem of Credit Policy* (1935), p. 37. "It is curious to notice that, if at any moment it were necessary to increase production from a stationary situation with general unemployment, this difficulty would become a reality. The necessary circulating balances would have to be provided at every stage, including that of direct consumption." But see in regard to superficially similar but fallacious reasoning, D. H. Robertson, "The Monetary Doctrines of Messrs. Foster and Catchings," *Economic Essays and Addresses of Pigou and Robertson* (1931).

It has so far been conceded that very slow and gradual changes in the rate of saving, or of investment outlet, might occur without maladjustment, but other than that very little has been said about adaptation. The classical economists, however, seemed to hold that changes in the rate of saving, or in the interest rate, or in the profit rate on new investment, could occur without causing general dislocation. Before going further, therefore, we must discuss this savings investment mechanism and its adjustment to change.

2. SAVING-INVESTMENT ADJUSTMENT AND KEYNESIAN EQUILIBRIUM

Not very much can be done in working out general rules regarding the ousting of one product by another, but, since this process usually calls for at least a little net investment, we are justified in passing on to the more general question of saving and investment adjustment.[23] So far discussion of the effect of changes in the interest rate, the prospective profit rate on new investment, and the rate of saving, has been avoided. The classics were inclined to treat this merely as another supply and demand problem. Savers furnished the supply and investors the demand for loanable funds. Interest was the supply price and profit the demand. Thus Professor Haberler expressed substantially the classical view in the following passage:

> Suppose we conclude that on balance the supply of saving is positively correlated with the rate of interest; that is to say, that people save more if the interest rate goes up, or that they save more at a higher than at a lower rate. If we take this proposition in conjunction with the less problematic one that investment is negatively correlated with the interest rate, what, then, is the influence of the interest rate on capital formation?
>
> This formulation of the problem, one with which, it seems to me, writers of very different schools would agree, suggests a solution analogous to that of the question as to whether a high or a low price of a commodity will lead to greater output. If the price is high, potential supply will be great, but demand will be insufficient to permit of a high level of output. If the price is low, there will be

[23] As has been noted before, Robertsonian terms are used throughout.

sufficient demand for a high level of output but not sufficient supply. Now everybody knows how to put this problem correctly. Dealing with our problem by analogy, we may conceive of investment as the demand schedule for capital, of saving as the supply schedule, and of the interaction of the two schedules as determining simultaneously price and quantity, interest rate and the capital actually constructed.[24]

Modern theorists are increasing doubtful of this formulation of the problem. First of all we must make allowance for rigidities. It is not at all clear to what extent "planned" saving from a given income is linked to the rate of interest.[25] Within broad limits and over a considerable period of time it would seem evident that Hobson was at least partly correct in maintaining that saving was dictated more by the manners and customs of the people than by the interest rate.[26] We must also realize that, insofar as the rate of interest be thought of as the "price" equating supply and demand for loanable funds, it is an extremely sticky and rigid price. Nor, further, is it well established just how much influence the rate of interest actually has on the willingness to invest. The weakness of changes in the rate of interest, at least within the customary range of variation, has been well indicated by Professor Hicks and Mr. Durbin.[27] But let us leave these important objections to one side. The passage quoted from Professor Haberler suggests a

[24] Gottfried Haberler, "The Interest Rate and Capital Formation," *Capital Formation and Its Elements* (1938). However, for a more complete exposition of Professor Haberler's ideas on this point, see Haberler, *Prosperity and Depression* (1939) revised edition, pp. 198 *et seq.*

[25] Haberler, *Prosperity*, p. 197

[26] This would of course, to be correct, have to refer to "planned" saving. As to terminological difficulties see Haberler, *Prosperity*.

[27] See Durbin, *Problem of Credit Policy*, pp. 82 *et seq.* "It is almost impossible to believe if the element of risk is so important in the marginal productivity calculation that small movements of the Market Rate of Interest will greatly affect the quantity of this type of investment at least in the short run." See, further, J. R. Hicks, *Value and Capital* (1939), p. 226: "So long as we are concerned with movements of the rate of interest which fall within the ordinary range of such movements, say between two per cent and seven per cent per annum, the effects of such changes . . . in the near future will be very slight. . . . Interest is too weak for it to have much influence on the near future; risk is too strong to enable interest to have much influence on the far future; what place is left for interest between these opposing perils?"

treatment of the problem by the Marshallian "cross" of intersecting supply and demand curves. It is the essence of Mr. Keynes' criticism of this supply and demand curve treatment that, as everyone knows, Marshall's schedules rest largely on *ceteris paribus* assumptions, and such assumptions are quite illegitimate in the case of savings and investment.[28] We cannot assume other things equal, including income, while the adjustment is taking place.[29]

In a *given* technical environment or in a technical environment with a given rate of change, an *increased* rate of saving *before* it does anything else is likely to cut down the market and the prosperity of the consumption goods industries.[30] Yet, since a part of investment is made with an eye to more or less prompt sale of the final product to consumers, a decline of consumer buying is likely to diminish the demand for new investment.[31] Only if a change in saving *immediately* reduces the rate of interest and only if this in turn *immediately* starts just the right amount of new investment, will trouble be avoided. Such immediacy is probably beyond practical consideration. In other words, supply and demand are not independent of each other and changes in one do not leave the other unchanged. To paraphrase Mrs. Robinson's remarks on a similar interdependent case, the supply curve for savings "infringes

[28] Keynes, *General Theory*, pp. 179–181

[29] *Cf* Mr Keynes "I hold that 'we can be quite sure that a rise in the rate of interest (assuming no favorable changes in the demand-schedule for investment) will decrease the actual aggregate of savings' This last statement embodies an essential element in my doctrine, and offers a useful shibboleth for distinguishing those who fundamentally agree with the underlying thesis from those who fundamentally differ" Keynes, "Mr Keynes's Consumption Function: Reply," *Quarterly Journal of Economics*, LIII (August 1938), 708.

[30] It is the importance of insisting on the *immediate* deflationary effect of an increase in the rate of saving, under our assumptions, which I believe led Mr. Keynes to adopt the otherwise awkward definition of saving and investment as always equal.

[31] See Durbin, *Purchasing Power*, pp. 82 *et seq.* However, if there are present a number of industries not closely geared to the level of consumption and very sensitive to changes in the rate of interest, immediate disturbance may be minimized. But if, as a result of these new industries being started, there is eventually a sudden large-scale increase in the output of consumers' goods with no change in the propensity to consume, disturbance may then ensue.

the first canon of behavior" of a supply curve. It is not "independent" of the demand curve of its "own commodity."

However, we cannot reason about these things in a vacuum. The propensity to save does not usually change by itself. Barring the panic hoarding of the downswing and of time of revolution and uneasiness, strain is probably likely to be thrown on the saving-investment mechanism from the investment rather than the saving side.[32] We cannot assume a given technical environment. We must consider jerky changes in investment outlet. This factor Mr. Keynes explicitly omits. He says, for example, "We take as given the . . . existing technique . . . the tastes and habits of the consumer," etc. "This does not mean that we assume these factors to be constant but merely that in this place and context we are *not considering* or *taking into account* the effects and consequences of *changes* in them" (italics added).[33]

Professor Hansen, however, has stressed the importance, in the past, of those types of investment which are not closely geared to the level of consumption, or, more strictly speaking, to changes in its level.[34] It is possible, as one writer puts it, for the economic system to be "dragged out of the depression by that sector which belongs to the future and is relatively immune against present disturbance."[35] If, then, the changes in the propensity to save either result from, or are accompanied by, the discovery of a new investment outlet of the first magnitude, it is likely (abstracting from cycle theory *per se*) that the disturbance will be relatively small. An investment outlet large enough to change the propensity to save is likely to be sufficiently promising not to be affected by the slacking off of

[32] For an elaborate discussion of terminological difficulties regarding "saving" and "hoarding," see Professor Haberler's reply to Mr Kahn's review of his cycle theory, *Economic Journal*, vol. XLVIII (June 1938) We are not referring here to specifically cyclical difficulties.

[33] Keynes, *General Theory*, p. 245

[34] Alvin H Hansen, *Full Recovery or Stagnation?* (1938) It is important to realize that it is not the level of consumption but changes in its level which primarily affects investment *Cf* Haberler, *Prosperity*, p. 199, note.

[35] L M Lachmann, "On Crisis and Adjustment," *Review of Economic Statistics*, XXI (May 1939), 62 and esp 64

consumer's goods demand.[36] *Vice versa*, a genuine reduction in the rate of saving arising from a basic shift of habit might be carried through gradually with some degree of smoothness unless large incomplete capital projects were affected.[37]

What is likely to be the important thing in modern society, however, is what happens when the propensity to save remains the same but the investment outlet becomes smaller. Let us for the moment abstract from cyclical difficulties and concentrate on long term equilibrium. Suppose the population ceases to expand. Then the expansion demand for investment disappears. Only if the "supplanting" demand, the rate of technical innovation and ousting of old products and techniques, is greatly speeded up can the community avoid a painful adjustment. It is fairly certain that in some cases an invention might happen of such size as to absorb all the factors set free, but this would be a mere coincidence.[38] Failing this we have two alternatives — either the rate of interest may fall to allow less profitable enterprises to be undertaken, or there must be a decrease in the propensity to save. We must think both of the price at which funds are transferred and the amount of funds being held available for transference.

One proposition seems to command the assent of all parties, and that is that in a *dynamic* world there is a minimum interest rate below which people will not transfer their funds to others. Such diverse writers as Keynes, Cassell, Böhm-Bawerk, and Schumpeter all agree on this point. The principal difference between later critics and the more "orthodox" school is that, while both recognize a minimum rate, for the modern writers it is a rate below which people do not *lend*, for the earlier writers

[36] Particularly if the investment is in a foreign country and made with an eye to sales in a foreign market. We are obliged however, for the sake of space, to abstract from the foreign trade aspects of the problem.

[37] *Cf.* F. A. Hayek, *Prices and Production* (1935), revised edition.

[38] A few inventions as revolutionary as the automobile or the steam railroad could easily take the place of expansion demand for a time at least. We must also remember that population expansion is not independent of new industries but may arise because of it.

it is a rate below which they do not *save*.[39] Once we realize that for very considerable periods people may continue to save or at least, if there is no net hoarding, to *hold* funds, although unwilling to lend them at prevailing rates, we see the great possibilities of dislocation.[40]

Once the demand for investible funds has decreased so that the interest rate has reached a minimum, yet saving continues, a general contraction may ensue. Scarcely has this contraction started — and certainly before any alteration of savings habits has had time to appear — than the normal savings motive is reënforced by panic hoarding. As Mr. Keynes has shown, the system may be forced down to a point at which "it has become so poor that its surplus over its consumption is sufficiently diminished to correspond to the weakness of the inducement to invest." [41] We may (1) reach an equilibrium in which there is no longer any *net* hoarding but prices remain relatively stable and there is on one hand a block of idle men and on the other a block of idle funds, or (2) we may find ourselves in a condition in which, below a "minimum" rate of interest, hoarding continues indefinitely no matter what happens to the price structure.[42]

The writer follows Professor Haberler in believing that the first case of underemployment equilibrium is the one most likely actually to occur.[43] Neither *unlimited* hoarding nor *unlimited* price reduction appears very probable in the real world.[44] As Haberler argues, the deflationary process, *ceteris*

[39] But both would probably agree that, temporarily at least, saving would continue before savings habits were altered.

[40] Thus, as pointed out below in the text, there may be no longer any *net increase* in total funds held idle, but owing to price rigidity no adjustment is made and factors remain unemployed.

[41] Keynes, *General Theory*, p. 31.

[42] Haberler, *Prosperity*, pp. 218–221, contains a careful and elaborate statement of this problem.

[43] See the discussion in Haberler.

[44] Haberler, p. 219: "It is important to realize that this is equivalent to saying that, when this critical level of interest rates has been reached, any amount of money which might be created by the banks will be hoarded. . . . Suppose wages and prices continue to fall as long as there is unemployment: then money

paribus, will be brought to an end by shifts in the propensity to consume and/or the inducement to invest, owing to the fact that the "real value" of existing money hoards becomes so great that even the "most cautious individuals" find an "irresistible temptation" to dishoard.[45]

It would be a mistake, however, to deduce from the premise that deflation may have a "bottom" the conclusion that wage and price reductions will ensure full employment. Eventual shifts in consumption and investment may possibly stop *further* deflation, or induce oscillations around a trend, but it is by no means true that they will necessarily drive the economy back to full employment. Full employment can only be attained by appropriate adjustment of savings habits relative to the inducement to invest. Wage and price cuts may always, to be sure, start another deflation, which, indeed, may eventually find a "bottom," but that does not mean that they will induce full employment. They are not, in themselves, very good methods of either shifting the propensity to consume or increasing the inducement to invest, and these are the only measures which will solve the difficulty.

Since we cannot rely on price adjustment, our task in underemployment equilibrium is of a twofold nature. First of all, further tendencies toward deflation, if any are present, must be offset. This is in the nature of "first aid" to prevent the patient from bleeding to death. Secondly, as a permanent recovery measure, steps must be taken to permit a rearrangement of savings habits. Contrary to the opinion of some current writers, increases in the money supply may be of immense importance in bringing about these adjustments. It is obvious that, if the hoarding of part of the population is offset by money payments to the remainder, general deflation can be prevented, but the usefulness of money does not end here. The *aggregate* propensity to consume may be increased by making injections of

---

is constantly released from the transaction sphere But instead of stimulating investment and employment, all this money is being hoarded Hoards grow without limit in terms of money."

[45] Haberler, p. 403.

monetary purchasing power in the form of payments to poorer persons whose propensities to consume are very high, and, finally, the constant increase in M which this process entails may go a long way toward satisfying liquidity preference.[46] In the meantime, if aggregate money income is maintained, the classical supply and demand formulation of the interest problem may have a chance to work itself out. Increased liquidity and the expectation of reduced yields may *eventually* bring about a shift in the propensity to consume of the wealthy, corresponding to the reduction in the rate of interest.[47] Thus, while the basic sources of dislocation are frequently non-monetary and cannot be *prevented* by monetary means, perhaps the worst of their effects can be offset by monetary policy. What policies are appropriate, what problems accompany them will be discussed in later chapters.

3. THE CYCLE

The discussion in the previous sections has brought to light enough disturbing factors to account for almost any degree of industrial fluctuation. Capitalism, it seems, must keep running in order to stand still and be forever changing in order to remain the same. It is worth noting that the mere combination of a relatively stable propensity to consume, with a jerky series of investment outlets, is, in itself, quite enough to account for movements approximating a business cycle. Save in the case of secular stagnation,[48] monetary equilibrium — as

[46] Of course, if the demand for hoards is insatiable, then *no* amount of money would satisfy liquidity preference. But I believe that such a condition is most unlikely One might also think of a case in which the act of creating and injecting money *increased* the urge for liquidity But this also seems unlikely — especially over a period of time We shall recur to these problems later.

[47] Since the original manuscript of this book was prepared, Professor A C. Pigou has advanced, though much more positively, a line of reasoning similar to the one just given as to the relation of the rate of interest and the propensity to consume See A C. Pigou, *Employment and Equilibrium — A Theoretical Discussion* (1941), and P. A Samuelson, "Professor Pigou's 'Employment and Equilibrium,'" *American Economic Review*, vol XXXI (September 1941).

[48] If one has reached a condition of Keynesian underemployment equilibrium, of the first type at least, in which prices have become adjusted to a reduced money supply, but, owing to rigidity, men are still unemployed, full

we saw in the diagram in Figure 1 — requires the continuous employment of the factors in the capital goods industries; yet we cannot expect the introduction of new inventions and/or new expansions of population or new exploitations of territory to come smoothly. In D. H. Robertson's words, there are "inevitable discontinuities." As a result, in the absence of intervention, and probably even then, a certain amount of periodic inflation and deflation is inevitable. A propensity to consume that is too small may also sometimes be too large, and in the latter case resort may be had to "forced saving."

One should note, also, that just as there are discontinuities in the demand for, and employment of, the supplanting and expanding factors, so also are there discontinuities in the activity of the replacing factors. Many writers simply assume a smooth flow of replacement, but this is clearly shown by statistical evidence to be untrue — at least so far as various particular industries are concerned.[49] It might still be maintained that, for the economy as a whole, the various replacement demands overlap in such a way as to produce a smooth aggregate. But this is merely a statement of hypothetical possibilities, and such evidence as is available is in the other direction.

From statistical data on discontinuity in various industries, some writers have endeavored to demonstrate the "replacement wave" theory of the business cycle. Starting from an initial burst of capital equipment installation (which must be independently explained), they argue that, *ceteris paribus*, the wearing out and replacement of the equipment will tend to come in a similar burst after an interval determined by the physical life of the machinery. In consequence, the demand for capital goods, and with it general economic activity, is given a

---

employment would not be necessary to monetary equilibrium. In the second type — indefinite hoarding — full employment is also not necessary, though the writer has doubts whether that can be referred to as monetary equilibrium at all.

[49] See, for example, Johan Einarsen, *Reinvestment Cycles and Their Manifestation in the Norwegian Shipping Industry* (1938); General Motors Corporation, *Dynamics of Automobile Demand* (1938); *American Machinist*, April 24. 1935, p. 314.

rhythmic pulsation.[50] Such a pulsation, they argue, may to a large extent impose fluctuations upon the monetary system rather than result from them.

The reasons adduced are as follows: Replacement forms a large part of the demand for capital goods. When an initial burst has come to an end, the capital goods industries will not be able to run at full capacity as long as replacement has fallen to a low level. In consequence there will be deflation. New inventions and new potential expansions may certainly be discovered during the slump, but the state of confidence will be such that they will not be utilized until business picks up. Business will pick up and entrepreneurs will be forced to dishoard or borrow when replacement demand becomes sufficiently important. Replacement demand will grow because, after a certain point, replacement may be necessary, not for the reason that one expects to make profits from the new machine, but simply because new equipment is indispensable if one is to remain in business at all.[51]

Even taking this theory on its own terms and assuming that machines wear out suddenly and with clocklike precision, there are still several objections to it. The degree of postponement of replacement might at times be a function of the degree to which consumption has fallen off. Thus, if machines were not seriously harmed by standing idle, a 50 per cent decrease in the level of consumption would produce a 100 per cent increase in the time interval between replacement concentrations. Likewise, even assuming consumption to be stable, and not to de-

[50] See Einarsen, *Reinvestment Cycles*, and also an article by the same author with same title, *Review of Economic Statistics*, vol. XX (February 1938). Professor A. C. Pigou mentions the idea in *Industrial Fluctuations* (1929), second edition. Mr. J M. Keynes also refers to the matter in Chap. XXII of the *General Theory*. As to the original burst of investment, I have made certain suggestions elsewhere. See D. M. Wright, "A Neglected Approach to the Acceleration Principle," *Review of Economic Statistics*, vol. XXIII (May 1941).

[51] By no means all expenditure on new instrumental goods is made with an eye to increased profit. On the contrary, replacements and in some cases innovations may be installed simply to stay in business. Even though the original management may have gone bankrupt, the creditors who take over will still have to make certain vital repairs in order to salvage anything.

crease very much during the slump, so large a burst of capital installation as that of 1927–29 might not recur for an indefinite period. The initial outburst might be made up of goods of such varying life spans that it would be a long time before the particular "waves" would cumulate into another "hump" of similar importance.

More damaging to the theory than objections of this sort is the point made by Mr. J. S. Bain that machines do not have finite temporal lives.[52] They do not collapse all at once like the "deacon's one-horse shay," but, on the contrary, their retirement is dictated by comparing rising costs of operation, etc., with sales prices of output. Thus surveys of the life expectancies of physical property are usually derived from data taken *ex pos* and cannot be applied without allowing for a wide margin of error.[53] The writer has made attempts to determine empirically what degree of validity may be ascribed to the replacement theory, but has been compelled to desist since, in most cases, the data are either nonexistent or else not accessible. There is almost no class of statistics concerning which businessmen are more uncommunicative than the expected life span of their capital equipment. We cannot, therefore, make any final decision either theoretically or empirically on the "replacement wave" theory. Nevertheless it is submitted that there can be times when replacement concentrations may be a determining factor in the business situation rather than a determined one.

Whether the mass installation and retirement of machinery and equipment, in relatively brief periods of time, be ascribed to the influence of discontinuity in innovation, expansion, or replacement, or all three together, the result produced is a distortion of the real structure of production, which is one of the most outstanding characteristics of an industrial society and one of the principal sources of difficulty in maintaining pur-

[52] Joe S. Bain, "The Relation of the Economic Life of Equipment to Reinvestment Cycles," *Review of Economic Statistics*, vol. XXI (May 1939).

[53] For interesting work in estimating life expectancies, see E. B. Kurtz, *Life Expectancy of Physical Property* (1931).

chasing power.[54] The capital goods industries are "overbuilt" for continuous operation. Since they are constructed for "peak loads," in the intervals between spurts they must stand idle. Were machines installed smoothly over time, we could enjoy the same output of consumers' goods and services which we now have, with a considerably smaller capital equipment, but, since they are usually installed all at once, "overbuilding" results.[55] Some rather curious consequences follow from this premise. In particular we should realize that a *continuous* operation of the capital goods industries, year in and year out, would be likely to result in the production of masses of unwanted capital goods, yet, if they are not continuously operated, inflation and deflation are likely to result. Were one required to put the problem of cyclical (not secular) [56] shortage of purchasing power in terms of Say's law and the barter approach, it might well be expressed by saying that the difficulty lay in recurrent *relative* overproductions of durable goods.

It should be stressed that the matter cannot reach an automatic adjustment through price flexibility alone. The demand curve for capital goods may have shifted so much that negative prices (subsidies) might be required before the number purchased currently would be much increased. If, to be sure, the

[54] As to the relative stability of durable and nondurable goods production, see the Board of Governors of the Federal Reserve System, *Federal Reserve Charts of Industrial Production* (October 1940 and previous years). Some interesting data as to the rate at which various industries have expanded during past booms are given in G C Means, *Patterns of Resource Use* (1938). See the discussion of these figures in M. Ezekiel, *Jobs for All* (1938).

[55] For example, if 100 dynamos are needed to give the required amount of electric current, and if each dynamo lasts ten "years" and ten are installed and replaced each "year," then the makers of dynamos need only have a plant capable of turning out ten a year But if 100 are installed in one year and no more until these wear out, then the "dynamo maker" must have a plant capable of making 100 dynamos a year — that is to say, one ten times as big as in the first case. But, though ten times as big, this larger plant would also, under our rigid assumption, be many times as idle. It would work at capacity one year and be idle the remainder of the time.

[56] Secular unemployment, such as results from high liquidity preference, etc., as distinguished from purely cyclical problems, is more important, as Keynes points out, for the general *under*production which it causes rather than any *relative* distortion in equipment actually constructed.

total money income of society remained the same, men might be switched from the depressed capital goods industries to the relatively prosperous consumers' goods industries. But it is obvious that, unless there is an almost instantaneous transfer, total money income will *not* remain the same.[57] Nor, indeed, would the transfer of men to the consumers' goods industries be effective, even if total money income remained unaltered, unless accompanied by a shift in the propensity to consume. For, if there were no change in the demand for consumers' goods, the increased output would be likely to glut the market and depress the consumers' goods industries in addition to the already depressed capital goods sector.

We must not however think in terms of *one* boom alone. There are *recurrent* relative overproductions of capital goods, or, what is the same thing, *recurrent* concentrations of demand for capital. We must therefore look at the matter from a long-range point of view. What may quite properly be described from some standpoints as an "overbuilding" of the capital goods industries, may not, from others, be used as an argument for uncritically transferring factors of production to the consumers' goods sector. On the contrary, ill-advised efforts at a transfer of factors may result, after a time, in an acute shortage of labor and equipment. How, indeed, to iron out concentrations and bottlenecks would puzzle the Gosplan itself, and, since we will frequently have cause to refer to the problem, we should consider here some of the difficulties which such an attempted smoothing out would encounter.

Suppose we have the conditions postulated in Figure I in which demand for capital goods is intermittent. If, in that case, the unemployed are switched to consumers' goods production, all will go well for a short time. But, when the fixed equipment of society is retired, severe labor shortage may ensue. In terms of Figure I, if the men unemployed in the area $A^1B^1C^1$ are switched to consumers' goods production, they cannot be switched back to replacing equipment in $B^1C^1D^1$ without discontinuing the added consumers' goods production. CC^1

[57] Unless, of course, it is deliberately maintained by public works, etc.

is equal to the total labor supply and corresponds to full employment. CR is equal to employment in the intermediate and consumers' goods industries, and RC^1 is equal to employment in the capital goods industries. Suppose we divert B^1Q to the production of consumers' goods and endeavor to carry this forward indefinitely, then at point C we have $CR + RC^1 + B^1Q > CR$. Yet, since CR equals the total labor supply, there will be a labor shortage.

In an otherwise perfectly static society with no technical change it might be possible to operate the "overdeveloped" capital goods industries at *half* speed *all* the time, thus accumulating surplus stocks which would avoid expansion at the peak.[58] The men and resources who would otherwise have been held idle as a reserve for peak loads would then be free for other labor. Yet the very attempt to shift these unemployed to consumers' goods industries, if carried out too rapidly, might result in creating new concentrations because of the acceleration principle. Leaving aside this factor, the suggestion would only have value *if* the concentrations were due solely to replacement "waves" forming a perfect sine curve. But, even granting all the rigid assumptions of the replacement wave theory, it would be likely that the actual replacement curve would be an extremely irregular, composite one, and the difficulties of transfer, forecasting, and accumulation of stocks would be enormous. The irregularity of the curve would also render extremely difficult any attempt to fit a compensating curve of opposite variation, whether of public works or private business.

In the real world the influence of innovations adds the final complicating factor. Different treatment, to be sure, can be given to different types of concentration. If the attempted concentration of new capital installation results from large-scale innovation alone, it is possible to argue, theoretically, that the supply of credit could be curtailed in such a way as

[58] Mr. D. H. Robertson's *Banking Policy and the Price Level* (1926), p. 27, contains a somewhat similar suggestion for "large-scale state dealings in the primary foodstuffs and materials."

to force a "spreading out," over time, of the installation of machinery and equipment. If the concentration, on the other hand, were due to a really massive general wearing out of the capital stock of society, then replacement would have to be carried out promptly, and very little "spreading" would be possible. One thing, however, is certain, and that is that, since any concentration in the real world will be accompanied by some innovation, whether the concentration be initially due to replacement or not, the plan of accumulating stocks will always be open to grave objections. The accumulated equipment may well be obsolete before it can be used. For all these reasons we may conclude that the difficulty of furnishing a steady market to the capital goods industries, in the absence of public works, and probably even then, is well-nigh insuperable.

Dr. L. M. Lachmann suggests an alternative solution of the difficulty, though he offers little hope that it is a possible one. He writes:

> What is needed is such an intelligent behavior on the part of consumers that they will reduce their consumption whenever new investment opportunities appear on the horizon and expand it immediately after these have been exhausted. To formulate these conditions is, for all practical purposes, to question the possibility of their ever being realized.[59]

In other words what is needed is an almost instantaneously flexible propensity to consume, which will change in just the amount required to maintain full employment — bearing in mind the complications produced by the acceleration principle and the overlapping of demands in the higher stages of industry.[60] Thus, to sum up, we have the choice of merely preventing and offsetting deflation during the slump by methods ranging from public works to Mr. J. E. Meade's "consumers'

[59] Lachmann, "On Crisis," etc., p. 66. Similar behavior would also be necessary in case of large-scale general replacement concentration.

[60] I say "instantaneously flexible" because, in Keynesian language, what Dr. Lachmann means is that the propensity to consume must shift so quickly that the size of the aggregate income has no opportunity to shrink.

credits"; [61] or on the other hand we can attempt to vary the propensity to consume. Since, however, attempts to vary the propensity to consume usually involve a redistribution of wealth, it is well to postpone discussion of this alternative to the next chapter on redistribution and purchasing power creation.

[61] Even this program cannot avoid some obstruction of the forces making for economic adjustment — a point to which we shall return later.

CHAPTER III

REDISTRIBUTION AND PURCHASING POWER CREATION

I. REDISTRIBUTION AS A CYCLICAL REMEDY

IT SHOULD BE clear, from what has been said in the last chapter, that the redistribution of wealth is open to very serious criticism as a means of stabilization against the business cycle. Redistribution is, of course, usually advocated on the grounds that it will raise the aggregate propensity to consume, since the rich save a much larger proportion of their incomes than do the poor.[1] But the cycle is in large part traceable to discontinuous investment outlets, hence what is needed is not a permanent change, either way, in the propensity to consume, but a *flexible* propensity to consume. However, the redistribution of wealth is a very slow and difficult process, and, having once laboriously educated people to spend a greater proportion of their incomes, it may prove very difficult to reverse the process.[2] Moreover, leaving this difficulty aside, we have already seen some of the problems of timing and foresight involved in an attempt to transfer factors back and forth between the capital goods and the consumers' goods sector. The effects of redistribution upon the propensity to consume are not sufficiently quick, or capable of sufficiently accurate prediction, to be employed in an endeavor of this sort.

However, it is possible to argue theoretically that if a smaller proportion of the economy were given over to new investment

[1] This is, of course, only an assumption as to average behavior, but see, for example, M. Leven, H. G. Moulton, and C. Warburton, *America's Capacity to Consume* (1934).

[2] Suppose, for example, that the New Deal had succeeded in educating the American people into spending a larger proportion of their incomes. Would not the present difficulties involved in the rearmament program be greatly accentuated?

it would result in greater stability. The disturbed area would be smaller and less significant relative to the whole of society. Mr. Keynes make this point indirectly when he tells us that a high marginal propensity to consume entails a large multiplier; yet that this does not mean that a community in which there is little saving will be more unstable than one in which the propensity to consume is low. He says:

> Whilst a high marginal propensity to consume involves a larger *proportionate* effect from a given percentage change in investment, the *absolute* effect will be small if the *average* propensity to consume is also high.[3]

Keynes points out that if investment be only 0.06 per cent of total employment the multiplier might be as high as fifty, for example; yet a decline of two-thirds in investment would only entail a 2 per cent decline in employment.[4] Thus, if a higher aggregate average propensity to consume confines discontinuities of investment to a smaller sphere, we are likely, *ceteris paribus*, to have greater stability. Not only would the size of the disturbed area be smaller, but also the exploitation of new investment opportunities would be spread out over a longer period of time.

But, while this argument is theoretically sound, it overlooks the record of past experience that whenever a large-scale investment opportunity opens up, and whenever the aggregate propensity to consume is too high to finance this investment from voluntary saving, a resort has always been had to "forced" saving via inflation. Whether credit inflation or currency inflation be the means invoked, the transfer of factors is nearly always managed by "forced" saving of some sort, with attendant maladjustment and probable collapse.[5] Those who place a high value on technical progress will probably

[3] J. M. Keynes, *The General Theory of Employment, Interest and Money* (1936), p. 125.

[4] Keynes, *General Theory*, p. 126.

[5] I use the expression "forced" saving here in a way which I believe would be agreeable to the Keynesians as well as to other types of economists, namely, injection of purchasing power *after* "full employment" has been reached.

approve this result. They will follow D. H. Robertson in saying:

> I do not feel confident that a policy which in the pursuit of stability of prices, output and employment, had nipped in the bud the English railway boom of the forties, or the American railway boom of 1869–71, or the German electrical boom of the nineties, would have been on the balance beneficial to the populations concerned.[6]

Others who value stability more than "progress" may take a different view. But, whether we applaud the process or not, it is difficult to see how it can be avoided in the absence of rigid state control. We may conclude that the attempt to minimize cycles by redistributing wealth is not likely to succeed as long as major opportunities for investment sporadically appear.

2. REDISTRIBUTION AS A REMEDY FOR SECULAR STAGNATION

While the redistribution of wealth is probably a very dubious means of cyclical stabilization, the result is *a priori* at least somewhat different for secular stagnation. A society which has become accustomed to a given rate of expansion and innovation will normally devote a fairly constant quantity of its resources to the expanding and supplanting sector. If the need for employing these factors becomes smaller, great maladjustment may ensue, and in such a case our aim should be to bring about a transfer of the "surplus" "nonoperating" factors into the "operating" or the replacement sphere. If, then, redistribution increases the aggregate propensity to consume, this will tend, *ceteris paribus*, to bring about such a transfer.[7]

[6] D. H. Robertson, *Banking Policy and the Price Level* (1926), p. 22.

[7] We are not discussing in this chapter the redistribution of wealth for "welfare" reasons (see, for example, A. C. Pigou, *Economics of Welfare*, 1938, fourth edition, and J. E Meade, *An Introduction to Economic Analysis and Policy*, 1937, second edition, pt. iii, "The Distribution of Income"). We are dealing with the matter from the point of view of cyclical stabilization and full employment. A change in the savings habits of the rich would, from this point of view, be equally effective. It is doubtful, however, if the prevailing modern social ideals would tolerate the latter plan as a complete solution. *Cf.* J. M. Keynes, *The Economic Consequences of the Peace* (1920), p. 19: "The capitalist classes were allowed to call the best part of the cake

However, before reaching the unqualified conclusion that the redistribution of wealth is the proper policy, there are a number of factors yet to be considered.

The first of these and the one concerning which the least can be said definitely is the contention of some writers that the distribution of wealth is determined by very deeply seated forces which are not easily overcome. For example, there is the work of Pareto discussed by Professor Pigou in his *Economics of Welfare*.[8] It must be remembered, however, that Pareto was dealing with the primary distribution of income. More and more today we have a secondary redistribution through taxes. Just how successful this secondary distribution will be in ironing out inequality we cannot say. Nor do we know very well what the repercussions of such a program may be. Only time can tell what the results of modern policy will be in this respect.

Perhaps of more immediate concern is the difficulty of knowing whether or not we really are in a condition of secular stagnation. Mr. Keynes tells us that:

> The effective demand associated with full employment is a special case, only realized when the propensity to consume and the inducement to invest stand in a particular relationship to one another. This particular relationship . . . can only exist when, by accident or design, *current* investment provides an amount of demand just equal to the excess of the aggregate supply price of the output resulting from full employment over what the community will choose to spend on consumption when it is fully employed.[9] [Italics added.]

Thus, abstracting from purely cyclical difficulties, at any one point of time the "propensity to consume and the inducement to invest" must stand in a "particular relationship." But, as has already been pointed out, we must always remember that Mr. Keynes is talking of a *given* situation of technique,

---

theirs . . . on the tacit underlying condition that they consumed very little of it in practise. . . . If the rich had spent their new wealth on their own enjoyment the world would long ago have found such a regime intolerable."

[8] Pigou, *Economics of Welfare*. See also N. O. Johnson, "The Pareto Law," *Review of Economic Statistics*, vol. XIX (February 1937).

[9] Keynes, *General Theory*, p. 28.

tastes of the consumer etc. He does not "consider or take into account the effects and consequences of changes in them." [10] It is important to realize this fact. While at a *particular* point of time we can say with some confidence that the propensity to consume is too low with reference to the inducement to invest, to go further and say that this state of affairs will probably continue, and that as a result we should try to raise the aggregate propensity to consume, may transcend the realm of economics and enter the realm of prophecy. We are having a demonstration of the importance of this fact in the present world war with its great destruction of wealth. It is not impossible that the conditions which led Mr. Keynes and others to feel that the supply of investment outlets was likely to be greatly and permanently reduced may not reappear for a considerable period.[11] This is not to say that there may not be maladjustments after the war, but the condition of *secular* shortage of investment outlets may possibly have been indefi-

[10] Keynes, *General Theory*, p. 245.

[11] Since I believe this may prove to be the case, I have only reproduced here as a footnote the remainder of my original discussion, written just before the outbreak of the war: "The factors most frequently cited are decline in rate of population growth, lack of any foreseeable large-scale inventions, the disturbance of international trade and international lending, etc., etc. The future will show how much these predictions are correct and how much they represent the extrapolation of a contemporary mood. The slacking-off of population growth seems well established, but the mere fact that we cannot *foresee* any new inventions of a major type is not entirely conclusive. For some writers ask how much an economist of 1910, for example, could have foreseen the enormous growth of the automobile. Population changes, also, are not entirely independent of technical ones. The discovery of new and cheaper foods and of cheaper machinery and techniques may again cause population to increase. Finally, as to political conditions and foreign lending, despite the present gloomy outlook we cannot be entirely sure that our chaotic conditions will always continue.

"One other factor should be mentioned and that is the point that it is difficult to evaluate the part played in the present situation by mistaken *policy*, especially cost-price maladjustment and the general growth of autarchy. The superior recovery of Australia as compared with the United States is suggestive in regard to the relative importance of the cost-price situation and secular decline in investment outlet. Australia appears to be faced with at least as serious a decline in the rate of growth of population as does the United States."

nitely postponed. Specifically post-war maladjustments will be discussed in a later section of this book.

Even, however, if we decide that some degree of redistribution is necessary, we must be careful how we go about it. We must not forget that the aim of redistribution is to increase consumption in *real* terms and to force a transfer of factors. But this calls for *new* investment, though to be sure for investment of a generally different type than has obtained. We may, for example, need fewer blast furnaces but more clothing factories. Increased consumption probably implies increased physical plant. This would almost certainly be the case if we wish to transfer most of the unemployed to the consumption industries. On the whole, popular discussion, at least, is apt to overestimate the degree of unused capacity existing in the *consumer's* goods industries. Relatively the greater part of our unemployment and stagnation centers in the "investment goods" or "*capital* goods" industries.[12] Even such "unused" capacity as does exist in the consumer's goods industries may be overestimated.[13] It is a mistake to assume the existence of general over-capacity from the bare fact that this or that industry is not producing as much as it might. We must remember that there may be a *pattern* of consumer's choice. It is not enough to compare "buying power" and mere gross "capacity." Men, for example, may want more food but they may not want more food as *much* as they want more automobiles. The conclusion of all this is clear. Our program of redistribution must not be such as to discourage too seriously the inducement to invest.

Mr. Keynes tells us:

> From the percentage gain, which the schedule of marginal efficiency of capital allows the borrower to expect to earn, there must be deducted (1) the cost of bringing borrower and lender together (2) *income* and *surtaxes* and (3) the allowance which the lender requires

[12] See discussion, Chapter II, § 3, note 54, above.

[13] See, for example, H. H. Villard, "Some Aspects of the Concept of Capacity to Produce," *Review of Economic Statistics*, vol. XXI (February 1939). See also T. J Kreps, "Consumption a Vast Under-Developed Economic Frontier," *American Economic Review*, XXX (February 1941), 177.

to cover his *risk* and *uncertainty*, before we arrive at the net yield available to tempt the wealth owner to sacrifice his liquidity.[14] [Italics added.]

Thus the prospective yield which determines the inducement to invest is *net* after taxes. We might raise the schedule of the marginal efficiency of capital by increasing, through redistribution, the average propensity to consume. But this does not necessarily mean that a large amount of consumption in real terms will ensue.[15] For the *net* yield may be so reduced by taxes as to reduce the inducement to invest. No large amount of new investment may be forthcoming. Also, too drastic a program will tend to call into play those "confidence" and psychological factors which are so difficult to evaluate and on which Mr. Keynes places so much stress.[16]

The basic difficulty in a program of redistribution lies in the fact that, *ceteris paribus*, the taxes which redistribute wealth are apt to be those which discourage new investment, and it is not likely that any ideal solution to this dilemma will be found. A tax program which, in the name of redistribution, penalizes the superior gains of the venturesome entrepreneur is bound to be an influence toward stagnation.[17] We must balance alternatives in the light of a particular situation. But we must not

[14] Keynes, *General Theory*, p 309. It must be remembered, however, that Keynes is speaking of the matter from the *lender's* point of view. To the entrepreneur — especially the officer of a corporation — somewhat different considerations might apply. In some cases in order to keep the concern in operation he might wish to make investments when no profit was expected at all

[15] *Cf.* Keynes, *General Theory*, p. 309· "If in condition of *tolerable* average employment, this net yield turns out to be infinitesimal, time honored methods [of obtaining full employment] may prove unavailing."

[16] Keynes, *General Theory*, pp. 161–162 and 172–173.

[17] In this regard the current popular emphasis on "reasonable" profit is particularly harmful. Little attempt is made to distinguish the "frictional" gains of innovation from the proceeds of pure monopoly. "Reasonable" profit is very largely a concept appropriate to monopoly regulation. When applied promiscuously without reference to risk elements, etc., it can do a great deal of harm. For some comments on the effect of taxation on new investment see Gerhard Colm and Fritz Lehman, *Economic Consequences of Recent American Tax Policy* (1938), and Gottfried Haberler, "Interest Rates and Capital Formation," *Capital Formation and Its Elements* (1938).

forget the need to encourage new investment, or overlook the fact that without new investment consumption in real terms will probably not be very greatly increased.

3. THE LEVEL OF MONEY WAGES

From the discussion of redistribution in general we must turn to a special case — attempts to redistribute wealth and increase purchasing power by raising the general level of money wages. In view of the complicated and extensive literature upon the subject only a very brief outline can be given.[18] Thorough treatment, indeed, would require a treatise in itself. Yet perhaps a brief summary will help to bring the problem into focus, and, in any event, a book on the creation of purchasing power is duty bound to present for consideration at least the bare essentials of the problem.

The discussion which follows is concerned with changes in the *general* level of money wages as a means of cyclical stabilization and as a remedy for secular stagnation. It is not concerned with the problems raised by long range price stabilization, or changes in the foreign trade situation, or with the appropriate wage policy for the individual firm.

As to price stabilization, according to many monetary theorists, "in the long period we are . . . left with the choice between a policy of allowing prices to fall slowly with the progress of technique . . . while keeping wages stable, or of allowing wages to rise slowly while keeping prices stable." [19] If we follow the latter policy, wages must be raised at some time, and the best time would seem to be the upswing of the cycle. Accordingly, *if* money wages have not already been raised excessively during the slump, they should be raised during the boom,

[18] In the discussion which follows, no attempt is being made to discuss or even cite all the important literature in the field. The treatment given in this section is quite rudimentary. For other treatments of the problem see, for example, P. H. Douglas, "The Effect of Wage Increases Upon Employment," and A. P. Lerner, "The Relation of Wage Policies and Price Policies," *American Economic Review*, vol. XXIX supplement (March 1939).

[19] Keynes, *General Theory*, p. 271. It might be asked, however, if an absolute stability of MV might not require *falling* money wages as well as stable ones. *Cf.* Durbin, *The Problem of Credit Policy*.

as production increases. It is obviously difficult, at times, to disentangle problems of this sort from problems of cyclical and secular stagnation, but it should be clear that quite different considerations are involved. Likewise foreign trade considerations may sometimes call for wage reductions, or increases, independent of the domestic situation. These also are governed by different desiderata than the problems we will discuss. Finally, reference to the "general" level introduces another element of vagueness and uncertainty. The "general level" of wages is no more tidy a concept than the "general level" of prices, and it is only a matter of degree as to whether a given group of changes affects only single firms or the "general" level.

Leaving these aspects of the case aside, the arguments usually advanced for an increase in the general level of money wages as a remedy for the cycle, or for secular stagnation, have at bottom the same implicit assumptions as the arguments for any type of redistribution. Starting with the premise that an increase in the level of money wages means an increase in the proportional share of the national income which goes to the workers, it is then assumed that the workers save less and hence that an increase in money wages, *ceteris paribus*, means an increase in the aggregate propensity to consume.[20]

Even granting the basic premise that general money wage increases do substantially affect the distribution of wealth, it would still leave the argument subject to the points already made concerning all forms of redistribution — namely, that they are of highly dubious value as regards the cycle, but that *a priori* they have more value in case of secular stagnation, provided adverse repercussions on investment are not too great. But it is by no means self evident that general increases in the level of money wages will raise the real consumption of laborers, and further discussion is therefore desirable.

[20] See, for data on this point, Staehle, "Short Period Variations in the Distribution of Income," *Review of Economic Statistics*, vol. XIX (August 1937); Dirks, "Retail Sales and Labor Income," *Review of Economic Statistics*, vol. XX (August 1938); and Staehle, "New Considerations on the Distribution of Incomes and the Propensity to Consume," in the same issue.

Three views may be distinguished as to the proper wage policy in time of general unemployment. They are: (1) the wage reduction argument of which Professor Pigou and Professor Slichter are exponents; (2) the wage increase argument set forth by many popular writers and underconsumptionists generally; and (3) the stable wage policy or Keynesian view.[21]

Let us first discuss the arguments for general wage reduction. As a case for the elimination of unemployment these are frequently expressed as if there could be a definite demand curve for labor in the aggregate.[22] But, just as in the case of the relationship of interest to changes in the rate of saving, the *ceteris paribus* assumption is unwarranted. There can be no supply and demand curves for labor, in the aggregate, for the primary reason that the price of labor is a very large factor in its own demand.[23] In consequence, some writers have concluded that the price of goods will fall *pari passu* with reductions in money wages, and, as a result, there will be no stimulus toward increased employment. Others have denied this view and appear to base their demonstration of the possibility of favorable results upon a very delicate balance of timing. Thus Professor Viner describes one version of the "classical" view:

> It relies upon the occurrence of a lag between the reduction in wage rates and a response in reduced volume of sales at the previous

[21] See S H. Slichter, *Towards Stability* (1935); A. C. Pigou, *The Theory of Unemployment* (1933); Gottfried Haberler, *Prosperity and Depression* (1939), revised edition; J. M. Keynes, *General Theory*.

[22] *Cf.* Edwin Cannan, "The Demand for Labour," *Economic Journal*, vol. XLII (September 1932): "In a particular employment, provided demand for its product is elastic, more persons can be employed if they will work for less remuneration. In all employments taken together, demand is indefinitely elastic, and consequently indefinite numbers can be employed if they do not ask for too high a remuneration. General unemployment appears when asking too much is a general phenomenon."

[23] This fact, in the writer's opinion, greatly limits the practical importance of the marginal productivity theory of wages. The marginal productivity theory is very definitely a partial equilibrium concept. Applied to the social whole it is true only as a tautology. Note that in this entire section I am dealing primarily with the general level. I do not wish to be understood to deny that a wage cut in particular industries will increase employment — provided repercussions on aggregate demand are not too serious.

prices during which interval entrepreneurs find prices to be higher than marginal costs and extensions of output are therefore profitable, provided buyers can be found for the increased output.

These buyers may be found because "increase in expenditures to restore depleted inventories and to replace inefficient equipment is relied upon to increase payrolls sufficiently to provide the income from which the increased output can be bought." [24]

In order to understand how Professor Viner's "lag" might possibly arise, it will help to use the Robertsonian "day" technique.[25] "Disposable" money income may be defined, with Robertson, as money received "yesterday." Suppose then money received "yesterday" be 100 units, 80 of which go to wages, 10 to interest, and 10 to profits. Assume further that wages constitute the whole of prime costs and are paid "daily." Now suppose that "today" an immediate wage cut is announced of 10 units. If the wage earners spend their *disposable* income "today," despite the cut in "today's" receipts, as though nothing had happened, then disposable income "tomorrow" will still be 100 and profits will rise to 20. As a result there will be a stimulus to increase employment. On the other hand, the wage earners "today" may just as well reduce their spending at once to 70 and "hoard" 10 units. If so, disposable income "tomorrow" shrinks to 90 units and profits will not increase. Keynes seems to feel that any stimulus to recovery must then come from the possible lowering of interest rates because the funds set free might satisfy "liquidity preference." [26]

Professor Pigou concedes that if entrepreneurs expect further cuts they will hold off increases in employment until these

[24] Jacob Viner, "Mr. Keynes on the Causes of Unemployment, a Review," *Quarterly Journal of Economics*, LI (November 1936), 162.

[25] See D. H. Robertson, "Saving and Hoarding," *Economic Journal*, XLIII (September 1933). Space is lacking to consider the well-known and oft-repeated criticisms of the Robertsonian technique, which center around impossibility of defining a "day" with reference to any actual income period Despite all that has been said, the fact remains that it *does* take time for things to happen, and the "step by step" technique can be extraordinarily valuable provided its limitations are not overlooked.

[26] Keynes, *General Theory*.

cuts materialize. But, barring this qualification, he offers a variant of the account just given. Prices of consumers' goods, he admits, will shrink *pari passu* with the fall in wages, but "at the outset nothing has happened to non-wage-earners income." [27] In consequence the purchasing power of non-wage-earners in *real* terms is increased, they will consume more and there will be a stimulus toward increased production and employment.

Because beneficial results hinge upon so slender a basis of timing, confidence, and expectation, Professor Pigou and many others do not feel that a general wage cut will help during the "actual process of a violent collapse." [28] "Everybody will agree that at such a time any practicable wage cut, even though it did not create an expectation of further cuts, would count for little or nothing — a mop to stay the seas." [29] But he believes that a general wage cut, which does not cause an expectation of further cuts, will benefit employment when the situation has become "reasonably stable."

One may concede that the occurrence of the "lag" or "breathing space" upon which the validity of the whole theory depends is more likely when things are "reasonably stable." Any optimistic expectations which result from the increase in profits, should it occur, will also have a smaller weight of pessimistic bias to encounter. Yet, if one traces the progress of events step by step, as Mr. Harrod and Professor Bernstein, for example, have tried to do, it soon becomes clear that so many alternative assumptions can be made as to the behavior of consumers at critical points of the process that it is impossible to postulate favorable results with any degree of dogmatism.[30]

[27] Pigou, *Theory of Unemployment*, p. 102

[28] A. C. Pigou, "Real and Money Wage Rates in Relation to Unemployment," *Economic Journal*, XLVII (September 1937), 405.

[29] Pigou, "Real and Money Wage Rates," p 405.

[30] See E. M. Bernstein, "Wage Rates, Investment, and Unemployment," *Journal of Political Economy*, vol. XLVII (April 1939); R. F. Harrod, "Professor Pigou's Theory of Unemployment," *Economic Journal*, vol. XLIV (March 1934).

It must be admitted that, even when there is a drop in the amount of money spent on consumption, the wage cut may still be effective as a stimulus if there are in existence a number of industries which are very sensitive to costs, capable of expansion at short notice, and not closely geared to changes in the level of current consumption.[31] However, it is almost the essence of a depression or secular stagnation that such industries are then lacking, either temporarily or for a long stretch of time. At best a wage cut, even supposing it actually to increase profits or profit expectations, might not call forth enough investment to fill the needed gap.

Of course a general wage cut may affect favorably the "spontaneous balance of optimism" by making entrepreneurs feel that labor has become more "reasonable." This would have some stimulating effect in many cases. At the "bottom" of a depression, for example, it might give just the upward movement to confidence that is needed.[32] But, after all, if the stage is set for recovery in any event, then the necessary impetus might be given by other less drastic means.

Professor Pigou at times makes the point that, if offsetting changes in the volume of credit occur when wages are reduced, then the net effect will be definitely stimulatory.[33] Professor Haberler makes a somewhat similar point and stresses the stimulus to production derived from reductions in money wages accompanied by public spending.[34] Everyone should accede to this view which has some empirical evidence to support it drawn from Australian experience. But could not substantially

[31] *Cf.* L. M. Lachmann, "On Crisis and Adjustment," *Review of Economic Statistics*, vol. XXI (May 1939).

[32] See Haberler, *Prosperity*, for a discussion of the "bottom" and the factors which tend to slow down the process of deflation.

[33] Pigou, "Real and Money Wage Rates" Controversy with Mr. Kaldor as to the spontaneity of such increases and the manner in which they occur has led Professor Pigou to adopt a formulation of the problem much more closely resembling that of Keynes than had previously been the case. See Nicholas Kaldor, "Professor Pigou on Money Wages in Relation to Unemployment," *Economic Journal*, vol. XLVII (December 1937); and A. C. Pigou, "Money Wage Rates in Relation to Unemployment," *Economic Journal*, vol. XLVIII (March 1938).

[34] Haberler, *Prosperity*, p. 405.

similar results be accomplished by spending without wage reduction? [35]

To conclude, there seems to be general agreement that cuts in the money wage level, by themselves, will do little to halt a deflationary spiral. They will be useful, if at all, only after the situation has been "stabilized" and the "bottom" has been reached. But, at that point, recovery could probably be engineered by monetary expansion which did not involve many of the social frictions resulting from a general money wage cut. If, therefore, one wishes to halt deflation, money wage cuts cannot be used, and, if one wishes to remedy a secular stagnation, other methods are frequently more advisable. On practical grounds, the case for wage cuts does not therefore seem very good.

So far we have been examining the arguments for general money-wage reduction. It is a somewhat more complicated matter to discuss the contrary contention that during a slump or stagnation we should increase the general level of money wages in order to increase purchasing power. Here too, however, it should be clear that misunderstanding will inevitably result if we confuse the results of an increase in money wages for an *individual* with increases for *society* generally. An increase in money wages for an individual alone, *ceteris paribus*, means an increase in his real purchasing power. The same is obviously not the case if the money income of society generally is being augmented, with no increase in production.

Let us begin with changes in the money-wage rates paid by an individual firm. *If* this process merely amounts to a transfer of a portion of a given income from dividend recipients to laborers, *if* the shareholders would have hoarded a larger portion of the amount transferred than the laborers, *if* there are no adverse repercussions via prices, and *if* sufficient goods are in existence to satisfy the increased demand, then

[35] The only difference that the writer can see is psychological. In the business mentality which has hitherto prevailed in the United States, wage cuts are "sound," unbalanced budgets "unsound"; therefore repercussions upon "confidence" might be different. But education may clear up this difficulty.

there will be a net increase in consumption. So much may be granted as definitely true.

It may be that the transfer of funds does no more than bring the wages of that particular firm up to the average level for the industry, and it may also be true that the management will not change its policy or its prices as a result of the change. In such a case the transfer will be wholly beneficial to consumption, but we cannot assume this result. It is likely on the contrary that an attempt will be made to maintain earnings of the shareholders and management (1) by cutting operation costs, (2) by raising prices.

The first method of maintaining earnings may simply take the form of dismissing men and working the remainder more intensively. In this case the stimulus to consumption and investment might be nullified. Or Professor Hicks' "elasticity of substitution" may be at work, and, if capital goods prices are relatively unchanged, it may pay the firm to install expensive but labor-saving devices.[36] Here we have a valid reason for considering a higher money-wage level as a possible incentive to investment, though not the reason usually in the minds of advocates of higher wages. The possible increase in demand for labor-saving machinery may set going a train of adjustment which it would be impossible to follow out. However, this much is clear: recent American business experience indicates that individual firms may at times be able to maintain profits relatively unchanged, despite a great increase in wage rates, by adjustments of efficiency, hours, machinery, and the like.[37]

[36] Since we are talking of slump conditions, it is likely that the prices of machinery and equipment will not only not have been raised but even that they will have been lowered somewhat. For elaborate discussion of the matter, chiefly from the point of view of the individual firm, see J R Hicks, *The Theory of Wages* (1935). Even though wages may have been raised in the capital goods industries, this *may* not increase their costs proportionately, since they have such a large investment in fixed capital. But, when the fixed capital begins to wear out, if "normal" profits are not being made at the new high wage level, prices may have to go up See *infra*, note 44.

[37] See W L. Crum, "Cyclical Changes in Corporate Profits," *Review of Economic Statistics*, vol. XXI (May 1939) But see further S H. Slichter, "The Downturn of 1937," *Review of Economic Statistics*, XX (August 1938), 97 and esp. 106.

The second method of maintaining earnings would be by raising prices of the firm's product. If the demand curve for the product be highly inelastic, the firm may shift the entire burden on to its customers.[38] It might be that this increase in costs would be diffused over the entire economy in such a way that the workers in the price raising industry would still have a net gain at the expense of the general public. But it is not clear that there need be *any* increase in the aggregate propensity to consume for society as a whole. One group of laborers may merely be exploiting other groups.[39]

The possible final effects of monopolistic competition of this sort among organized groups, each jockeying for position, are exceedingly difficult to determine. An infinite number of assumptions as to elasticities of demand, etc., etc., would be made. *Ceteris paribus*, the increase in costs would tend to spread slowly over the whole economic system. Any *net* increase in the aggregate propensity to consume, for society as a whole, would be likely to occur only if (a) there is actually an increase in labor income relative to that of owners, (b) the owners would have hoarded a greater part of their income than laborers, (c) the increase of labor income is not offset by increased costs throughout the system. Speaking generally, there would be a tendency for the increased costs to be diffused slowly in the form of increased prices. The gain in consumption would be apt to be frictional. It might be that by raising wages first in one industry and then, as prices started to rise, raising them in another, or by raising them continually in the same industry, a series of frictional gains of this sort would be maintained as against the employers. Yet, even if the aggregate propensity to consume, out of a given money income, be

[38] Of course, in the case of monopsony the shift might be "backward" on to the sellers of raw materials.

[39] It is important to remember that one of the exploiters of labor may be labor itself. Farm labor, for example, may be exploited by industrial labor. Labor unions, like associations of businessmen, are producers' pressure groups, and equally prone to restrict production in their own interest but antisocially, in the manner referred to by Veblen as "Capitalistic Sabotage." The consumer may get little help from either side.

increased by methods of this sort, production need not increase if investment is unduly discouraged.

Let us for the moment defer the question of investment and consider the effects of a *general* simultaneous increase in wage rates throughout the system. Suppose that money-wage rates are simultaneously raised by law. What will be the result? Two situations may arise: (1) employers may somehow obtain funds to pay their increased wage bill, or (2) they may dismiss workers and operate on the same total wage bill. If (1) occurs, either the employers have dishoarded, or they have sold securities to others who have dishoarded, or they have borrowed from the banks, or they have curtailed their own consumption. It is unlikely that they will greatly reduce the latter, and we may assume that some net increase in money spent will occur. But what happens? The employers must cover costs, and costs are likely to be raised as the wage bill increases. Mr. Keynes is inclined to assume, as a first approximation, that prices will rise proportionately with the increase in the wage level.[40] It is impossible, however, in a world of imperfect competition and rigid prices to generalize too stringently. Some small gain may occur to one side or the other or to one group of industries or another. If Mr. Kalecki's figures are correct, however, the Keynesian hypothesis has been strikingly fulfilled in France.[41] To continue, if the dishoarding and increase in money spent occurs *before* prices are raised, there may be some net increase in real consumption on the part of the laborers and perhaps an increase in the propensity to consume of society as a whole. But here too these gains are likely to be frictional, and here too we must consider repercussions on investment.

However, the case should also be examined in which employers merely dismiss some of their workers and continue on the old wage bill. In that case no initial increase in consumption is likely, and the chances of stimulation are yet

[40] Keynes, *General Theory*, Chap. XIX.

[41] Michael Kalecki, "The Lesson of the Blum Experiment," *Economic Journal*, vol. XLVIII (March 1938).

more remote. Perhaps, as in France, a general reëmployment may be enforced by hours regulation. But the consequences of such a policy are apt to be most harmful. As Mr. Marjolin puts it, in describing the French experiment: "All the available labor was being completely utilized . . . with a volume of *production* not appreciably above the lowest level reached during the depression." [42] Most people had more money; yet few could buy very much more. Employment had increased but not real wealth.

The writer therefore agrees with Mr. Kalecki that "the fight for wages is not likely to bring about fundamental changes in the distribution of the national income. Income and capital taxation are far more potent weapons to achieve this aim; for these taxes do not affect prime costs." [43] Significant increases in the share of a *given* money and real income which goes to labor, are likely to be frictional — that is to say that the money share might remain unchanged but its purchasing power would be likely to decline. The money wage level, if production remains unchanged, must be raised not once but many times in order to continue to maintain any net gain in real consumption for labor.

References to real consumption bring us back once more to the problem of investment and output. It may well be possible that a sufficiently militant trade union policy, by constant

[42] Robert Marjolin, "Reflections on the Blum Experiment," *Economica*, vol. V (new series) (May 1938). The articles of Mr. Kalecki and Mr. Marjolin give an interesting summary of the French experiment. It is worth following Mr. Kalecki's account of the effect upon distribution of an increase of about 60 per cent in the wage of manual labor. The purchasing power of laborers employed *before* the law increased only 1 per cent, but reëmployment forced by the forty-hour-week law increased the total payment to manual labor by 24 per cent. The white-collar class gained nothing whatever in purchasing power. There was practically no change in the purchasing power of the fixed-income class. But large industrialists — according to Kalecki — were able to more than pass on the price rise and actually gained something in purchasing power. The stability of the purchasing power of the fixed-income classes was only true in the *aggregate*. The state increased its pensions, etc. There was, during the same period, a large increase in the national debt.

[43] Michael Kalecki, *Essays in the Theory of Economic Fluctuations* (1939),

demands for higher money wages, will succeed in increasing materially the share, in a given real income, of those men who are employed, and in maintaining the increase thus obtained. One might even concede that such a policy, in some cases, might not result in serious *reduction* of real income. Consumers' goods output need not drop appreciably and the minimum replacement of machinery might be carried through even though no profits were expected.[44] In consequence, the replacing and operating factors might be still almost fully employed. But, if there is no new investment, the expanding and supplanting sectors will be kept idle and there will be no increase in *real* consumption. As earlier pointed out, the "excess" capacity of the consumers' goods industries, properly defined, is not relatively very great, and without new investment it cannot increase. Yet, if the marginal efficiency of capital in the consumers' goods industries is low, new investment will not be forthcoming, unless, of course, the state itself steps in.[45]

Repercussions upon the marginal efficiency of capital from constant demands for higher wages are likely to be serious. Recent American experience has, to be sure, shown that established firms may adapt themselves to very large wage increases in one way and another and still show profits. We might infer from this that the marginal efficiency of capital would not be greatly impaired by such a process. But to reason in this way confuses realized profits with the marginal efficiency of capital. Mr. Keynes is explicit on this point. He says:

> The reader should note that the marginal efficiency of capital is here defined in terms of the *expectation* of yield and of the *current* supply price of the capital asset. It depends on the rate of return

[44] The writer feels, however, that it is more likely that after a while, as equipment wore out, considerable disinvestment might occur A certain amount of payments other than wages are definitely not needed to call forth the maintenance of the existing capital supply. But it is not clear that raising money-wage rates would eliminate this type of income, and, as long as a certain level of profits is required to induce the maintenance of a part of the social equipment, reductions below that level will induce disinvestment.

[45] Of course, if the state itself is prepared to keep everyone employed at all costs in some sort of activity, then repercussions on new investment can be ignored — so long as employment *per se* is the only criterion of policy. But

expected . . . on money . . . invested in a newly produced asset; not on the historical result of what an investment has yielded. . . . The aggregate current return to capital has no direct relationship to its marginal efficiency.[46]

The profits realized in 1937, for example, are largely beside the point.[47] It is not what entrepreneurs made but what they *expected* to make. In forming these expectations the greater the uncertainty as to costs, the greater the amount which must be subtracted before the *net* yield is reached. Mr. Keynes has been earlier quoted as saying that "the allowance which the lender requires to cover his risk and uncertainty" must be deducted from "the percentage gain which the schedule of the marginal efficiency of capital allows the borrower to expect to earn." [48] We must also remember that Keynes criticizes very large changes in the money-wage level as likely "to cause a great instability of prices, so violent perhaps as to make business calculations futile in an economic society functioning after the manner of that in which we live." [49]

However successfully existing enterprises may adapt themselves to increases in money wages, the state of long-term expectation for *new* investment is almost certain to be seriously affected by a prospective steeply rising trend in wage costs. The established concern has connections and resources which make it less dependent on outside aid. But business calculations for new investment are vague enough without introducing large-scale, short-term money-wage movements in *either* direction.[50]

It will be seen that the writer favors the third or Keynesian view as to money-wage policy. On the whole, a policy of maintaining a relatively stable level of money wages, both during

---

as long as private investment is relied upon to any significant degree, repercussions cannot be ignored.

[46] Keynes, *General Theory*, p. 136.

[47] See *supra*, note 37.

[48] Keynes, *General Theory*, p. 309.

[49] Keynes, *General Theory*, p. 269.

[50] Keynes, *General Theory*, p. 149. "If we speak frankly we have to admit that our basis of knowledge for estimating the yield ten years hence of a railway . . . amounts to little and sometimes to nothing; or even five years hence."

cycle and stagnation, affords the least disturbance both of the labor unions on the one hand and the marginal efficiency of capital on the other. Purchasing power is best maintained and production least discouraged by increasing money income, rather than attempting to redistribute a money income which is itself insufficient. While one may grant that an increase in the propensity to consume is a desirable thing, it must always be stressed that the increase is only a *step* toward the ultimate end — increased production of consumers' goods.

It should scarcely be necessary to point out that a stable money-wage policy, or one in which money wages are allowed to increase *pari passu* with increases in consumers' goods production, does not mean that *real* wages will be kept down. Quite the contrary. Real wages will rise as production increases. The view which I have attempted to rebut is only the idea that in the short run, and during cyclical slump or stagnation, purchasing power will be created, without neutralizing repercussions, by rapid money-wage increases carried through without reference to production or employment. The particular pressure groups which benefit by this policy are as likely to be doing so at the expense of their fellow workers, as at the expense of the owner or the businessman, and the net increase in real consumption may be negligible.

In this chapter some of the fundamental considerations have been presented regarding redistribution as a policy of cyclical stabilization and as a means of dealing with secular stagnation. At the risk of excessive repetition it seems advisable to summarize briefly our conclusions before going on to more exclusively monetary aspects of the problem.

Redistribution, as we have seen, is highly questionable as a cyclical remedy. The problem of the cycle is essentially one of jerky investment outlets and this problem cannot be avoided by permanent changes in the propensity to consume. As a means of dealing with secular stagnation, redistribution seems more valid, but we must be on guard concerning repercussions on the marginal efficiency of capital. It must not be forgotten

that a genuine transfer of factors and an increase in real consumption may call for considerable new investment. Redistribution as a means of dealing with secular stagnation is, it is submitted, essentially a long-term remedy. In the short run, other methods of maintaining purchasing power must be employed. The case is even more weighty against the special method of redistribution involved in rapid changes in the level of money wages. From a long-range point of view they are not likely, by themselves, to make any important alterations in the distribution of wealth, and in the short run such effects as they may have on consumption are likely to be overbalanced by adverse repercussions on investment.

CHAPTER IV

WHAT IS INFLATION?

BEFORE entering upon an analysis of more specifically monetary measures than those considered so far, it is advisable to clear up one source of terminological confusion. During our discussion it will be necessary to characterize this or that plan as "inflationary" or "noninflationary," and in order to prevent misunderstanding we must define what we mean by these terms. It must be understood that no attempt is being made to lay down "the" only possible definition. I am only trying (1) to present the principal relevant phenomena, and (2) to describe which of alternative concepts will be referred to as "inflation" in the remainder of this particular study.

1. ECONOMIC ANALYSIS

The concept of inflation is like a statue made of sand. Touch it, and it loses all shape. In writing and in conversation one encounters scores of definitions of all degrees of accuracy. The following random samples are given simply to show the degree of confusion which exists:

(1) Any "tinkering" with the currency
(2) "Printing" paper money
(3) Leaving the gold standard
(4) Deficit financing
(5) The "overextension" of bank credit
(6) Any increase in MV
(7) A rise in prices
(8) A rise in prices after full employment has been reached and output cannot be further expanded
(9) A rise in prices resulting when an increase in monetary demand does not merely raise prices by enlarging output on a given cost curve, but raises the curve itself [1]

[1] This definition, while rather elaborate, has certain attractions. However,

(10) An "excessive" rise in prices
(11) A "distortion" of the structure of production
(12) A process of wealth redistribution
(13) A concealed tax on the fixed income classes

Many more definitions can be given, but these suffice to show what varied meanings can be attached to the same term.

It is submitted, however, that much of our trouble results from a failure to distinguish the condition "inflation" from measures which may or may not bring it about. Inflation, it is maintained, should be thought of as a result, not a process. Definitions 1 through 6 describe various processes.[2] Definitions 7 through 13 run primarily in terms of results. These latter, it is submitted, are much preferable. A word like "inflation" which has a strong emotional content should be defined in terms of the evil which it suggests. What do we mean when we say that we fear inflation? Some idea is given by definitions 9 through 13, though they are not exhaustive. We fear a condition in which the excessive increase in monetary demand disrupts trade, wipes out savings, distorts capital values, reduces the fixed-income classes to poverty, and generally brings on those phenomena described, for example, by Professor Bresciani-Turroni in his notable book on the German post-war inflation.[3] But, because certain measures may bring about such results, when carried to extremes, we must not infer that they will *necessarily* do so. To identify a process which has several possible results with the single result which we fear will always make for muddled thinking. Some clearer approach is necessary.

The first five definitions deal with processes which may bring on an inflation by working through an increase in MV.[4] We may therefore gain something in generality by discussing defi-

---

it is based on the assumption that we can have such a thing as an aggregate cost curve for society. Moreover, it fails to distinguish between price rise and "excessive" price rise.

[2] Number 6, of course, is largely tautological in that it is not a process but the reflection of any one of a number of processes.

[3] Constantino Bresciani-Turroni, *The Economics of Inflation* (1937), Sayers translation.

[4] See *supra*, note 2.

nition 6. The description of inflation as any increase in "spending" or "purchasing power" or MV is, as was pointed out in the introduction, closely linked to an assumption of perfect competition, full employment and flexible prices. Under such assumptions any increase in M is bound to spread itself over the whole economic system and raise prices roughly in proportion to its quantity. An exception would arise in the case of hoarding, but the problems raised by hoarding will be discussed later on.[5] Assuming that there is no hoarding, repeated increases in M will eventually bring on the socially undesirable conditions already described, and V may increase much faster than M as people lose confidence in the currency.[6]

However, when we pass to a world of unemployed resources, lumpy factors and imperfect competition, we cannot be so dogmatic. The problem becomes one of comparing the flow of monetary demand with what may be called the "time-elasticity of supply" — meaning by that, the speed with which output may be increased to match an increase in demand expressed in money terms. If, for example, after a short but severe period of secondary deflation, the economy should find itself in a condition in which there are accumulated stocks and/or considerable plant capacity which can quickly be put to work, an increase in monetary demand may actually reduce cost and prices by enabling industry to operate more nearly at the optimum output. Of course such a situation would be an extreme case. It is more likely that prices would rise a little in the first instance while supply was accommodating itself to the increased demand. But once the adjustment was made prices might fall again.

The longer the time which elapses between collapse and recovery, the more difficult it will be for production to expand as monetary demand increases. Fewer trained men, for example, will probably be available, plant may be obsolete, etc.,

[5] As to terminological confusions regarding the word hoarding, see Gottfried Haberler, *Prosperity and Depression* (1939), revised edition, pp. 200 *et seq.*

[6] See Bresciani-Turroni, pp. 159 *et seq.* For further discussion of "velocity," see Chapter VI, § 1, this study, "Some Notes as to the Meaning of Velocity."

etc. As Keynes puts it, "As output increases, a series of 'bottlenecks' will be successively reached where the supply of particular commodities ceases to be elastic, and their prices have to rise." [7] Again, regarding wage units, he says, "These points, where a further increase in effective demand in terms of money is liable to cause a discontinuous rise in the wage unit, might be deemed from certain points of view to be positions of semi-inflation." [8]

It is clear that the mere existence of unemployed resources will not protect us from "semi-inflation" if indeed from "true" inflation later to be discussed. We must come back to the concept of "a certain flow of money in a given time interval meeting a certain flow of goods in the same time interval." [9] One must balance goods flow and money flow in a given period of time. The more quickly supply adapts itself to increased demand, the more quickly we may increase purchasing power in a given interval without fear of an excessive price rise.

But we cannot think merely of a comparison of aggregates in a given time interval. We must also consider the type of demand which the increased money flow is being used to express and whether this demand is being directed toward an industry with a large or small time-elasticity of supply. For example, if there should be a great increase in the demand for investment goods, financed by a net increase in MV, the existence of very elastic supply conditions in the consumers' goods industries might mitigate, but could not prevent, a price rise in the investment goods industries where supply might be less elastic. Anyone who has studied the composition of price indices knows the difficulty of drawing the line between changes in relative prices and changes in the "general level." These problems might be expressed by saying that there can be "inflation" in one market and not in another, though in the end, if the increase is large,

[7] J. M. Keynes, *The General Theory of Employment, Interest and Money* (1936), p. 300.

[8] Keynes, p. 301.

[9] D. H. Robertson, "Mr. Keynes' Theory of Money," *Economic Journal*, XLI (September 1931), 401. See also A. W. Marget, *The Theory of Prices* (1938), p. 510.

all are likely to be affected.[10] By analogy, we might think of society as made up of a number of imperfectly connected glass vessels. Water poured into one may tend to filter down into the others, though the process may be long drawn out. Even if there were no net change in MV, the sudden diversion of demand from one set of products to another might be described at times as "inflation" in the one market and deflation in the other.

Considerations such as these explain the use of definitions of inflation resembling the eleventh one listed, namely, that inflation is a distortion of the structure of production. For a net injection of purchasing power is frequently used as a means of inducing the economy to adapt itself more quickly to changes in demand than would otherwise be the case. Especially if the government, or the group doing the "inflating," wishes to build up a special line of industry more quickly than the rest of society would wish to, if left alone, attempts of this sort are very likely to occur. War inflation is well known, but "overextension" of bank credit to finance an investment boom is equally usual, and forms the principal basis of the "Austrian" doctrine of "forced saving."

It would be a mistake to think of the "flow" of goods as responding passively to the "flow" of money. Prices are not determined by either monetary or technical forces alone. Particularly is this the case in our modern era of "administered" prices. A monopoly, for example, might be perfectly capable of increasing its production, yet it might prefer to raise its prices.[11] Can we say this is the result of monetary forces? Again, a monopoly which followed a stable price policy might simply let orders accumulate. Here attempted spending is in excess of goods flow, yet no price rise results. Is this inflation? Finally, a rise in prices may *precede* and bring about an in-

[10] If we had a rigid stabilization of MV, such as Professor Hayek advocates, there would not be so much difficulty, but, if there is elasticity in the credit supply, an expansion in one market will probably call for an increase in total spending which may spread over the whole system

[11] The degree of price rise from a particular injection of purchasing power may thus become a function at times of the degree of monopoly control.

crease in money inflow and attempted spending. For example, commodity speculation, in anticipation of a rise, may persuade banks to lend more money and the expectation may thus induce its own verification. Yet it must be pointed out that, without the resulting increase in the money supply, the whole structure would collapse. We must merely caution ourselves against too easy assumptions as to the direction of the causal nexus.

What exactly is meant by money "flow"? It is customary to talk of the balance of "goods flow" and "money flow" and to think of this in terms of a comparison of "real" income and money "income." But here, as Professor Marget warns us, we must remember the distinction between "payments into income and payments out of income"; [12] for in studying "how income affects prices it is *outlay* out of income that is immediately relevant." [13] In other words, we want to know not only how much income people are receiving but also how much they are spending. The word "spending," however, becomes curiously tautological when we wish to compare discrepancies of money flow and goods flow. For in order to spend one must buy something, and, in the act of spending, money flow and goods flow are always equal — just as there are always an equal number of parties (one) on each side in a marriage. What we mean, therefore, is attempted spending or monetary demand. It is, figuratively speaking, the putting in of a series of higher and higher "bids" for a flow of goods.

The discussion so far may be summarized by saying that if attempted spending in a certain market in a certain interval of time is greater than the time-elasticity of supply so that, *ceteris paribus*, prices will rise, there is a tendency toward inflation. But shall we follow the Keynesian definition of "true" inflation and confine it to the condition which occurs "when an increase in the quantity of effective demand produces no further increase in output" but a rise in the cost-unit proportionate to the increase in demand? [14]

This question leads by inference to one of the basic dilemmas of all attempted definitions of inflation. Is "inflation" to be

[12] Marget, p 379. [13] Marget, p. 381. [14] Keynes, p. 303.

defined as high prices or as "excessively" high prices? [15] Any definition which confuses "inflation" with higher prices seems to the writer to be undesirable. When monetary demand first begins to increase, there may be a temporary price rise due to an interval of adaptation. Confusing this initial rise with "inflation" may have serious consequences on confidence and public policy. The identification of "inflation" with higher prices and "deflation" with low prices also leads to a policy of extreme price stabilization, which the writer follows Robertson in considering undesirable.[16] It will be seen that I lean toward a definition of "inflation" in terms of excessively high prices. But this prevents unqualified adherence to the Keynesian formula. It was said earlier that "inflation" should be defined in terms of the evils which we fear when we use the term. One may not favor rigid price stabilization, but it must be realized that the difference between "semi" inflation and "true" inflation, according to Keynes, is only one of degree, and the *socially tolerable* degree of disturbance of the price level, wealth distribution, and production may lie somewhere in *between*. We cannot continue to stimulate demand when prices are already rising to a great height, just because a small increase in output can still be coaxed from society. Such a process, it is submitted, should be described as "inflation."

Inflation will therefore be defined for the remainder of this study as "the condition which results when an increase in attempted spending in a certain market, in a certain interval

[15] Compare Haberler, p. 172: "I put 'inflation' in quotation marks because some writers would like to reserve the word 'inflation' to such an increase in the quantity of money as leads to a rise or to an 'excessive' rise, in prices, they resent the use of the word for cases where the increased amount of money (or of monetary demand) is matched by an increase in the flow of goods and hence does not bring about a rise in prices."

[16] Robertson, *Banking Policy and the Price Level* (1926). Furthermore, it confuses higher prices resulting from an increase of money flow relative to a *given* flow of goods, with high prices resulting from a *decrease* in goods flow relative to a *given* flow of money. While this latter phenomenon may show some of the characteristics of "inflation," the writer feels it should better be referred to as "scarcity." In a true inflation one can often find both an increase in money and a decrease in production when the process has reached its height.

of time, exceeds the adaptive power of the time-elasticity of supply to such an extent that a price rise ensues which *seriously* affects the purchasing power of the fixed-income classes and money debts in general." This definition has serious defects. Who is to decide what is "excessive" or what is meant by the word "seriously"? The concept is similar to the "reasonable prudent man" of Anglo-American law. Yet I do not believe that anything more definite can be offered. There is no use in striving for a delusive exactitude.

Some may object that no attempt has been made to distinguish between different methods by which the increase in "attempted spending" is financed. Does the method of finance make any difference? In the first instance, and in determining whether at any *one* time we have inflation, it is submitted that it does not.[17] Thus, after there has been a great deal of hoarding, a sudden release of idle balances might easily result in "excessive" price rise and inflation, though nothing has been done to the currency. Monetary demand might exceed the flow of goods though the country in question were technically on the gold standard. Or suppose a more extreme case. Suppose benefits to consumers are financed by a special issue of "printed" currency. This need not in the first instance cause any inflation whatever. The payments to consumers would be treated as consumers' income, and if the time-elasticity of demand, in the industries satisfying consumers' outlay, were proportional to the increase in income, no change in prices need ensue. However, in describing such a phenomenon, attention is called to the fact that our definition is a "flashlight picture." It would not be adequate to halt analysis at this point.

Let us suppose, for example, that hoarding is taking place on a large scale. Suppose, further, that purchasing power is injected into the system in order to make up for the "gap" between the goods and money streams in a particular interval. This injection of purchasing power having been used once to

[17] Of course, the method of finance may make a difference in business conditions by its effects on confidence, etc. But this would not directly affect the question of whether there was or was not inflation.

take goods off the market may not be used again but may lie idle in someone's hoard. Another injection may be needed to take off the next increment of goods and then another. The process of recurrent injection may go on for a considerable length of time. If now, after idle balances have been accumulating over a long period, there is a revival of "confidence" and economic activity, the whole stored up stock of money may suddenly be released. All the idle funds that have been accumulating are spent at once. A notable price rise may result. This danger of sudden dishoarding must constantly be guarded against.

Suppose, however, the money authority is on guard and when dishoarding begins the excessive purchasing power is absorbed by higher taxes and by credit restriction. Can we say that such a process has been one of inflation? It is submitted that we cannot. No change in prices need have ensued and no important changes in the distribution of wealth or the structure of production.[18] As long as hoards are not suddenly released no trouble need ensue. It is not even clear that they will ever be released. For there is a suggestion underlying parts of Keynes' *General Theory* that western society may be approaching a situation like that in India, in which hoarding has continued for many centuries. It is conceivable that an increase in the currency supply, after once serving as income to consumers, might thereafter lie idle in someone's hoard indefinitely. No more disturbance to the price structure need result than is given to the Indian price structure by the gold and silver accumulations of the maharajahs. Even if hoards are released, as long as the monetary authority stands ready to absorb and cancel undue increases of purchasing power, no inflation need

[18] The nominal money income of parts of the community may be altered. The standard of living need not be. It is only when the hoarders start to release their funds that they will be taxed. If we consider the persons hoarding to have, on the whole, a fairly stable propensity to consume, their actual consumption need scarcely be affected at all.

As to distortion of the structure of production, if the government is merely filling in a temporary cessation of investment demand in an already distorted structure, no *change* in this structure need result.

result. Methods of doing this will be discussed in later chapters.

Summary

"Inflation" has been defined as "the condition which results when an increase in attempted spending in a certain market in a certain interval of time exceeds the adaptive powers of the time-elasticity of supply so that a price rise ensues which seriously affects the purchasing power of the fixed-income classes and money debts in general."

Under this definition an increase in monetary demand or attempted spending, whether financed by gold, credit, or "paper money," which is proportional to the "time-elasticity of supply" need not cause inflation. *Vice versa*, an increase financed solely by gold could well be inflationary. It is a matter of purchasing power, price levels, wealth distribution and production. Statements that departure from the gold standard or "printing paper money" or "deficit financing" necessarily mean inflation are not economic but political opinions. They rest fundamentally on the assumption that we are not politically capable of managing the currency. This may or may not be true, but it is not a matter for *economic* determination.

2. HISTORICAL NOTE

The point of view just explained runs counter to many ideas once generally accepted and still by no means entirely put to one side. A typical example of the intemperate language sometimes employed by some economists is found in the following quotation:

> History is strewn with the wreckage and records of human suffering caused by "ingenious devices" to issue and "control" the consequences flowing from inconvertible paper money. These efforts to create wealth out of paper, to make something out of nothing, are a species of black magic, and they have *always* failed.[19] [Italics added.]

It seems worthwhile therefore to give, briefly, some American examples of successful monetary "manipulation."

[19] W. E. Spahr, *The Fallacies of Professor Irving Fisher's 100 per cent Money Proposal* (1938).

The definition given in the previous section may be broadly paraphrased by saying that, if a nation tries to mask a lack of capacity to produce goods and services by issuing money, inflation is likely to result, but, if it attempts to *express* an existing capacity by issuing money, inflation is not likely to result. Of course it is theoretically possible to allow prices to fall so that goods produced can be sold, but the social friction may at times be intense. Moreover, Mr. Keynes has demonstrated that under certain special assumptions no degree of price flexibility can increase real consumption and employment.[20] Whether we agree with the Keynesian hypothesis or not, it is clear that, without subscribing to a policy of rigid price stabilization, there are nevertheless weighty reasons for preferring an expansion of monetary demand to a drastic lowering of the price level. When, therefore, one says "expressing existing capacity in money terms," one must mean relative maintenance of the price level.

In looking for historical examples of successful injection of purchasing power it will be found that "inflation" has usually resulted during or after a war. A poverty-stricken economy attempts to cover up its poverty by monetary issues. We have had very little experience with a rich economy seeking to express its wealth by monetary expansion. Some evidence is afforded, however, by the record of Benjamin Franklin in Pennsylvania and near-by states. Benjamin Franklin has always remained in the American mind as the acme of common sense. Everyone remembers his advice on "The Way to Make Money Plenty in Every Man's Pocket" — his answer was "spend one penny less than thy clear gains." [21] It is, however, frequently forgotten that he was an ardent advocate of paper money and that largely under his influence several successful experiments in the printing of currency to overcome depressions were carried through.[22]

[20] See Haberler, p. 219.

[21] See any edition of Franklin's collected works.

[22] Professor Spahr had evidently not read his Adam Smith very closely when he said inconvertible paper had *always* failed. Adam Smith in *The Wealth*

It must be understood that Franklin's experiments are not necessarily stated as a conclusive guide to modern policy. Deposit banking on fractional reserves, for example, was then in its infancy. It is not maintained that the issuance of currency is necessarily the best way of dealing with a depression. We are not saying that such a procedure may not cause inflation. The only point is that it does not *have* to.

It might be interesting to read Franklin's account, taken from his autobiography:

> About this time there was a cry among the people for more paper money, only fifteen thousand pounds being extant in the province and that soon to be sunk. The wealthy inhabitants oppos'd any addition, being against all paper money, from an apprehension that it would depreciate, as it had done in New England, to the prejudice of all creditors. We discuss'd this in our junto when I was on the side of an addition, being persuaded that the small sum struck in 1723 had done much good by increasing the trade, employment, and numbers of the inhabitants in the province, since I now saw all the old houses inhabited and many new ones building; whereas I remembered well, when I first walk'd about the streets of Philadelphia. . . . I saw most of the houses in Walnut street . . . between Second and Front street, with bills on their doors "To be let."
>
> Our debates possess'd me so fully of the subject, that I wrote and printed an anonymous pamphlet on it entitled "The Nature and Necessity of a Paper Currency." It was well receiv'd by the common people in general, but the rich men dislik'd it, for it increas'd and strengthen'd the clamor for more money . . . and the point was carried by a majority in the house. My friends there . . . thought fit to reward me by employing me in printing the money; a very profitable job and a great help to me.
>
> The utility of this currency became by time and experience so evident as never afterward to be much disputed; so that it grew soon to fifty five thousand pounds and in 1739 to eighty thousand pounds, since which it arose during the war to upwards of three hundred and fifty thousand pounds, trade, building, and inhabitants all the while increasing, tho' I now think there are limits beyond which the quantity may be hurtful.[23]

---

of Nations (Cannan's edition, 1904), vol. II, bk. V, chap. ii, pt. I, p. 305, gives a brief and succinct account of the Pennsylvania experiment.

[23] This quotation will be found in any good edition of the "Autobiography." See, for example, *Autobiography of B. Franklin* (Bigelow edition, 1887), p. 152.

We find, in the last paragraph, a summary of much the same point of view explained in the first section of this chapter. If a nation tries to cover up its lack of wealth by paper money, the result will be a true inflation. But if "trade, building and inhabitants" are "all the while increasing," such a result is not likely.

It must not be supposed that Franklin and the members of his party did not have knowledge of the dangers of printing money. In the quotation we have given he mentions the New England experience. In his "A Modest Inquiry into the Nature and Necessity of a Paper Currency" he says:

> It is nothing to the purpose to object to the wretched fall of the bills in New England and South Carolina, unless it might be made evident that their currency was emitted with the same prudence, and on such good security as ours is; and it certainly was not.[24]

He explains the South Carolina depreciation by pointing out that it occurred:

> When the colony was in danger of being destroyed by the Indians and Spaniards . . . and the inhabitants, to get something lodged in safe countries, gave any prices in paper money for bills of exchange; whereby the paper . . . greatly depreciated.[25]

Regarding New England he tells us that all the New England colonies accepted each other's paper currency:

> But the whole of this common currency, not being under one common direction, was not so easily kept within bounds, the prudent reserve of one colony . . . being rendered useless by the excess of another.[26]

However, Franklin also had successful experiments in mind, notably in Pennsylvania. Mr. Richard A. Lester has given a statistical treatment of "Currency Issues to Overcome De-

---

At the same time the reference to a "very profitable job" shows that Franklin was not entirely disinterested in his economic advice.

[24] For one edition see J. Sparks, *Franklin's Life and Works* (1840), II, 253, "A Modest Inquiry into the Nature and Necessity of Paper Money."

[25] Franklin, "Remarks and Facts Relative to the American Paper Money" (Sparks, p. 344).

[26] Sparks, p. 346.

pressions in Pennsylvania 1723 and 1729" and also of the same topic in "Delaware, New Jersey, New York and Maryland, 1715–37." [27] In Pennsylvania in 1723, according to Lester, the scheme of printing money to relieve depression had been tried successfully. This is the issue of 1723 mentioned by Franklin. The writings of the period are very confusing, since they tend to indicate merely that there was a change in the quantity of circulating currency.[28] As a matter of fact, however, the actual method was much more than a routine mint operation. Legal tender money was printed in 1723, and, says Lester, "most of the 15,000 was to be lent at 5 per cent interest; the loans were to be secured by mortgages on land and houses and were to be paid back in eight annual installments." [29]

In other words, a sort of eighteenth-century Reconstruction Finance Corporation was created which was financed by "fiat" money. Would not Professor Spahr have us believe that these experiments have "*always* failed"? This Pennsylvania plan was frequently resorted to in following decades. Maryland was even more drastic. "A certain sum 'was *given* away' to each inhabitant over fifteen years of age." This was done, according to Lester's quotation from old records, that the paper money might "be more useful to the inhabitants" and its circulation might be "as speedy and diffusive as possible." [30]

[27] *Journal of Political Economy* (June 1938 and April 1939). The material contained in these articles and much other interesting matter is collected in R. A. Lester, *Monetary Experiments* (1939).

[28] Franklin's writing throughout shows a confusion of capital and income concepts — but then so does the work of Adam Smith. *Income* and the *quantity* of money were not clearly separated until after their time. See Charles Gide and Charles Rist, *A History of Economic Doctrines* (1915), Richards translation.

[29] R. A. Lester, "Currency Issues to Overcome Depressions in Pennsylvania," *Journal of Political Economy*, XLVI (June 1938), 338.

[30] R. A. Lester, "Currency Issues to Overcome Depressions in Delaware, New Jersey, New York and Maryland, 1715–37," *Journal of Political Economy*, XLVII (April 1939), 208. I must hasten to add that I do not necessarily favor this method It should also be pointed out that multiple bank expansion on cash reserves was in its infancy. In modern times there would be risk of credit inflation from multiple expansion. But, as we shall see later, this danger *can* be avoided.

While these examples do not establish a universal rule that "monetary manipulation" need not cause inflation, they do, especially in connection with modern Scandinavian experience, rebut any sweeping statements of the opposite order.[31] There are times when increases in the money supply will cause inflation and times when it will not. Yet, whenever one case or the other occurs, there are always persons who desire to generalize from previous experience regardless of the relevance of the circumstances underlying the examples which they select. If, during and after the present war, a currency depreciation should occur, such as usually accompanies great conflicts, there will undoubtedly arise groups of "authorities" who will blame the inflation upon the monetary policies *preceding* the outbreak of the war. Such an inference is quite unjustified. The accumulated idle balances resulting from the deficit financing and gold inflows of the past ten years do complicate our present problem of preventing inflation. But had there not been a war, these balances might never have presented a problem, for, if they had been returned to circulation in peacetime, they might easily have been taxed away. In the present conditions of stress the task of control may be more difficult, but inflation is almost as much a part of war as disease or death, and the peculiar conditions to which war gives rise cannot be used as an argument against purchasing power creation in peacetime slump.

[31] As to Scandinavian experience, see Lester, *Monetary Experiments*.

CHAPTER V

BANK CREDIT AND CHANGES IN BANK POLICY

I. THE INADEQUACIES OF BANK CREDIT

In Chapter II the conclusion was reached that economic instability and cycle movements, in great part, were due to the combination of a relatively stable propensity to consume with "unavoidable discontinuities" of investment outlet. In order to take a first step toward stability, it was concluded, we should endeavor, as far as possible, to stabilize the consumer's money income during periods of investment slump.[1] This section will discuss the basic inadequacies of bank credit as a means of carrying out such a policy. No attempt will be made to elaborate the ordinary theory of commercial banking.[2] We will be interested primarily in the inadequacies of commercial bank credit as a means of stabilization in a world of highly discontinuous investment outlet, and will keep as much as possible to this single narrow point. The brief discussion which follows may seem somewhat elementary, but it deals with fundamentals which are too easily overlooked.

The fact that the banking system does not restrict its loans to money derived from stockholders and depositors but may lend in excess of the funds actually committed to its charge is, of course, a commonplace among economists.[3] Yet, if it is taken

[1] As Professor Haberler has pointed out, there may be occasions when the crisis is engendered by the competition of consumption with investment (Gottfried Haberler, *Prosperity and Depression*, 1939, revised edition, p. 125). But we are not dealing with the *crisis* but with stability *after* the crisis and in the slump. In other words, we wish to put a socially tolerable bottom to the process of cumulative deflation and to confine it to as narrow a range as possible.

[2] The following sections of this chapter will contain a good deal of discussion of commercial banking weapons and theory.

[3] See H. G. Moulton, *The Formation of Capital* (1935), Chap. VI, p. 77. See also an article by Professor O. M. W. Sprague of the Harvard Business School on "Banks and Banking" in the *Encyclopedia Americana* (1932 edition).

for granted that the banking system can "create" credit, why may not this power be used to stabilize consumption during an investment slump?

Conservative economists when defending the "creation" of credit usually object that banks do not "create" credit. They merely "recognize" credit which already exists. As one writer puts it: "Banks, by their actions, cannot increase or diminish the volume of credit but they can recognize more or less credit, thus altering the volume of the circulating medium." [4] This statement may seem a play on words, but it contains a very important element of truth. It is important to realize, as Mr. Meade points out, that our system of "elastic" credit is chiefly *producer's* credit.[5] The banks lend money (in theory at least) primarily to finance production and marketing.[6] Even when personal loans are made they are made to persons either with fairly secure jobs or valuable assets. If a man has neither, bank credit is not available. If, for one reason or another, people do not wish, or are unable, to market goods or start new projects, the banks can do little to stimulate.[7] During a depression, whether or not there are actual investment opportunities available which would pay, people are usually too afraid to borrow. Lowering the interest rate, in a time of uncertainty, is likely to be a mere ritual act devoid of practical significance. Moreover, as Durbin and Hawtrey have pointed out, the interest rate is frequently of far less significance than willingness to lend and the type of security demanded.[8] Nor does the

[4] Caroline Whitney, *Experiments in Credit Control* (1934), p. 21.

[5] The growth of "consumer credit" in the past decades makes our banking system less exclusively concerned with "production." Under some terminologies, however, durable consumers' goods are regarded as capital goods. In any event the bank is really financing the marketing of such goods. "Personal loans" are also increasing. But these are made to (1) persons with fairly secure jobs, (2) persons with valuable assets. If men have neither, bank credit is not available. See J. E. Meade, *Economic Analysis and Policy* (1937); *Consumers' Credits and Unemployment* (1938).

[6] *Ibid.*

[7] The important distinction between commercial short-term loans and long-term investment will be discussed in detail in § 2 of this chapter.

[8] For example, see E F. M. Durbin, *The Problem of Credit Policy* (1935), p. 198.

policy of increasing bank reserves — for example, by open market operations — help if there is a shortage of demand for loans, either because of subjective risk factors or an objective lack of investment opportunity.

The shortcomings of specific weapons and policies will be discussed, however, in the succeeding sections of this chapter. Just now our concern is in stating the basic weakness. It is submitted that the basic weakness of orthodox credit policy as a means of maintaining income during an investment slump is, first, that we have, primarily, a *production* theory of bank credit and, second, that personal income is for the most part dependent on personal activity. If there is no work for a man, he gets no income, unless, of course, he be a man of some means. If there is little business activity, there is little work and hence little money income. If there is no income, goods cannot be sold. If goods cannot be sold, bank credit cannot be extended to any great amount. We have nowhere in our banking system, considered by itself, a method of getting money income to people whose *labor* is not needed by private industry for the time being, but whose *money income* is essential to the sale of goods at the existing price level. Bank credit cannot help us in this dilemma. Because it is dependent on the existence of a brisk demand for loans, we have too much of it when we do not need it and not enough when we do. Bank credit control, moreover, can only function effectively in a negative way. It may stop an expansion, but it can do little to start one. But, although it is easy to see that existing bank policy cannot help very much, there are writers who feel that a *change* in bank policy, or in its weapon of control, will be sufficient to alleviate greatly our troubles, and to some of these writers we now turn our attention.

2. MR. BERLE'S "CAPITAL CREDIT" BANK

In hearings before the "Temporary National Economic Committee" Mr. A. A. Berle, Jr., a distinguished legal authority and occasional writer on economics, presented a plan for

"A Banking System for Capital and Capital Credit." [9] Mr. Berle agrees, on the whole, with the criticisms just made and stresses the need for "a causative mechanism." [10] "The machinery we now have is passive," he tells us.[11] But he feels that what we need is a reversal of the classical tradition against long-term loans from "created" credit.

The previous section of this chapter omitted discussion of the established tradition in favor of "short-term" banking. Mr. Berle, however, sums it up in his memorandum:

> Classic finance recognizes the sharp difference between short-term credit and money — the sort of function a commercial bank normally performs, and long-term financing — the kind of thing done by the investment banking houses through bond and stock issues.
>
> The short-term credit field has been evolving continuously and rapidly. During the last century the private commercial banks moved steadily forward. As they did so repeated occasional stoppages of currency and credit forced a steady evolution of their theories and their machinery. The result was the organization of the great European central banks and reserve bank systems developed in the latter half of the nineteenth century, and, in the United States, with the creation of the Federal Reserve System in 1914.
>
> Briefly, what happened was the creation of machinery so that the supply of money and short-term credit should keep pace and proportion with the need for it, and yet be kept in rough working relation to the floating supply of current goods and services moving towards consumption or final use. In result, the supply of bank credit and bank deposits (in effect, the power of commercial banks to create and circulate money) is rightly considered as much a part of our monetary system as is currency itself. . . .[12]

The classical reason why commercial banks did not like to create credit or currency against a capital loan was a thoroughly good one. Where a loan was extended and bank credit or currency created for the purpose of bringing into existence a supply of floating goods headed for consumption or final use, the supply of currency and

[9] The "Temporary National Economic Committee" is a committee composed of members of the Senate, the House of Representatives, and the various executive departments. The quotations and information given in this section are drawn from a memorandum submitted by Mr. Berle, May 23, 1939, entitled "A Banking System for Capital and Capital Credit."

[10] Berle, p. 9. [11] Berle, p. 9. [12] Berle, p. 2.

credit, though it was increased, met an equivalent increase in the supply of goods; and the price level was thus kept in balance. But if currency or credit were created against a static asset, like a building, the currency and credit operated on the floating supply of goods and not on the building (or at least only to a limited extent on the building). The currency and credit floated into the banking system. Since the floating supply of consumers' goods is more or less constant, it is obvious that the price level could be thrown out of gear at once were any considerable part of permanent or capital assets coined into currency, and the currency turned loose on the community for use in buying and reselling consumers' goods. For this reason, every banker has been firmly taught that the creation of currency and credit cannot be legitimately used where it is based on capital assets. The famous experiment of creating currency against capital assets by the issue, during the French Revolution, of *assignats* based on land, has been the classic illustration. That same danger exists in any capital credit banking system where bank credit and currency can be created against a capital loan.[13]

But, although Mr. Berle thus points out the danger of long-term policy, he feels that the financial system can nevertheless be made to work by the use of "capital credit." His exposition is not entirely clear, but we will try to develop it as much as possible.

Briefly, Mr. Berle wishes to set up a series of "non-political" capital banks to which "there will come people who desire to construct additions to the plant of the country. The people . . . may range from individual enterprisers who wish to construct plants . . . to semi-public authorities . . . municipalities . . . or estates which need to construct hospitals, prisons," etc., etc.[14] The borrowers will sell bonds to the capital banks which will be rediscountable with the Federal Reserve.[15] The interest rate would be "flexible" and "selective." The rate charged a borrower could be varied from time to time and special low rates given to noncommercial enterprises as hospitals.[16] Capital credit would be controlled by the Federal Reserve Board through the rediscount rate and open market operations.[17]

[13] Berle, p. 16.
[14] Berle, p. 12.
[15] Berle, p. 13.
[16] Berle, p. 11.
[17] Berle, pp. 16–19.

Save for the flexibility and "selectiveness" of the interest rate and the fact that rediscount of bonds is not apparently limited to governments, the paragraph just given reads very much like a description of the pre-1929 American banking system. Mr. Berle appears at times to identify long-term capital credit exclusively with the sale of bonds. But there are more ways of killing a cat than choking it with cream, and, in one way and another, the commercial banking system, even now, does a large amount of capital financing both private and public. It is not clear just what, in Mr. Berle's opinion, occurs when a bank purchases government bonds. Nevertheless he tells us:

> The long term credit field has had no comparable development since its appearance at and after the time of the Napoleonic wars. A striking fact is that long term credit — that is the type of money which normally goes toward construction, public improvements and permanent acquisition to plan through investment — moves in much the same way that it did . . . more than a century ago. The bond selling business has not changed much.[18]

Elsewhere he tells us that it is probably not practicable to construct his system out of the existing commercial field: "Because commercial bankers have been trained for generations in the classic system — that is, that the job of their bank was not to supply capital." [19]

Mr. Berle has discovered that "capital development can go on though there *are no savings*; or though owners of those savings decline to invest them and wish to hoard" (italics added).[20] This "revolutionary" discovery that saving is not necessary to capital formation is credited to Dr. Harold Moulton.[21] Yet although Berle tells us that bankers have been

[18] Berle, p. 2.

[19] Berle, p. 14.

[20] Berle, p. 3. Of course, in "real" terms the first part of Berle's statement cannot be true. Unless some people are refraining from consumption, there can be no capital development. The second part of his sentence is correct. "Capital credit" may offset hoarding and permit a smooth flow if enough projects can be found.

[21] Berle, p. 3.

trained for "generations" in the classic system, the authority upon whom he relies, Dr. Moulton, writes:

> It would appear that over 50 per cent of all loans and investments made by national banks are utilized for fixed capital purposes. If state banks and trust companies be included the percentage is materially increased.
>
> Investment operations by commercial banks are in no sense a recent development. In the period before the Civil War, state banking institutions commonly made loans for fixed capital purposes.[22]

While Dr. Moulton has occasionally used rather broad language, he is not to be credited with promulgating the view that saving, in real terms at least, is not necessary to capital development. Moulton pointed out that bank credit *was* used for capital purposes, but that is quite different from saying that abstention from consumption on someone's part is not needed for capital formation.[23] Mr. Berle has wholly failed to show that our bankers do not know anything about long-term credit. He himself tells us that "in earlier times" local banks provided "capital to young men who had ideas."[24] Indeed, in the light of American banking history, long-term banking is known only too well.

Mr. Berle tells us, referring to the commercial banks, that, if the monetary mechanisms made available between 1933 and the present time had been available in 1929–32, much of the sufferings of the great depression could have been mitigated, if not avoided.[25] Yet these measures of which he approves were not entirely consistent with his point of view. One of the aims of the banking act of 1933 was to *divorce* long-term credit from commercial banks. The act of 1935, more in accordance with his theories, relaxed restrictions against long-term real estate loans.

Mr. Berle warns us of the inflationary dangers of long-term

[22] Harold Moulton, *Formation of Capital*, p. 95. On p. 93 he calculates that, in 1929, 30 per cent of all "credit extension" by banks went to investment This figure did *not* include loans on securities.

[23] See note 20, *supra*. The controversy is closely related to Keynes' definition of savings and investment as "always equal."

[24] Berle, p. 10.

[25] Berle, p. 2.

credit, yet recent experience does not give us very great confidence in the ability of the controls which he sets up, the rediscount rate and open market operations, to stop an expansion. He tells us that the "use of the Federal credit by providing relief . . . is not a permanent solution. There is always the danger that the time may come when an economy so organized will reach the end of its tether." [26] But later on "the danger of a breakdown in the government credit is discussed later; enough here to say it may be discounted. In any case it has been wholly overstressed." [27] But despite the contradictions of Berle's theoretical analysis, his ideas are not without merit, especially if applied to the slump alone.

It is important to realize that the interest rate by itself is inadequate indication of the availability of funds. The amount of collateral and of security demanded must also be considered. As Durbin says, "Considerable variations in the supply of money will arise simply from variations in the degree of security required by the banks or in their pure willingness to lend." [28]

The gist of Mr. Berle's criticism seems to be that the investment houses and commercial banks are unduly cautious. His proposals at times appear to boil down to the suggestion that we create a series of nationally owned or strictly regulated banks to make long-term loans in intervals when the private investment houses are unwilling to do so.[29] The suggestion occasionally implicit in his memorandum that the banking system should be paralleled by another which is government owned cannot be discussed here. Yet if the ends sought by Mr. Berle could be otherwise obtained would it not be better to avoid the socialization of banking? In defense of Berle's

[26] Berle, p. 1.

[27] Berle, p. 5. It is not, however, quite clear whether it is the use of Federal credit which in Berle's opinion causes the economy to come to the "end of its tether" or social friction.

[28] Durbin, *Credit Policy*, p. 198.

[29] Mr. Berle's specific suggestions are a little vague. In consequence this summary may not be wholly accurate, but it is very difficult to put one's finger on his specific schemes.

position, however, it must be conceded that long-term financiers may perhaps in recent years have been unduly timorous. Occasional suggestions have been made that there has been a "capital strike." Also in defense of Berle's position it must be conceded that, with as many unemployed as was the case until recently, the extension of long-term bank credit, and indeed of any other kind of bank credit, is not likely to cause immediate inflation.[30] Thus a certain *prima facie* case can be made out for Berle's suggestions.

Suppose, however, that we adopt Mr. Berle's plan. What difference would it make? His scheme would not avoid the necessity for government borrowing. The original capital of the "capital banks" would probably have to be supplied by the government from loans or taxes, and, insofar as there is any suggestion of "creating credit" by multiple expansion, this may not prove feasible. It must be remembered that in most cases it is the banking *system*, not an individual bank, which can "create" credit.[31] One bank or group of banks cannot expand, to any great extent, if the others are not doing so because clearings would be consistently against the expanding bank or banks. A very large and strong bank, by initiating a policy of expansion, might eventually induce others to expand also before the expanding bank lost its reserves. But if the others did not follow suit the expanding bank would soon be in difficulties. To "create" credit, in usual banking fashion, the government would have to own *all* the banks, or at least a very important part of them.

But suppose the government does own all the banks. Would the mechanism be any more "causative" than it is today? Will not borrowers have to "come" to the capital bank? Expansion of the capital bank will be limited by the amount of capital demand just as with present banks. These demands, as we have seen, are subject to variation for partially nonmonetary reasons. In this regard it must be pointed out that Mr. Berle appears to have the causal nexus largely backward. He speaks

[30] But when unemployment decreases, trouble is likely to ensue for reasons explained by Berle. See Berle, p. 16. [31] See authorities cited *supra*, note 3.

of "irregularities in the flow of so-called savings." [32] But, on the whole, it would be more accurate to speak of irregularities in the flow of investment outlet. It is true that the government might stimulate the demand for capital by grants and subsidies, as it does now. But the "causative" mechanism would be the act of the government — just as it is now.

Mr. Berle's system therefore has little basic institutional difference, other than possible government ownership, from that we have at present. Nor does it seem to accomplish much that cannot be accomplished by the ordinary spending policy. As to the implied charge that the investment bankers are "on strike," anyone familiar with the bitterness of contemporary partisan controversy cannot deny some element of plausibility to this view. But we must not forget other forces at work. Among them is the suggestion that we have a long-range shortage of outlets for investment in capital goods. There are also the possible effects of tax policy and rapid changes in wage levels.[33] These things do not arise out of any particular conspiracy or lack of intelligence on the part of the bankers.

Since Mr. Berle's plan will not do away with the necessity for government borrowing or taxation and since the "causative" force would still be the act of the government in granting subsidies, etc., there does not seem to be any pressing reason for changing from the present deficit financing method to "capital credit banking." When the expanding and supplanting factors are idle it is probably wise to put them to work on special projects. But it would seem better to admit frankly that we are attempting to maintain the national money *income* and incidentally to use as many idle resources as we can. To surround the process with an elaborate hocus-pocus in order to make it look "just like other banks" is to invite the possibility of forgetting the dangers of a permanent policy of long-term banking.[34]

[32] Berle, p 3

[33] See the discussion of both these factors in Chapter III, §§ 1 and 2, above.

[34] *Supra*, note 30.

Mr. Berle's proposals are capable of at least three interpretations. (1) They may be an attempt to return to long-term commercial banking. This may succeed in a slump but is more likely to be inflationary in the long run. (2) They may in effect be a plea to socialize the banking system. (3) They may merely amount to an argument for a more liberal policy of public works and deficit financing. It may be concluded that most things of value that the plan could accomplish would be nearly as well accomplished under 3, in an ordinary spending policy, and without the particular novel features suggested by Mr. Berle.

3. IRVING FISHER AND 100 PER CENT MONEY

In this section we will discuss a suggested reform of bank policy which is largely the reverse of the one just considered. Professor Irving Fisher and a number of other eminent economists seem to feel that the trouble with our banking system is not that it fails to stimulate but that it stimulates too much.[35] Accordingly they propose to put an end to the power of the banking system to expand demand deposits upon a fractional reserve.

Briefly, the plan requires a separation of all commercial banks into "Loan Banks" and "Check Banks" — which might still be departments of one institution.[36] The "Loan Bank" would operate as a savings bank and need carry only the present requirement of 3 per cent cash reserve against deposits.[37] Depositors could not draw checks against their accounts and could only withdraw funds after due notice, etc. Depositors of the "Check Bank," however, could draw checks

[35] A bibliography is given by Professor Irving Fisher in his *100 Per Cent Money* (1935); second edition (1936). Professor Hansen also lists a number of articles in his *Full Recovery or Stagnation* (1938), Chap. V, "Recent Trends in Business Cycle Literature," p 111 See Professor Simons' review of Hansen's criticism in *Journal of Political Economy*, XLV (April 1939), 272 Professor Fisher's proposals have been very vigorously attacked by Professor Walter E. Spahr, *The Fallacies of Professor Irving Fisher's 100 Per Cent Money Proposal* (1938).

[36] Fisher (first edition), p. 53.

[37] Fisher, *100 Per Cent Money*, Chap V.

against their deposits, but the bank would have to carry 100 per cent cash reserve against them.[38] The revenue of the "Loan Bank" would be derived from interest on loans. The "Check Bank" would earn its expenses and profits from service charges.[39]

According to a recent memorandum by Professor Fisher, the transition might be arranged as follows: (1) The "monetary authority" might be authorized to "lend without interest sufficient cash (Federal Reserve notes, credit, United States notes, or other lawful money) to every bank or other agency carrying demand deposits on a certain specified date." [40] (2) "Another method would be to let each bank count as cash-reserve its United States Government securities (reckoned at par) up to a specified maximum, and to provide for their conversion by the government, on demand of the bank, into cash." [41]

However, while Professor Fisher lays primary stress on the fixing of the quantity of money (M), he is aware that occasionally "reflation" will be needed. "As long as population and trade . . . increase there will, in general, be a need for more money in circulation, and the consequent action of the monetary authority in satisfying this need through the purchase of government bonds with new money would gradually reduce the government debt." [42] In other words, the monetary authority will be enabled to increase the monetary circulation by open market operations financed by new issues of currency.[43] Professor Fisher is a little vague, as regards the 100 per cent plan,

[38] Fisher, *100 Per Cent Money* (first edition), p. 53.

[39] Fisher, *100 Per Cent Money* (first edition), pp. 138 *et seq.*

[40] See mimeographed memorandum, *A Program for Monetary Reform* (February 1939), p. 4. Similar proposals are contained in a pamphlet of the same name dated August 23, 1940, p. 4, signed, in addition to Professor Fisher, by J. R. Commons, F. D. Graham, E. J. Hamilton, W. I. King, and C. R. Whittlesey.

[41] Fisher, *Monetary Reform* (February 1939), p. 5.

[42] *Ibid.*

[43] Professor Fisher is not very explicit as to where the new currency would come from. Professor Spahr takes him violently to task for advocating "inconvertible paper money." But, while Professor Fisher undoubtedly has something of the sort in mind, it would by no means be inconsistent with some types of gold standard.

on the subject of velocity but tells us it might "fortify the efficiency" of the monetary authority if it were "given power" to "influence" hoarding and dishoarding and "velocity generally." [44] A footnote gives brief mention of "stamped money," but the problem is not developed.

Professor Fisher's plan possesses one undoubted advantage. "Check Banks" would always be solvent. In the present system of fractional reserves an increase in the demand for cash on the part of the public has a more than proportional effect in restricting credit. Thus if there be a run on the banks, they cannot *all* possibly be solvent at one time, however sound they may be individually, and in the hectic scramble for liquidity they are compelled to call loans and to curtail credit far more than would otherwise be the case. In consequence, deflationary pressure is very greatly aggravated. Fisher's plan would avoid this evil, in so far as "Check Banks" are concerned, but his "Loan Banks" would still be vulnerable.

We have not yet had experience with a general bank panic under the F.D.I.C., but it seems likely that the F.D.I.C. will do much to mitigate crises of this sort, for it ensures small depositors in all departments of a bank. Also the insurance feature will reduce the loss of purchasing power consequent upon bank failures. Professor Fisher's plan should not, therefore, be compared with the banking system prior to the great banking crisis of 1932–33 but with the present banking system. The present system, with the F.D.I.C., is considerably stronger, and there is therefore somewhat less need for change.

The remainder of Professor Fisher's scheme has been discussed by so many authors that it does not seem necessary to go over the ground again in great detail.[45] It has been pointed out that stabilizing the quantity of money M by no means stabilizes MV.[46] Professor Fisher inveighs against a "cir-

[44] Fisher, *100 Per Cent Money* (first edition), p. 91.

[45] In addition to books already cited, see M. G. Myers, *Monetary Proposals for Social Reform* (1940), especially the discussion of Professor Soddy.

[46] The concept of velocity in relation to income is mentioned again in the first section of Chapter VI of this study. Professor W. E. Spahr calculates in *Fallacies of 100 Per Cent Money* (p. 28), that from 1929 to 1933 "prices fell

culating medium" based on "business debt," but it is impossible to escape from the fact that, under any system, privately generated money *income* will vary with business *activity*.

It has also been pointed out that the plan probably would not restrict investment to voluntary savings, or prevent the spurts of industrial activity which lie at the base of the boom. The plan would make the money supply somewhat less elastic, but changes in velocity and the use of "near-money" might still permit rapid expansion, when new investment opportunities appeared. Capital installation, therefore, need not be forced to "spread out" over time as is essential to secure complete stability.

Finally, in the matter of stimulation, Fisher's plan is most unsatisfactory. Aside from footnote reference to stamped money, his emphasis seems to be chiefly on open market operation.[47] But these in times of stress have shown themselves to be of little use. The increasing of reserves may prove futile when people are no longer able to borrow. Granting that absolute stability is unobtainable by money means, the weakness, which keeps restrictive credit policy from operating even as much as it could, is the lack of effective means of stimulation. The banking system is an automobile with brakes but no engine. The driver will always be afraid to apply the brakes in time for fear the machine lose momentum altogether. Professor Fisher's suggestions in *100 Per Cent Money* do little to help this condition.[48] Thus, while the 100 per cent money plan does offer a partial remedy for one of the major forces aggravating the deflationary spiral — the scramble of banks to become liquid — it still does not avoid the cycle and, by itself,

---

32 per cent, velocity of deposit currency declined 69 per cent; deposits declined 15 per cent." Professor Fisher himself in *Booms and Depressions* (1932) admits that deposits fell 21 per cent but velocity 61 per cent in 1929–32 (p 140) Thus velocity would appear to be a much more important factor in the fall of prices than the volume of currency

[47] *Supra*, notes 39 and 40

[48] In *Booms and Depressions*, Professor Fisher mentions a number of methods of stimulation.

it contains no method of stabilization once a downswing has begun.

4. A NEGATIVE RATE OF INTEREST AND SUBSIDIES TO PRODUCERS

In contrast to the essentially passive plans thus far considered, we come now to more positive suggestions. It has frequently been indicated in earlier sections of this study that changes in the rate of interest, in times of uncertainty and slump, may not be sufficient to call forth an adequate amount of new investment. The variations in cost entailed by changes of 2 or 3 per cent in the rate may not be large enough to offset the risk factor involved or to overcome a lack of expected profits. In consequence some writers believe that the banking system should be empowered to administer a "negative" rate of interest, while others have suggested that producers be subsidized outright for maintaining or increasing employment.[49]

Loans without interest, repayable at the option of the borrower, amount in fact to gifts. If enough "loans" of this sort are made indiscriminately to anyone, producers and consumers alike, the number of takers would probably be infinite and some sort of boom would eventually result. But whether this is a desirable method of obtaining full employment is another question. In Chapter VII outright gifts to consumers will be discussed, but the plans treated in the present section are not quite so broad. Subsidy proposals are usually limited to types of activity which it is desired to stimulate, while "negative" interest rate schemes, though including a subsidy and doing away with the payment of interest, still require repayment of part of the loan. They also are usually restricted to special types of loans. Clearly, subsidy proposals are more likely to take immediate effect than a negative interest rate. The knowl-

[49] As to a "negative" rate, see J H R. Cromwell and Hugo E. Czerwonky, *In Defense of Capitalism* (1937) Fisher mentions the matter briefly in *Booms and Depressions* (p. 142) As to subsidies, see Nicholas Kaldor, "Wage Subsidies as a Remedy for Unemployment," *Journal of Political Economy*, vol XLIV (December 1936); M Ezekiel, *Jobs for All* (1939); R. F. Harrod, *The Trade Cycle* (1936); J. E. Meade, *An Introduction to Economic Analysis and Policy* (1939).

edge that some money must be repaid — even though no interest is due — is bound to have a certain deterrent effect upon the borrower who is worried about the future. But the difference is only one of degree. If the negative rate or subsidy be large enough — perhaps in some cases more than the amount to be repaid — *some* figure is bound to be reached at which people will "borrow." We can therefore treat the two types of proposal together. The main difference in the specific plans offered is that usually negative interest rate schemes make elaborate provision for financing by injections of currency, while some of the subsidy plans assume funds raised by taxation, or make no assumptions as to finance at all.

Subsidies to particular classes of producers affect the direction of production. In Mr. Kaldor's words, they "will have effects similar to a tariff in distorting the productivity relationships between different industries." [50] Space is lacking to deal with the matter from a static "welfare" point of view as Mr. Meade and Mr. Kahn, among others, have done.[51] The question will be discussed almost wholly from the financial and cyclical angle.

One method of financing a negative interest rate has been suggested by J. H. R. Cromwell and H. E. Czerwonky in their book, *In Defense of Capitalism*.[52] According to their proposal, the Federal Reserve Board would be given power "to subsidize enterprisers to use money, and [also empowered] to pay banks a *service* charge for the risk and expense involved in extending loans to such enterprisers as will employ labor." [53] The machinery works as follows. Member banks would make loans to "enterprisers" and assume the risk of nonpayment of the loans.[54] The bank would receive in return a non-interest-bearing note which would apparently be eligible for rediscount.[55] The Reserve Board, however, would pay the bank a

[50] Kaldor, "Wage Subsidies," p. 727.

[51] See R. F. Kahn, "Notes on Ideal Output," *Economic Journal*, vol. XLV (March 1935); Meade, *Economic Analysis*, pp. 178 *et seq.*

[52] Cromwell and Czerwonky. [53] Cromwell and Czerwonky, p. 81.

[54] Cromwell and Czerwonky, p. 85.

[55] Cromwell and Czerwonky, p. 86: "It should likewise be understood that

service charge of 3 per cent or more and would directly subsidize the borrower by *giving* him a certain percentage of the loan.[56]

The Reserve Board would, apparently, obtain the funds to make payments by creating credit as follows: The Reserve Banks would be ordered to credit the balance of the member banks with the amount of the subsidy and interest charge.[57] Currency issues would not be restricted by any gold reserve requirement and would be issued at the discretion of the Board.[58] It is clear that the increased reserve balance of the member banks with the Reserve Banks could be a source of multiple expansion, but this would, presumably, be taken care of by concurrently enlarging the power of the Board to raise and lower reserve requirements.[59] Financial methods of this sort will be discussed in detail in Chapter VII on "Purchasing Power Injectors."

Mr. Kaldor in an article on "Wage Subsidies as a Remedy for Unemployment" does not go into the question of financing at any length but his proposals are closely similar to the Cromwell-Czerwonky plan — namely, subsidies to businessmen who will employ labor. Mr. Kaldor proposes a flat percentage subsidy on *all* labor employed and equal in *all* industries.[60] Cromwell and Czerwonky are not so specific, but their "inducement loans," of which a part will be an outright subsidy, "would not be discriminatory and would be available to any enterprise, no matter how adequately it might be financed which

---

certification by the Board would not only guarantee the service charges but would also guarantee the eligibility of inducement paper for cash advances in case of emergency."

[56] Cromwell and Czerwonky, p. 82.

[57] Cromwell and Czerwonky are not very definite regarding methods of finance. I assume that the method given in their footnote on page 64 as to advances to the government will be followed in other cases.

[58] Cromwell and Czerwonky, pp. 69 *et seq.*

[59] Cromwell and Czerwonky, pp. 67 *et seq.*

[60] Kaldor, p. 727: "The type of subsidy contemplated . . . is a flat rate (either some percentage of wages or a lump sum per worker) payable on all labor and equal in all industries." Kaldor says (p. 723) that a plan of this sort, the "Papen Plan," was briefly tried in Germany.

could be willing to *increase production* and employ *more* labor." [61] Mr. Harrod also suggests a subsidy on *additional* employment,[62] and, if the funds are raised by taxation, they "should be confined to the capital goods industries." [63]

Theoretically, a combination of taxes and subsidies would seem to present the complete solution to the problem of unemployment and purchasing power creation, but there are many difficulties to be considered before reaching the unqualified conclusion that here we have the only weapon needed. These difficulties center around two main problems — asymmetries in the real structure of production and needed changes in the propensity to consume. If mere employment *per se* be the sole aim, then, obviously, a sufficiently large subsidy to all producers could quickly end unemployment, but, if it is desired to hold waste to a minimum and to avoid serious maladjustments and labor shortages, the problem becomes more complicated.

Let us first consider the problem of the cycle. We have seen that the difficulty here lies in the periodic outbursts of investment activity. As a result of these spurts of capital installation, the capital goods industries are overbuilt for continuous operation. In Chapter II the difficulties were elaborated which are inherent in attempts to transfer factors *permanently* to consumers' goods production. In so far as the *cycle* alone was concerned, it was concluded, such a transfer was probably undesirable. In consequence, the field of action was restricted primarily to the capital goods industries. But, since the capital goods industries are "overbuilt" for continuous operation, subsidizing them to run at capacity would be likely to result in a large accumulation of unsaleable equipment. The problem is not so much getting the capital goods industries to work, as finding a market for their products. Such a market could be furnished by a carefully timed public works program, but when we talk of public works we have already left the field of sub-

[61] Cromwell and Czerwonky, p. 88.
[62] Harrod, pp. 227 *et seq.*
[63] Harrod, p. 230.

sidies *per se*, and discussion of the special problems of public works must be postponed to Chapter VII.

Yet, though subsidies to producers cannot carry the whole weight of a recovery program, they would certainly be a valuable adjunct to a more comprehensive policy. If carefully timed to avoid bottlenecks, a "flexible and selective" negative interest rate, or subsidy, to those industries which one wished to stimulate would greatly help the problem of reëmployment. Subsidies to *all* concerns alike, however, would only be desirable if one assumed that the real structure of production were already in balance and needed only to be shoved off dead center.

Dr. Mordecai Ezekiel, the well-known agricultural economist, realizes that the industrial structure is not necessarily in balance and offers an interesting variant of the subsidy idea. He presents his program in his recent book entitled *Jobs for All*.[64] Ezekiel names his program "Industrial Expansion" and summarizes it as follows:

> The essential idea of Industrial Expansion is to have each of the key basic industries prepare tentative programs for expanding its operations and pay roll in the year ahead, and then to check and revise these tentative programs against each other to be sure they *fit properly*. Then each concern will be given advance orders for the planned production through contracts with a special government agency. These contracts will provide for the public purchase, at a discount, of any portion of the programmed production which remains unsold.[65] [Italics added.]

Dr. Ezekiel tells us in a number of places that mistakes will, at first, be made and surpluses pile up. He also, in agreement with the analysis of the cycle in Chapter II of this study, points out that:

> Our great dependence upon machinery makes our society an especially unstable one. The bread we eat and the clothes we wear must be made about [i.e., at the same time] as we need them, so the level of activity in such consumer goods industries stays pretty stable in good times and in bad. But when bad times come businessmen are

[64] M. Ezekiel, *Jobs for All* (1939). [65] Ezekiel, p. 17.

very unlikely to buy new machinery or equipment. When their plants are operating way below capacity they not only cease expanding their equipment, but also economize on repair of existing equipment and let depreciation reserves pile up unspent. As a result all the industries that contribute to the production of capital goods suffer large and sudden decreases of demand in times of depression. These include steel, cement, lumber, machinery, and many others. *In times of prosperity nearly half of all our production is concentrated in such industries.*[66] [Italics added.]

Ezekiel also cites figures by Dr. Gardiner C. Means based "upon records of how each industry has expanded during boom periods in the past." [67] He tells us: "In general we have expanded capital goods *too fast* during such periods." [68] The figures show expansion rates varying from 6 per cent for meat, to 54 per cent for copper, and 34 for iron and steel.[69]

Yet, while Dr. Ezekiel recognizes the existence of asymmetries, there are passages in which he does not appear fully to realize their import. For in continuing he says:

> In a properly balanced expansion there would be such a balance between capital goods and consumer goods as could be maintained without subsequent sharp contractions in capital goods production. Such a planned expansion might therefore show *somewhat larger* increase in food, clothing . . . and other products for consumers' use, and *somewhat smaller* increase in capital goods than is shown in the data above.[70] [Italics added.]

What Dr. Ezekiel does not seem to have fully grasped is that a "rate" of expansion of 50 per cent or even one "somewhat" smaller is very likely to result in a degree of activity *impossible* to maintain. Although "nearly half of all our production" is concentrated in the heavy industries, in times of prosperity, it by no means follows that they can or should maintain that degree of activity *all* the time. Dr. Ezekiel seems to feel that the basic difficulty is a matter of business policy. "Businessmen *let* depreciation reserves pile up unspent." But businessmen may not have an entirely free choice. Replacement concentration, the acceleration principle, technical

[66] Ezekiel, p. 93. [67] Ezekiel, p. 86. [68] Ezekiel, p. 86. [69] Ezekiel, pp. 81 and 82. [70] Ezekiel, p. 82.

change, may all, at times, be independent of business policy to a considerable degree.

Dr. Ezekiel tells us that "industrial expansion would aim to even out . . . production of new capital as much as possible. Instead of putting in a great deal of equipment some years, and very little in others, the programs would aim at installing each year about the *average* amount of new equipment needed to care for future growth and expansion" (italics added).[71] The enormous difficulties inherent in such an attempted smoothing out of capital goods demand have already been summarized in Chapter II, and there is no reason to repeat them here. Another point, mentioned earlier, is the existence of a pattern of consumers' choice. Though one may agree with Ezekiel that "many people do need a lot more milk and fruit and meat than they can afford today," [72] it is not at all clear that if they were given more money they actually would buy more food rather than more luxuries. The problem is further complicated by the fact that as income changes the pattern of wants changes, with consequent maladjustments in the program of planned expansion.[73]

Criticisms of this sort are relatively obvious and still center around the existence of asymmetry in the real structure of production; we must therefore pass on to a discussion of another set of problems — those connected with changes in the aggregate propensity to consume. In discussing cyclical stabilization the question of changing the propensity to consume was put to one side because it was not felt that a transfer of factors to the consumers' goods industries was desirable. In secular stagnation, however, a transfer is precisely what is needed, and consequently the propensity to consume becomes important. By a drastically literal application of Say's law, Dr. Ezekiel feels that, if *all* industries were to go ahead and produce, many of our troubles would be avoided. In *Jobs for All*

[71] Ezekiel, p. 94.

[72] Ezekiel, p. 22.

[73] Compare the discussion of Allyn Young in A. H. Hansen, *Business Cycle Theory* (1927), p. 117: "In a period of expansion the demand for luxuries increases faster than the demand for necessaries."

he admits the existence of minor asymmetries, but he appears, at times, to overlook one of the most important relationships of all, namely, that between saving and consumption.[74]

It should be stressed that the contracts which the government draws up with producers to buy their surpluses will be in terms of *money*. If the expansion takes place in such a way as to cause a great lowering of prices in a substantial part of industry, it will not be true that:

> The nation in turn, will incur little *risk* in having the government underwrite the expansion in production, for the program will be so drawn and fitted together that the increase in production in each industry will just about match the increase in demand for the products of that industry.[75] [Italics added.]

Even if the programs were well-matched technically and in real terms but failed to correspond to the propensity to consume, a very considerable *money* loss might ensue.

Keynes' "normal psychological law" that "when aggregate real income is increased, aggregate consumption is increased, but not by so much as income" has been much attacked; yet, even if we do not accept it as a universal statement, it certainly represents a possible and a probable state of affairs.[76] If now we have Dr. Ezekiel's planned expansion, under conditions when the Keynesian law applies as to the marginal propensity to consume, consumption will probably fail to keep pace with expansion of consumers' goods output. It is likely that if prices are sufficiently reduced the total output would be sold, but the government would be likely to suffer a severe money loss.

We might also have a condition in which the average, as well as the marginal, propensity to consume was too low, and hence the money expended on consumers' goods was less than the money value of total consumption goods output. In con-

[74] But Ezekiel does point out the physical distortion of the real structure of production in favor of the investment industries.

[75] Ezekiel, p. 17.

[76] J. M. Keynes, *The General Theory of Employment, Interest and Money* (1936), p. 27.

ditions of full employment and adequate investment outlets this would merely mean that there was need for a deflation of the consumers' goods industries. But, if adequate investment opportunities are not forthcoming, the state, to ensure full employment under Ezekiel's plan, must either buy up surpluses and hold them indefinitely, while maintaining prices, or else it must dispose of surpluses through lower prices, while compensating producers for the losses they would have sustained. In either event money losses would be suffered. Perhaps the state might meet the losses for a while, in the hope of an eventual alteration in the propensity to consume, but the policy would have difficulties as a permanent measure.[77]

Normally, in a condition of inadequate investment opportunity, the money and real income of society would fall until there was no longer any net saving, but this result can be avoided in one of two ways: (1) the state could meet the deficits by increasing the money supply; (2) preferential subsidies to the consumers' goods industries might, theoretically, be combined with taxes on incomes which would otherwise be hoarded in such a way that the one would finance the other.

If the first policy were followed, money income would not shrink, and the entire output of consumers' goods would be sold, but hoards would constantly increase.[78] Either the national debt and the currency supply, or the currency supply alone, would also grow continually. In the second policy the national debt and currency supply need not increase, but the political and administrative difficulties might be more serious.

To summarize, therefore, as to subsidies and negative rates of interest, we can say the following: Asymmetry of the real structure of production makes unworkable an over-all, non-preferential subsidy or guaranty of output. *Preferential* sub-

[77] Such a change might very well be forthcoming once the population had become used to the new high level of income, especially if no serious decline in business activity occurred.

[78] *Full employment*, however, would only be attained if the money payments were planned in such a way as to *raise* aggregate consumption. Merely maintaining consumption would prevent deflation but would not bring about full employment

sidies or negative interest rates might be used to advantage in conjunction with a more general program of public works, unemployment insurance, etc., as a means of cyclical stabilization. Regarding difficulties posed by the propensity to consume — especially in the case of secular stagnation — these require an examination of (1) the injection of purchasing power or (2) the taxation of idle hoards and hoarding. Problems of this sort will be discussed independently in the next two chapters. For the present we may conclude that, while the subsidy and negative interest rate proposals contain valuable suggestions as to one possible line of attack, they are, *by themselves*, insufficient to carry the entire burden of a stabilization and full employment program.

CHAPTER VI

VELOCITY STIMULATORS

FROM a purely monetary approach, proposals to increase "velocity," especially proposals to tax hoarding and idle hoards, present one of the most promising lines of attack upon the problem of stabilization. Such diverse authorities as Professor Spahr and Professor Fisher indicate that from 1929 to 1933 "velocity" declined between three and four times as much as the quantity of deposit currency.[1] The relative stagnation of the year 1939 was also reflected in an extremely low figure for "velocity" in that year.[2] Clearly there was a hitch in the money stream, and what would seem more reasonable than to force it to move onward at an even rate?

Yet the monetary approach runs great danger of oversimplifying the problem. "Velocity," like "inflation," is a slippery word used in a number of different senses, and it is a frequent source of confusion. Before discussing specific plans, therefore, it seems wise to present certain broad and very elementary considerations as to what can be meant by the term "velocity."[3]

1. SOME NOTES ON THE MEANING OF VELOCITY

In discussing the matter of velocity it is important to remember that it is nearly always an average. For instance, to determine the "income" velocity in a given period, we may divide the national money income by the total "money" stock.[4] Like all averages, however, the resulting figure may be highly

[1] Irving Fisher, *Booms and Depressions* (1932), p. 140; W. E. Spahr, *The Fallacies of Professor Irving Fisher's 100 Per Cent Money Proposal* (1938), p. 28.

[2] *Federal Reserve Bulletin*, January 1940, p. 7.

[3] For detailed discussion see, for example, A. W. Marget, *The Theory of Prices* (1938), vol. I.

[4] Marget, *Prices*, p. 375.

misleading. Suppose the national money income is 120 and the "money" stock is 10; then "income velocity" would be 12. Suppose, however, that only 4 of that stock had been in actual use during the period, the rest being hoarded. Then the income velocity of money in actual circulation would be 30 and not 10. The average was not at all typical. Being an average, velocity is usually an *ex pos* concept, a *result*, and may tell us very little as to the causal factors actually at work.[5] It is not sufficient to say that velocity is low and that money is not "turning over." One must rather ask *why* it is not turning over. "Velocity" *per se* is a symptom rather than a cause.

Most advocates of velocity stimulation plans are unduly impressed with the evil effects of holding a stock of money. Dahlberg, for example, writes that "economic law decrees that money income must — for economic equilibrium — be disbursed as rapidly as it is received."[6] But this statement is not always correct. If hoards have been accumulated in the past, dishoarding may offset hoarding from *current* money income, and as long as there is no *net* hoarding no disturbance need result. Furthermore the mere holding of money hoards — as distinguished from *net* hoarding — need cause no trouble whatever if prices have been reduced to match the diminished supply of effective money.[7] A tax on hoards, if adjustment to their accumulation had already taken place, might actually cause an inflation by forcing a sudden disbursement of money which had long ago ceased to have any direct effect upon prices. Finally, in the case of net hoarding, if current money income is augmented by the state so as to offset deflationary effects, then

[5] J. M. Keynes, in the *General Theory of Employment, Interest and Money* (1936), refers to "income velocity" as "in itself, merely a name which explains nothing" (p 299). To the writer it would seem that this criticism applies to "velocities" of money generally By breaking down the total of exchanges into more and more compartments we may be able to observe the working of more and more forces, but the term is always likely to be a catch-all. But see Marget, *Prices*, pp. 98–100, and compare his discussion of Haberler's criticism of Schumpeter on p. 91.

[6] Arthur Dahlberg, "Recovery Plans," *Monograph No. 25, Temporary National Economic Committee*, 76th Congress, 3rd Session (1940), p. 65.

[7] Abstracting, of course, from the deflationary spiral *per se*

no cumulative disturbance need result.[8] The money income remaining after net hoarding may be sufficient to purchase the production of society. Hoards increase, to be sure, but until they are released no trouble need ensue.

Mr. Dahlberg's reference to the necessity of disbursing money "as rapidly as it is received" might also be interpreted to suggest another mistake frequently made, namely, the confusion between hoarding and dishoarding, on the one hand, and changes in the customary velocity of money in circulation, on the other. If society has become accustomed to a given customary rate of turnover — even a very slow one — this need cause no trouble. The customary rate at which cash and active deposits change hands is normally determined, in Robertson's phrase, by "habits regarding the disbursement of income," and, save in condition of true inflation, these are apt to alter very slowly.[9] We might think of the matter as follows: The current of a stream may move at the rate of five miles per hour. But the stream may have more water in it at one time than at another. The stream may be conceived of as the stream of active money in circulation. It moves at a rate determined by "habits regarding the disbursement of income." But hoarding or dishoarding may raise or lower the amount of water, i.e., funds, in the stream. Naturally the two are closely interconnected, but if we fail to distinguish a change in the speed of the current (habits, institutions, and customs relating to payment) from an increase in the amount of water (hoarding and dishoarding), we shall always be confused.[10]

[8] Compare D H Robertson, "Saving and Hoarding," *Economic Journal*, vol XLIII (September 1933)

[9] D H Robertson, "Note on the Theory of Money," *Economica*, 41 (August 1933), 244

[10] The following passages from Professor Irving Fisher's *100 Per Cent Money* (1935), first edition, p 91, might perhaps seem to show somewhat this confusion.

"For instance after a period of over-indebtedness and speculation, there might be a stampede of distress selling and therefore *increased hoarding*: that is there might be a slowing of velocity . ."

"The effect of this on the price level, however, would be much smaller than if the volume of circulation were also affected. . . ."

It is true, as Professor Marget points out, that it is difficult to draw a line between the withdrawal of funds from active circulation and a change in "habits." The borders between different spheres or markets may not be easily outlined.[11] Since the matter is one of habit, it will be hard to decide when a hoard is a hoard, and reference must be had to some customary rate of turnover. As Professor Haberler says, "To make the concept precise, it must be specified how long a balance is to remain idle, so that it should be regarded as falling under the category of 'idle balances.' Overnight all balances are idle, and over a sufficiently long period all may have been active in the sense of having turned over."[12] Yet, despite the unavoidable difficulty of deciding precisely what is meant by a "hoard," it is hoarding and dishoarding that is the unstabilizing factor rather than the customary rate of turnover. Current income need not be spent as quickly as it is received but only after the customary interval.

It is frequently thought, on the other hand, that if we could *force* an increase in this customary rate of turnover by changing habits regarding the disbursement of income, this would have favorable repercussion on consumption and investment.[13]

"Finally, the latest and best studies on velocity show that in *normal times it varies little*; and, even in booms and depressions, its variations are much smaller than usually supposed, except for speculative transactions" (italics added).

It is submitted that in the third paragraph Professor Fisher is mainly referring to the customary rate of turnover. In the first paragraph he is referring to hoarding and dishoarding. The two are quite different things. As to the relative importance of M and V, see Professor Spahr's calculations in his *Fallacies of Professor Irving Fisher's 100 Per Cent Money Proposal*, p. 28, and those of Professor Fisher in *Booms and Depressions*, p. 226.

[11] Marget, *ibid*, p. 460· "At any given moment, by far the greater portion of the so-called "circulating" part of the money is, in the homely phrase of Mr. Robertson, 'money sitting'; only a very small part is really 'money on the wing.' Once this is recognized, it becomes obvious that the distinction between money 'in circulation' and money 'out of circulation' is an extremely tenuous one."

[12] Gottfried Haberler, *Prosperity and Depression* (1939), revised edition, p. 202.

[13] As D. H. Robertson demonstrates in his "Note on the Theory of Money,"

It is submitted, however, that a mere change in habits regarding disbursement will not, *in and of itself*, change consumption or investment. Suppose a man is paid $120 on the first of the month. Suppose he buys everything from his employer and during the month he gradually hands the $120 back to his employer in payment for goods. Velocity will be 120/120 or 1. Suppose now his salary is paid in twelve installments of $10 each. He might get the same $10 and spend it 12 times over in the month. The velocity then, under the average concept, would still be 120/120 or 1. But the velocity of *money in circulation* would have increased to 12. The owner meanwhile has $110 to dispose of, but *spending* in both cases, barring the $110 which we will consider later, is exactly the same. If now the owner takes his $110, *set free*, and spends it, there may be an increase in investment or consumption. In this way a change in habits of disbursement *may* allow an increase in investment or consumption. But whether this increase will take effect will depend on the disposition of the employer, not on the change in "velocity" of money in circulation. The mere change in habits of disbursement need make no change in actual consumption, or in velocity defined with reference to the total stock. A change in the velocity of money in circulation is not the same thing as a change in the propensity to consume.

One final point may be made, and that is that even if velocity and money spent out of a given money income increase, real consumption need not increase. The increased spending may merely waste itself in higher prices, and production may be unaffected. Consumption does not automatically satisfy itself, and if new investment is not forthcoming we may simply have an increased flow of money bidding for the same flow of goods. For all these reasons, in order to evaluate a plan, we must know what its effects will be on investment and production, on the propensity to consume, and on confidence in the currency.

---

a change in the "integration of industry" unaccompanied by a change in "habits regarding disbursement" will not affect consumption except in so far as by setting balances free it makes possible new consumption or investment.

The mere mechanical fact that money is turning over "faster" is not important in itself.

2. THE TAXATION OF HOARDING AND "IDLE" HOARDS

In this section a definition of hoarding will be used which has been suggested by Professor Haberler in his excellent discussion of the many terminological difficulties of recent literature. "Hoarding," for our purposes, will take place if, "with stable habits of payment," some money is "withheld from circulation." [14] It is also necessary to distinguish between "hoarding" and "net" hoarding. "Net" hoarding will be defined as the net putting aside of funds from current income and not simply the holding of funds already put aside in a previous period.[15] These latter should be referred to as "hoards." Since a man may sometimes be thought of as "hoarding" when he is simply holding hoards rather than accumulating them, less ambiguous terms than "hoarding" are needed and we will speak of "net" hoarding and hoards.

The velocity stimulators obviously have much in common with schemes to redistribute wealth. There is, however, one considerable difference. Many advocates of velocity stimulation take the *prima facie* reasonable view that there is no need to deprive an individual of any income or hoards which he can be persuaded either to consume or to put to productive uses. As long, they say, as money is being "kept in circulation," there is no reason to interfere. Unlike the "welfare" economists, they do not favor redistribution for its own sake, but emphasize the taxation not of wealth but of *idle* wealth. Their objection is not to inequality, or to saving, but to hoarding. The basic

[14] Haberler, *Prosperity*, p. 203. Mr. Dahlberg has a different conception, apparently, but he does not define it to any extent. Compare the following from his discussion of "Taxing Money into Circulation": "In fact, even the term hoarding (along with D. H. Robertson's term "dis-hoarding") was, until recently, used to mean only variations in the size of one's cash holdings, not — as is frequently now the case — a decreased rate of use of money" (Dahlberg, "Recovery Plans," p. 65, note).

[15] "Net" hoarding could be broken down further into "net" hoarding for the individual, and "net" hoarding for society. The context will make clear, in this chapter, in which sense it is being used.

idea underlying most of the proposals in the group is that emphasized by Keynes in his discussion of Gesell. Give money "carrying cost just like other stocks of barren goods"; then people will stop net hoarding, or retaining hoards, and dishoard.[16]

Yet, although there are outstanding differences between the velocity stimulators and plans for the redistribution of wealth, many of the considerations which apply to the one also apply to the other, and to avoid repetition they will be summarized briefly at this point. For the same reasons given in Chapter III concerning the redistribution of wealth, the velocity stimulators do not appear very sound as a weapon of cycle policy. They overlook the physical discontinuities which may underlie the cycle.[17] As with redistribution, however, a much stronger argument can be presented in the case of secular stagnation. But here, too, the possibility of unfavorable repercussions on the inducement to invest must be kept in mind.

Coming to specific proposals, it is seldom that one finds plans which advocate any one kind of tax, stamp, or other proposal alone. Individual measures almost never appear by themselves but rather in a variety of combinations. For purposes of exposition, however, it will be helpful to consider the various types of proposals substantially alone, and we will begin with a tax not on "hoards" but on "net" hoarding. As has already been indicated by our definitions, a tax on net hoarding would not directly affect hoards previously accumulated but would attempt to absorb that amount of *current* income which would otherwise be hoarded and "run to waste." We have had occasion previously, in connection with Dr. Ezekiel's plan, to suggest that a tax on hoarding plus a subsidy to consumers, or subsidy to the consumption goods industries, might be used to change the aggregate propensity to consume. However, it must be remembered that in a slump or stagnation there is no guarantee that the expenditure of even the entire *current* money income of society would be enough to purchase the potential

[16] Keynes, *General Theory*, p. 357.

[17] See the discussion in Chapter II, § 3, this study, and also Chapter III, § 1.

output of consumer's goods at the existing, or at least at the desired, price level. Yet while this is true, if the tax forced some increase in consumption, even if not enough to immediately absorb all surplus stocks or capacity, this increase might set in motion a cumulative expansion — provided no other adverse reactions occur.

One of the nearest approaches to a tax on net hoarding alone, without the complicating features of stamped money, etc., is found in Senator Sheridan Downey's *Pensions or Penury*.[18] Besides the Townsend Plan, to be discussed in section 4 of this chapter, Downey favors "a surtax upon all unearned incomes which their owners are unable to invest in capital formation." [19] "A man would not be deprived of a cent of his earned income and no incomes would be affected that could be utilized in capital development; but beyond that the taxpayer must be forced to spend his unearned income or have it taxed drastically." [20] These quotations bring out a special difficulty which a tax on net hoarding, as distinguished from a tax on hoards, will be bound to encounter. The difficulty lies in the probable impossibility of telling accurately what income will be hoarded and what will not. If at the end of a year, or other period, we look back and see that an individual has neither spent nor invested his earnings within a reasonable time, we may then impose a tax upon his accumulated funds with a certain degree of confidence that we are really taxing a hoard. But if we look ahead many problems arise.

Downey at first implies that the individual will have the choice of spending or investing on the one hand, or paying the tax on the other. Later on, however, in his book we find a rather different proposal:

[18] Sheridan Downey, *Pensions or Penury* (1939). Senator Downey was elected United States Senator from California on the "Ham and Eggs," "Thirty Dollars Every Thursday" plan. For accounts of the plan see "Thirty-Thursday Plan," *Tax Digest*, vol. XVII, no. 9, published by the California Taxpayers' Association, Inc ; and M. G. Myers, *Monetary Proposals for Social Reform* (1940), p. 156.

[19] Downey, *Pensions*, p. 14.

[20] Downey, *Pensions*, p. 15.

The first step might be the creation of a monetary commission, composed not only of governmental representatives, but also of businessmen and labor leaders who could act as mathematicians and scientists, not as antagonists and politicians. This commission would determine the investment needs of the nation, the amount of savings that might be absorbed, and the necessary point at which savings should be eliminated in order to prevent their stagnation. But even when the commission had decided where the surtax should be applied against unearned incomes, it would not be authorized to confiscate the excess amount of such incomes but only to compel their expenditure for *consumer's goods*.[21] [Italics added.]

It would appear that Downey advocates the setting up of a commission which will determine *ex ante* the amount of saving that can be absorbed during the following year. Having decided how much saving and investment should take place it will then require the recipients of "unearned" income to spend the "excess" amount on consumer's goods. They would not be allowed to invest but only to spend, subject to certain qualifications which will be given shortly.

Downey's plan has certain obvious weaknesses which will be only briefly mentioned. The difficulty of determining in advance in a free economy what the "investment needs of the nation" are going to be and how much saving will really result in "capital formation" is obvious.[22] Further, the tax is only to be imposed on the recipients of "unearned" income. But it is clear that the social consequences of hoarding are just as serious whether it is done from "earned" or from "unearned" income. Hoarding from "unearned" income might be only a fraction of total hoarding. It is difficult to guess at the proportion because Downey nowhere defines what he means by an "earned" or an "unearned" income.

Let us suppose the most favorable case for such a plan. Suppose that we find that only the recipients of "unearned" income hoard. Suppose further that the commission determines that during the succeeding year one half of the aggregate "unearned" income can be profitably invested while the other half

[21] Downey, *Pensions*, p. 104.

[22] Downey does not define "capital formation."

should be spent on consumer's goods. Will they then say to each individual recipient of "unearned" income, "Each of you must spend half your income and invest the other half"? [23] Suppose Mr. Smith wants to invest all his income in a new factory and Mr. Jones wishes to spend all of his. What is to be done?

Under the Downey plan Mr. Smith cannot build his factory individually, but

> Any entrepreneur or any group of men operating under a corporation [could] develop a business to any desired magnitude through accumulating its earnings into surplus accounts, so long as those accumulations . . . were translated into capital formation.[24]

Senator Downey's commission could have its estimates upset in two ways. Either all the recipients of "unearned" income might decide to form corporations and invest, in which case, if the estimates of "investment needs" by the commission had been accurate, we might have a condition of "overinvestment" of Hobson's type — an actual building of unnecessary factories and equipment — or else all the recipients might decide to spend, with the result that consumer's demand would be excessive. Unemployment might come to an end, to be sure, but the community would not have as large a stock of real capital as might be desired. Downey, unlike Keynes, appears at times to overlook the fact that the propensity to consume can be excessive.

It would seem necessary to conclude that Downey's plan would probably have to be applied simply as a steeply progressive income tax administered on the rough assumption that the rich save and the poor do not. His commission would first have to try to determine what the investment needs of the nation would be. They would then have to agree on a tax which would affect the propensity to consume in just the right amount. The chances of carrying through calculations of this sort with accuracy do not appear overly good.

Let us assume, however, that the plan is so administered that

[23] But Downey in some places specifically gives the taxpayer the right to spend all his income.

[24] Downey, *Pensions*, p. 104.

it does increase the monetary demand for goods. We are then brought back to the problem of possible repercussions on the marginal efficiency of capital. We must not forget the point made in the chapter on redistribution that, as Keynes points out, the effective yield of the marginal efficiency of capital is to be determined *net* after taxes and risk allowance.[25] It might be that an increase in monetary demand would only raise the price of consumer's goods output without greatly increasing its quantity, since the gain in the marginal efficiency of capital in the consumer's goods industries would be overbalanced by the increase in taxes and risk.

It will be seen that, in view of the many difficulties thus far advanced, a tax on hoards is more desirable than a tax on hoarding. There is not as serious a problem in deciding who is to be taxed. Since the tax is imposed on accumulations rather than on income, it will not affect so directly the marginal efficiency of capital.[26] The plan might simply provide that all balances accumulated at the end of the year in excess of a certain figure would be liable to tax. One plan of this sort is given in the notes.[27]

[25] Keynes, *General Theory*, p. 309.

[26] An income tax might be administered to operate retroactively as a tax on hoards.

[27] Mr. G. R. Walker of Boston, Massachusetts, has suggested the following plan:

"1. The average monthly balances held by banks as demand deposits for the account of individuals shall be taxed, after deducting an exemption of $5,000 00, at a rate to be determined from time to time by the Board of Governors of the Federal Reserve System, within limits specified by Congress. . . . The tax shall be collected by the banks and transmitted to the Treasury. The banks shall be paid by the government for this service.

"2. All individuals shall report their cash on hand at the end of each year if the amount exceeds $5,000. The sum reported, less an exemption of $5,000, shall be taxed at a rate to be determined by the Board of Governors of the Federal Reserve System. . . . From the tax so assessed may be deducted the taxes paid by the individual in that year on his bank balances. Coin and currency to the value of $300 may be disregarded in reporting cash on hand.

(The report of cash on hand could be incorporated in the forms for the individual income tax, and the tax collected by the Bureau of Internal Revenue.)

Although the marginal efficiency of capital would not be so directly affected in the case of a tax on hoards as it might be with a tax on hoarding, it must not be supposed that all social friction and adverse repercussions on "confidence" will be avoided. It would appear that proposals both for the taxation of hoards and of hoarding are likely to cause considerable disturbance. While we might be able to gauge accurately the amount of saving desirable from a *social* point of view, it must not be forgotten that the individual, as far as *he* is concerned, may have perfectly valid reasons for saving in excess of that amount. He may wish to raise himself in the social scale, he

---

"Cash shall mean coin and currency of the United States, foreign coin and currency at cost, balances with brokers, agents, or any other, certified checks, letters of credit, or any other instrument representing the ownership of cash whether on hand or in transit, all deposits in foreign banks, and demand deposits in domestic banks.

"3. Trusts, partnerships, and corporations (except banks) shall report their cash on hand at the end of the year. After deducting reserves for taxes, reserves held for expenditures to be charged to capital account under contracts in force, *uninvested sinking funds*, and an exemption of $25,000, that portion of cash on hand at the end of the year which is in excess of 10 per cent of total assets less depreciation, or, at the option of the taxpayer, in excess of 10 per cent of net sales made during the year, shall be taxed at the following rates: (graduated, say, from 5 to 25 per cent).

(Most corporations now report their cash on hand in balance sheets included in income tax returns. This tax has a precedent in the undistributed earnings tax, but is not open to the same objections.)

"4. The Board of Governors of the Federal Reserve System shall have the power to fix the minimum rate of interest which banks may pay on time deposits as well as the maximum rate.

(This power may be used to discourage the transfer of demand deposits to time deposits, for the banks will not accept time deposits if they have to pay an unprofitable rate. A more direct control may be given if it proves necessary.)

"5. There shall be an annual issue of currency, the issue for one year being readily distinguishable from the issues of other years The currency issued for one year shall be legal tender only for that year, but shall be exchangeable at all banks at face value for the ensuing year's issue during the month of January, and at a discount of 10 per cent during the next 12 months, and at a discount which increases by 10 per cent of face value each year thereafter."

For other plans, see Arthur Dahlberg, *When Capital Goes On Strike* (1938); and "Recovery Plans" by the same author.

may desire to accumulate a back-log of liquid funds or quick assets to enable him to venture other portions of his capital in more risky enterprises, or he may wish to provide for old age, etc., etc. The taxation of hoards and hoarding is likely, therefore, to appear unreasonable to the individual and may cause actual hardship in individual cases.

For this reason it is conceivable that a moderate tax on hoards or hoarding, which was at the same time high enough really to be felt, might, under some circumstances, lower rather than raise the propensity to consume. That is to say that people, in order to accumulate the funds which they desire, perhaps for valid personal reasons, might save a greater proportion of their income after the tax was imposed than before. It is possible that the increased propensity to save of individuals might be large enough to offset the effects of a consumptive expenditure of the proceeds of the tax by the government. However, if the tax were made sufficiently heavy, hoarding could probably be stopped, but repercussions on "confidence" might be serious. The writer wonders whether a tax large enough to force dishoarding might not cause so much friction, in individual cases, as to be politically unworkable.

However, it is possible to overstress the confidence argument. Protagonists of a taxation of hoards might, with some justice, object that any new plan is likely to cause an initial crisis. Once the initial crisis is passed, they might say, the increased circulation of deposits would have beneficial results on investment and real consumption. The whole question, therefore, is whether or not a tax on hoards will really, in the long run, stimulate consumption and investment.

No dogmatic universal answer can be given. Mr. Keynes, however, poses one very serious objection to the whole idea of forcing hoards into circulation. He says, in criticizing Gesell:

> He was unaware that money was not unique in having a liquidity-premium attached to it, but differed only in degree from other articles. . . . Thus if currency notes were to be deprived of their liquidity-premium by the stamping system, a long series of substi-

tutes would step into their shoes — bank money, debts at call, foreign money, jewelry and the precious metals generally, and so forth.[28]

In the first instance, therefore, according to Keynes, the taxation of idle hoards might cause merely an increased demand for gold, jewels, and even land. The prices of these articles might be bid up and a certain proportion of the balances released might be permanently absorbed into dealing in them. But some of the funds released might find their way into consumption. The *sellers* of gold, jewels, etc., would not be anxious to hoard because of the tax and would wish to spend or invest. It is hard to tell how much real increase in consumption and productive investment would actually occur.

It might be that, with the propensity to consume of the community unchanged or even decreased, resources might only be put to work producing the various articles in which hoarding could now occur. A stimulus to the mining of gems, etc., etc., might occur. Such a stimulus might end unemployment, but, as has been demonstrated in Nazi Germany, increasing employment and increasing the standard of living are not necessarily the same thing. The writer recalls reading, during the 1929 crash, of people who hoarded pepper.

Another possible absorption of the released hoards could be in the form of generally higher prices. If the initial disturbance increased risk sufficiently to negative the temporary increase in the marginal efficiency of capital resulting from increased monetary demand, then prices might be raised all along the line without a great increase in investment and real consumption. Once costs overtook selling prices, the initial stimulus would disappear. Hoarders would retain commodity hoards. A larger volume of money would be required to carry on business transactions, but little real increase in consumption might have ensued. In this regard we must not overlook one basic analytical weakness of many plans to tax hoards, namely, that no effort is made to relate the possible increase in monetary demand to the flow of goods and services. A release of hoards

[28] Keynes, *General Theory*, p. 357.

all at once might cause an inflationary price rise. On the other hand the stimulus might be insufficient to affect conditions greatly.

Once the hoards have been forced into circulation and once the system has been adapted to the change in velocity, the scheme may have exhausted its power of stimulation. Professor Irving Fisher suggests, in regard to stamped money, that the tax be raised or lowered from time to time to stimulate "V." [29] Fisher's suggestion probably means that businessmen and the public generally would have to revise, each time, their estimates as to the normal balances which they could afford to keep against certain types of outlay. Speculation and disorganization might possibly ensue. If hoards are forced into circulation but habits of payment remain unchanged and if no increase in real consumption ensues, the Fisher plan would then be introduced as an attempt to speed up habits of payment and hence release part of the normal balances for other work. But it is difficult to see how the resulting stimulus, if any, could be very accurately predicted or whether it would be any more successful than the first attempt.

Difficulties of enforcement are obvious especially in the case of cash holdings. Would we send out detectives to slit mattresses and search chimneys? The difficulty as to cash, however, might be taken care of by the suggestion of issuing a new kind of money each year.[30] Older issues would depreciate at the rate of 10 per cent per month after January the first, and in this way all cash hoards would have to be turned in for redemption at least once each year — at which time they could be taxed.

The role of foreign money must not be neglected. People might try to hoard pounds or francs or Canadian dollars, and the repercussions on the exchange rate, and business generally, of large-scale capital movements to avoid the tax might be most serious. Finally, we have already pointed out that the idea is

[29] Fisher, *Booms and Depressions*, pp 226 *et seq*

[30] See Walker's plan, *supra*, note 27. and Dahlberg, "Recovery Plans," pp. 68 *et seq*.

highly questionable as a cyclical remedy; yet if this is so, it may be a very difficult matter to fix the tax high enough to maintain consumption and offset secular stagnation, yet not so high as to cause cyclical maladjustments.

3. STAMPED MONEY

It is almost impossible to separate a discussion of the taxation of idle hoards or hoarding from a discussion of the allied proposal of stamped money, and there are several plans which combine features taken from both in nearly equal parts. A good explanation of stamped money will be found in Appendix VII of Irving Fisher's *Booms and Depressions* and in the work of its originator, *The Natural Economic Order*, by Silvio Gesell.[31] Mr. Keynes has given it a highly qualified good word in Chapter 23 of the *General Theory*. Irving Fisher explains it as follows:

> Let the government print billions of special dollar bills, the reverse side to be divided into 12 spaces, each the size of a one-cent postage stamp and each space dated; the dates to represent the first day of 12 consecutive months. . . . Each dollar bill would be legal tender provided it had the required one-cent stamps on it up to that month at which it is tendered. No one could refuse it because it would be legal tender. . . . The plan would operate as a stamp tax on hoarding. . . . Involuntary unemployment would disappear with recovery.[32]

Mr. Keynes has said that "the idea behind stamped money is sound." However, he states that the plan is not feasible "in the form in which he (Gesell) proposed it." [33] Most of the arguments for and against the scheme are the same as those given in the previous section on hoards and hoarding and they will not be repeated.

A special weakness of the stamped money proposal, however, is the failure to tax bank deposits. This weakness has been

[31] Silvio Gesell, *The Natural Economic Order* (1934), Pye translation. See also the discussion in Myers, *Monetary Proposals*, Chap. II.

[32] Fisher, *Booms and Depressions*, pp. 226 *et seq.*

[33] Keynes, *General Theory*, p 357.

recognized by Mr. Dahlberg, who suggests, in his book, *When Capital Goes on Strike*, a tax on both currency and deposits. Instead of the stamped method, however, Dahlberg advocated the issuance of a "calendar" currency on which would be printed the changing value of the notes, values which would be synchronized with the declining value of the taxed deposit dollars. The nuisance of handling a currency of changing value has later led him to advocate merely the issuance of distinctively marked currency and coins which would be redeemed by the government at a discount should the quantity of currency become excessive.[34] Taxes would be imposed on bank deposits, and, in the event of an excessive transfer from bank deposits to currency, the currency would be devalued in order to make it equally unattractive to those who wished to hoard. Dahlberg's scheme would not cause quite as much friction as stamped money *per se* and takes care of bank deposits, but it remains subject to the criticism already made in the preceding section.

Both Dahlberg's "calendar" currency and Gesell's stamped money, on the other hand, have one important advantage considered merely as means of purchasing power injection. As will be seen in the next chapter, a considerable problem in injecting purchasing power is how to get back the money injected should you wish to call it in. Stamped money and calendar currency, however, could be administered so as to kill themselves off when no longer needed. That is to say that calendar currency would automatically depreciate, while the revenue from the sale of stamps, in the case of stamped money, might be sufficient to abstract from the circulating medium, over a period of time, as much as had originally been injected.[35] Yet the losses under calendar currency and the tax under stamped money would be somewhat capriciously distributed over society. Moreover, the losses and taxes are likely to bear proportionately more heavily on the poorer people who are

[34] Dahlberg, "Recovery Plans," pp. 68 *et seq.*

[35] This would mean that the government, or the credit authority as a part of its credit policy, would hoard cash.

relatively larger users of cash. Problems of this sort will be discussed in the next chapter on "Purchasing Power Injection."

4. PENSIONS AND COMPULSORY SPENDING — THE TOWNSEND PLAN

The Townsend Plan has already been mentioned in connection with Senator Sheridan Downey's proposals, and we must now give it a more detailed examination.[36] It is rather difficult to classify the Townsend Plan. It has elements which suggest a redistribution of wealth scheme combined with other elements which suggest a pure velocity stimulator. Lately the redistribution feature has become more apparent and the "plan" seems to be developing in that direction. One should realize, indeed, that the Townsend Plan is not so much a single well-integrated recovery proposal as a political movement whose rising importance reflects the shift in the age distribution of the American population. As the movement has developed, changes have been made in the specific measures suggested, and it is not always easy to tell just what was being advocated at any one point of time.[37] All the schemes have provided for

[36] Material concerning the Townsend Plan is distributed by Townsend Plan Headquarters, 450 E. Ohio Street, Chicago, Illinois. The latest information the writer has obtained is derived from the "New Reference Book" compiled under the supervision of Dr Townsend, with a statistical appendix by Ivan Tarnowsky, published 1941. See also the O'Connor Bill H R. 1036, introduced in the present Congress January 3, 1941. For other discussion see Dahlberg, "Recovery Plans," pp. 44 *et seq* ; Tax Policy League, *The Townsend Plan Analyzed* (1936); Myers, *Monetary Proposals*, p 155, University of Chicago Roundtable, "The Economic Meaning of the Townsend Plan," *Public Policy Pamphlet No 20* (1936)

[37] As an example of the variations the plan has undergone compare the following from the *Townsend Weekly*, December 30, 1935· "$200 per month stands There has never been, nor will be, any compromise on the $200 per month provision in the Townsend demands," with the following quotation from the "New Reference Book" (1941). "The Townsend Plan does not provide for $200 a month pensions. This widely prevalent notion . . . is wholly and completely false. . . Since the bills pending before Congress for several years set forth that the *maximum* pension to be paid was not to exceed $200 per month, critics hastened to twist this simple provision into an assertion that the plan called for $200 a month." But the McGroarty bill (H. R. 3977, January 16, 1935) did provide for a mandatory payment of $200 a month

Another provision which has been changed is as to the requirements for

pensions to the aged, and all of them have required the pensioners to spend their money within one month, but the various proposals for raising the money, and the size of the pension to be paid, have varied considerably.

Roughly, the plan has passed through three stages. In the first stage a definite pension of $200 a month was promised to all those over sixty who would "discontinue and refrain from all gainful competitive pursuits or salaried positions of any kind." [38] To raise the money a 2 per cent transactions tax, payable monthly, was to be levied "on the gross dollar value of each business, commercial, and/or financial transaction done within the United States." [39] In the second stage, doubts as to the ability of the tax to raise the required amount led the proponents of the plan to set $200 a month as the *maximum* pension. At the present time it is estimated by the adherents of the movement that the tax will yield about $50 per month per person eligible for benefits.[40] In the third stage, taxes other than a pure transactions tax have been added and exemption introduced freeing small transactions and incomes from the tax.[41] At the present time the plan provides for a 2 per cent tax on the "*gross* incomes of all persons or companies derived from any and all sources, over and above $250 for each calendar month, and such $250 shall be deducted monthly if received as wages or salary, and may be deducted on an annual basis if received from any other source." [42]

The Townsend Plan in its first and second stages has been examined by a group of economists of the University of Chicago, with special reference to the burden and administrative

---

receiving the dividend. Originally only those over sixty with incomes of *less than* $2,400 a year were eligible (H. R 7154, April 1, 1935); today there are no restrictions as to personal income (H. R. 1036, § 302 (c), January 3, 1941).

[38] The first McGroarty bill (H R. 3977, January 16, 1935).

[39] *Ibid.*

[40] It is important to realize that not everyone over sixty would receive a pension but only those who would quit work. Thus only those to whom $50 a month was sufficiently attractive would receive the pension.

[41] See the O'Connor bill (1941).

[42] The O'Connor bill.

difficulty of the 2 per cent transactions tax.[43] It is pointed out, with much statistical detail, that the incidence of the tax would be very capricious, that in some cases it would be applied many times on the same article, and that it would also tend to raise prices generally. The evidence also shows that it would be impossible for the tax to yield the maximum of $200 a month at present income levels.[44] While more recent tax proposals have changed the picture in detail, it would seem that most of the Chicago criticisms still remain valid.

It is submitted, however, that the Chicago pamphlet is somewhat less than just to the Townsend Plan. The particular passage which seems unsatisfactory is the following:

> Once payments started, money would be put into circulation plainly enough; but it would *only* be the money drawn out of circulation four months earlier. The argument that more money would be put into circulation by the pensions, in short, ignores the fact that they are to be financed by taxes; it would apply much better to the financing of pensions by inflation.[45] [Italics added.]

It is true that the argument would apply "much better" to financing by "inflation"; still it is not exactly fair or accurate to say that the money put into circulation would "only" be the money drawn out of circulation four months before. This statement is true as of the *instant* of payment, but it overlooks the possibility of induced changes in *velocity* and the aggregate propensity to *consume* which might shortly follow. If the Townsend Plan were to be financed by a tax on "idle" hoards, it would be clear that there would be an increase in velocity and, in the absence of offsetting price movements, in real consumption. But, as we have already seen, a tax on "idle" hoards is itself open to many objections. The 2 per cent monthly gross income tax is still more questionable; yet if it succeeded

[43] "The Economic Meaning of the Townsend Plan."

[44] The Townsendites, of course, maintain that the tax would raise incomes so much that $200 a month would soon be reached.

[45] "The Economic Meaning of the Townsend Plan," p. 20. The Chicago pamphlet calls attention to the introductory crisis of four months while the tax was being hoarded and reserves built up.

in diverting to pensions any considerable degree of money which would have been hoarded, and if prices were not correspondingly raised, money spent on consumption would increase. The Townsend Plan, if it could be administered, would have one mechanical advantage over other plans. It *ensures* the spending of the sums paid out.

However, this one point alone is not sufficient to warrant the adoption of the plan in preference to other suggestions. The difficulty and cost of administration appear extremely great. It will be necessary to police the spending habits of millions of people. The provision in the present O'Connor Bill, advocated by the Townsendites, that "an annuitant shall not pay to any person any salary, wages, or other compensation in disproportion to the services rendered," is an attempt to take care of one obvious leak.

The Townsend Plan, in addition to its own weaknesses, is open to all the objections urged against the other velocity stimulators. No attempt is made to relate the increased spending, if any would arise, to the flow of goods. The plan is useless as a cyclical remedy. Once the full effects of the change were felt the flow of money and spending would have adapted itself to the change and thereafter would be unaffected by it. A question and answer pamphlet put out by the Townsendites reads as follows:

> Q. Will the operation of the Townsend Plan eliminate periods of depression?
>
> A. *Yes.* There will be the normal rise and fall of business based on the law of supply and demand, but when a decline in business does occur, the *steady* orderly purchasing power of the annuitants will keep money in circulation in sufficient quantities so that these periods of depression will *never be acute.*[46] [Italics added.]

This statement is clearly wrong. What it overlooks is that if there is a "normal" rise and fall, there will also be a rise and fall in the *yield of the tax.* Purchasing by annuitants will not be steady. For, as business *activity* falls off, *transactions*

[46] *Thirty-Three Questions and Answers Explaining the Townsend Plan*, a pamphlet distributed in 1939 by headquarters in Chicago, p. 14.

and incomes fall off and *pensions* fall off.[47] The Townsend Plan selects one of the worst possible types of tax for steady yield — a tax on business activity.

5. SUMMARY

We may conclude from the foregoing that the velocity stimulators have *prima facie* much to recommend them. A tax on idle hoards, especially, is not open to some of the objections raised against a tax on hoarding but has, on the contrary, definite theoretical advantages. It would not directly affect the distribution of wealth or force anyone to spend or to save. It would only prevent the accumulation or holding of "idle" balances. In consequence, the disturbance, by the tax, of accepted habits, viewed from this particular point of view, would be less than in the case of a definite scheme of redistribution. At first sight it would seem clear that dishoarding would be bound to increase spending and investment, and therefore that the advocates of velocity stimulation present a very formidable argument.

However, closer examination presents a less convincing picture. A slowing-down of velocity is after all only a symptom, and, in the case of the cycle, underlying discontinuities can scarcely be avoided by taxing idle balances which are merely the result of deeper forces. Even in the case of secular stagnation Mr. Keynes points out that people may hoard in many other ways than through money. Moreover, the idle hoards may simply waste themselves in higher prices if confidence is low and the desire to hoard great. Once the system has adapted itself to the change in velocity, the stimulus will have exhausted itself. Social friction in the case of individuals who have valid reasons for wishing to save may be a factor. Foreign currency may be introduced and there are many other difficulties. The Townsend plan adds to these an unnecessarily costly and arbitrary method of raising revenue, which may not tax idle hoards

[47] As pensions fall off, more and more of those over sixty might try for work. So far as they were successful they would add to the "pressure on jobs" that the Townsend Plan seeks to avoid.

or net hoarding as much as it will fall on active business balances.

The basic trouble with the whole idea is that it is too mechanical and that the difficulties of administration appear extremely great.[48] A commission attempting to administer a tax would have to decide the following questions: (1) What is an "idle" balance? (2) How much do we wish to increase circulation in order to avoid secular stagnation, yet not cause cyclical difficulty? (3) How high will the tax have to be to get just this result? (4) Will a tax at that level cause so much friction that it will discourage productive investment? (5) How can we eliminate liquidity substitutes?

Finally, if the change in velocity is made, and if all hoards and net hoarding are eliminated, and if in spite of this, little increase in productive investment or real consumption occurs, the plan will have accomplished all that it can do. Speeding up "velocity" even faster will scarcely be more likely to succeed if velocity stimulation has failed to accomplish much in the first effort. On the whole, a more flexible method and one involving less friction would probably be to offset net hoarding and hoards by injecting purchasing power. Such a program presents many difficulties. What, for example, is to be done when the Keynesian L_2 function is completely elastic? This and many other problems will be discussed in the next chapter.

[48] Professor Jørgen Pedersen, in his notable article on public finance, reaches this conclusion also. See J Pedersen, "Some Problems of Public Finance," *Weltwirtschaftliches Archiv*, vol 45 (May 1937) I am indebted to Professor Hansen for a translation of this article by Leonard Felsenthal.

CHAPTER VII

PURCHASING POWER INJECTORS

BEFORE going into an analysis of specific plans it seems advisable to outline the basic philosophy and basic difficulties of all the schemes grouped together in this chapter. Plans for the injection of purchasing power vary, it is true, from such largely accepted ideas as the "spending" policy to so-called "radical" proposals as Social Credit, "Consumers'" Credit,[1] Technocracy, the Consumptionstat and others, but in their practical recommendations the chief difference is merely in degree. The common feature which links them all is an emphasis on the importance of *spendable money income*. They concentrate upon the idea of a "certain flow of money in a given time interval meeting a certain flow of goods in the same time interval," and their common aim is to maintain a balance or equality from "day" to "day" between the goods and money flows.[2]

In order to maintain a balance they all favor an injection of money income to make up any "shortage," and a removal of "excess" income should too much be available. The idea is associated with a policy of price stabilization — for by "shortage" of purchasing power is meant, of course, only that money income is insufficient to take goods off the market at the *given price level*. But it must not be supposed that all advocates of purchasing power injection favor an absolutely rigid price stabilization.

The purchasing power injection plans rightly stress the

[1] By "consumers' credit" is meant not installment buying and loans to consumers but the special monetary plan of that name suggested by Mr. J. E. Meade in *Consumers' Credits and Unemployment* (1938).

[2] "Day" is placed in quotation marks since in practice it must refer to some more or less arbitrary interval. See the discussion of the Robertsonian "day" in Gottfried Haberler, *Prosperity and Depression* (1939), revised edition.

importance of money *income* as opposed to the mere "quantity" of "money" and its velocity. The whole idea is more flexible and adaptable than 100 per cent money and less likely to cause friction than "velocity" stimulation; nevertheless, there are serious problems connected with it. The simplest of these is the problem of how to create the necessary additional monetary purchasing power. This can easily be done in a number of different ways. The most difficult is how to administer and distribute *politically* the purchasing power that has thus been created. It may well be, indeed, that the whole idea stands or falls on its political feasibility. But between these extremes lie a number of intermediate problems which must be briefly mentioned.

Perhaps the most important centers around the accumulation of idle balances. Remember that we are here concerned with the equality of the goods and money streams in a certain interval of *time*. In the chapter on inflation it was pointed out that, if, in a particular interval of time, we inject purchasing power in order to offset current hoarding, the injection may be used once or twice to take goods off the market but after that may lie idle in someone's hoard. Not even all of the original injection may be spent in the first instance, and some have therefore objected that when the demand for balances to satisfy the "speculative motive" is insatiable — when the Keynesian L_2 function is perfectly elastic — it will do little good to inject purchasing power into the system.[3] Such an objection, however, is based in considerable part on a confusion of "income" and the "quantity of money."

It is clear, of course, that not all the purchasing power injected into the system will be spent even in the first instance by those who receive it. We must not forget the discrepancy between money income *received* and money income *spent*.[4] Suppose, by an analysis of current hoarding, we estimate what the "gap" between purchasing power and goods is going to be

[3] *Cf.* J. M. Keynes, *The General Theory of Employment, Interest and Money* (1936), pp. 199 *et seq.*

[4] *Cf.* A. W. Marget, *The Theory of Prices* (1938), I, 379.

in a particular period. If we decide to offset this "gap" we would have to inject not merely enough to make up the deficiency itself but also an extra amount to make up for that part of the injection which will be hoarded before it ever reaches the market. There is a reverse side to this problem. For we must not forget that spending may also be continued by trenching on savings rather than receiving income. Indeed, in the present type of analysis it is difficult to avoid the use of Irving Fisher's definition of money income as money *spent* on consumers' goods. The Fisherine definition at least reminds us that it is spending that counts and that, while spending and money income are closely connected, they are not necessarily the same. Nor is the relation between them invariant or unique.

It is not correct, however, to say that the injection of purchasing power will do no good in times when the whole amount injected will *ultimately* be hoarded. A perfectly elastic L_2 function will only occur for society in the *aggregate*. Business concerns and wealthy individuals may be hoarding every addition to their money stocks, but there will always be poorer persons willing to spend. A starving man, for example, will scarcely have an insatiable liquidity preference. While a portion of the funds injected, therefore, may never reach the market, and while the entire sum may after a while come to rest in someone's hoard, the government can, if it wishes, pay out by pensions, public works, etc., substantial amounts to those classes of the community whose propensity to consume is very high, and by this method it can either maintain or increase aggregate consumption. The fact that the money may be hoarded when it reaches the hands of entrepreneurs and institutions is from some points of view a positive advantage. Barring serious loss of confidence in the currency, the process can, at one and the same time, increase consumption and help to satisfy liquidity preference. Mr. Keynes suggests that in some cases the process might go on practically forever, but an absolutely and perpetually elastic L_2 function seems rather unrealistic.[5]

[5] See Haberler, *Prosperity*, pp. 219 *et seq.*

In the chapter on inflation, to be sure, it was pointed out that the sudden dishoarding of these balances might cause an inflationary price rise. Also a related problem is that of multiple expansion. As every student of money and banking knows, if willing borrowers are available, each dollar of lawful money issued may serve as the basis of a considerably larger number of dollars of bank loans. If, then, in making injections we use currency capable of serving as bank reserves, no immediate inflation may be noticed. But, if this process of injection finally causes a revival of business and the demand for loans picks up, the great augmentation of the credit base that has gone on may permit an enormous inflation of bank loans and purchasing power. These dangers are not, however, fatal to the validity of the whole idea. By taxes and by increasing reserve requirements surplus funds may be absorbed and cancelled and substantial monetary equilibrium preserved, but serious problems of timing and wealth distribution are presented.[6]

Looking now at the matter of stimulation, it might be said that even if consumption is increased there is no guarantee that output and real investment will be increased. It is quite true that in recent times we have been inclined to assume altogether too automatic a response on the part of business men to monetary stimuli. One may grant that, *ceteris paribus*, the merchant or manufacturer who finds his sales increasing will tend to expand the scale of his operations. But this will only be the case if his prospective profits also warrant the addition. An increased flow of spending which is accompanied by measures which either increase risk or reduce profits may not evoke any important amount of new investment. In discussing this problem, however, one must disentangle the effects of monetary measures *per se* from the effects of monetary measures *accompanied* by other policies substantially unrelated to the monetary program. So far as new spending *per se* is considered, of all the plans discussed, the purchasing power injectors combine the most in stimulation with the least social friction. Consumption and some investment can be

[6] As to these difficulties see Chapter VIII, § 2, this study.

directly maintained, while the friction and disturbance entailed in the taxation of idle hoards, for example, will largely be lacking. It would seem likely that if the output of consumers' goods is rapidly and continually cleared from the market some investment in consumers' goods will ensue. Consumption can be increased and unless other policies discourage investment — for example, a policy of encouraging a rapid rise in costs and imposing a drastic taxation of profits — the chances for recovery should be good. However, many of the advocates of purchasing power injection have given too little attention to this aspect of the case and have assumed that there will be an automatic increase in output if money is injected and consumption increased regardless of what else may be happening.

The mention of consumers' goods brings out another problem of considerable complexity. So far we have spoken of maintaining a "balance" between the "goods" and money flows. But *what* goods stream, what money stream, are we trying to keep in balance? As was pointed out in the chapter on inflation, there may be a number of different "markets" in which special types of payments are exchanged against special types of goods. There is, for example, the "market" for investible funds and the "market" for consumers' goods. Anyone who has studied the preparation and functioning of price indices knows some of the difficulties connected with our problem. There may, for example, be a rise in wholesale prices without a corresponding rise in retail prices.[7]

Purchasing power injectors concentrate upon the "market" for consumers' goods and the money spent upon them. Their system tends to be built around real final consumption. But even this simplification causes trouble, for it is frequently very difficult, especially in the case of "consumers' capital" and installment buying, to draw a line between capital goods and consumers' goods, between investment and consumption.

[7] *Cf.* C. O. Hardy, *Credit Policies of the Federal Reserve System* (1932), pp. 209 *et seq.* Note also the treatment of this problem by E. F. M. Durbin, *The Problem of Credit Policy* (1935).

Moreover the concentration on consumer spending leads to one serious fallacy shared by nearly all the advocates of purchasing power injection. They seem to feel that a stability of consumer purchasing power will lead to or maintain full employment. They tend to overlook, to a greater or less extent, the existence of distortions in the real structure of production.

Many writers have discussed at length Professor Hayek's opinion that *any* injection of purchasing power will cause an "undue lengthening" of the process of production.[8] Such validity as the idea possesses has been shown to be confined to a condition in which consumption and investment do genuinely stand in an opposing rather than a complementary relationship — in other words, to a condition of full employment.[9] Nevertheless, for a variety of reasons, we do have distortions in the structure of production, and, while purchasing power may be injected until there is "equality between costs and prices in the consumption goods market and full employment in the *consumption* goods industries," this does not mean that there will be *general* full employment.[10] An injection of purchasing power in excess of this limit will be likely to cause inflation. *Stabilizing* consumption and money income by no means entails stabilizing employment in a world subject to intermittent investment outlets and replacement demand. This inability to stabilize employment is not an argument *against* purchasing power injection — quite the contrary. But we must remember that maintaining consumption and maintaining employment are not the same thing, and an increase (decrease) in one need not lead to an increase (decrease) in the other.

To sum up: the general idea of the purchasing power injectors may prove the most hopeful and flexible of all the methods so far treated, but there are grave difficulties to be met. For example, besides questions of political distribution and administration, there may be named: (1) accumulation of

[8] F. A. Hayek, *Prices and Production* (1935), revised edition.

[9] See, for example, A. H. Hansen, *Full Recovery or Stagnation* (1938), Chapter III.

[10] *Cf.* Durbin, *Credit Policy*, p. 223.

idle balances and sudden dishoarding; (2) discrepancies between money income and consumer spending; (3) multiple expansion of bank credit on the basis of currency issued; (4) repercussions on confidence and investment; (5) the difficulty of deciding what goods stream it is against which you are issuing money; (6) the probable impossibility of maintaining full employment, during the cycle, even though we maintain consumption unchanged; (7) the necessity, in times of unemployment equilibrium, of making money payments in such a way as to increase aggregate consumption. In the light of these difficulties let us discuss the specific plans proposed.

1. DEFICIT FINANCING

A. The Mechanism of Injection

For the sake of clearness in exposition, the methods by which deficit financing may result in a net increase in the quantity of available purchasing power will be briefly summarized. It is of course a commonplace to the trained economist that government borrowing may be something more than a mere *transfer* of funds from individual savers to the government, but, since a clear idea of the mechanism involved is essential in the discussion of the next two chapters, we will outline it as briefly as possible.

It must first of all be pointed out, however, that even if there were only a mere transfer of funds this could operate, in some cases, to maintain or increase purchasing power. Suppose the government borrows and spends funds that would otherwise have been hoarded. In that case the government would be maintaining income and the flow of purchasing power. For if the government had not spent the money it would have lain idle, and there would have been a probable shortage of money income with falling prices and unemployment. Likewise if the government borrows money which has *already* been hoarded and puts it back into active circulation by spending, there may be a net increase in purchasing power. But, as almost everyone knows, deficit financing does something more than borrow idle savings.

A very considerable portion of the sums spent by the United States government since 1930 has been created through the use of bank credit.[11] This creation is similar to the ordinary process of credit "creation." When the banks buy bonds from the government, they do not pay "cash" for them but need only set up deposits in favor of the government just as in the case of any other loan. Deposits (liabilities) of the banks go up by the amount of the purchase and assets (in this case bonds) are increased by the same amount. The government draws checks upon these deposits and gives them to W.P.A. workers, etc. Were the recipients of the government checks to present them at the bank demanding cash, the banks would be put to some inconvenience and even rendered insolvent, but we know from experience that this will not in fact occur. The recipients of government checks or the persons to whom the checks are transferred will merely deposit them with the banks. As fast as funds are drained out by the government they are redeposited by the recipients. The banking system as a whole merely offsets deposit entries in its books, and, while an individual bank may gain or lose a certain amount, the total of bank assets (in this case bonds) and the total of bank liabilities (deposits; potential purchasing power) is increased for the nation as a unit.

It is true that the process has increased the amount of deposits with reference to reserves so that the *potential* lending power of the banks has been reduced. But when we have a condition such as the present with large excess reserves there is certainly a net addition to deposits and purchasing power. There is definitely something more than a simple transfer of funds. Moreover, bank reserves are so much a matter of government regulation that this limiting of potential credit could easily be avoided by lowering reserve requirements. In a small country with large foreign trade and limited gold reserves the

[11] According to the *Federal Reserve Bulletin* for January 1939, 43 6 per cent of the government debt was held by the banks on June 30, 1938. The same source in January 1940 estimated the holdings of government bonds by the commercial banks at the end of 1939 at 38 per cent of the total amount outstanding.

situation might be different, but under modern American conditions deficit financing definitely does not cut down the amount of credit available. It must also be remembered that the bonds which the banks hold are eligible for *rediscount* and hence are themselves capable of serving as a basis for reserves in times of stringency.

If the government, instead of borrowing from the banks, had financed its spending by printing greenbacks, the immediate financial results, disregarding effects on business "confidence," would have been much the same. New monetary purchasing power would definitely have been created. But there are important differences between the two methods. For, whereas the increased deposits resulting from deficit financing are a drag on the creation of further credit, the deposits resulting from an issue of greenbacks would be accompanied by balances of currency capable of serving as the base for multiple expansion.

It must not be supposed, however, that deficit financing avoids all inflationary danger. The bonds, to a limited extent, may themselves be the basis of a considerable multiple expansion, and idle deposits progressively accumulating over a considerable period may suddenly be released, with disastrous consequences. The financing of government deficits by currency issues has, moreover, one considerable advantage over deficit financing, and that is that it avoids the payment of interest on the national debt.[12] It is sometimes suggested that the government might start its own bank to finance its needs in order to avoid the payment of interest.[13] But this overlooks the fact that bank credit creation cannot be successfully practised, to any very large extent, by an individual bank unless *all* are expanding at about the same *rate*. Unless prepared to issue currency indefinitely, the government bank financing a deficit would probably have clearings consistently against it and would either become insolvent or be forced to borrow.

Many of the critics of deficit financing and a spending pro-

[12] But see further discussion of this question in § 1 (c) of this chapter.

[13] Perhaps something of this sort is meant by Mr. Berle's "Bank for Capital Credit" scheme. See Chapter V, § 2, this book.

gram have suggested that it is possible to use various types of financial machinery which would avoid the payment of interest and which, so far as the financial set-up goes, would be no more, or even less, "inflationary" than deficit financing. Mr. Meade for example in his *Consumer's Credits and Unemployment* suggests merely a special issue of notes which would not be counted as a part of bank reserves.[14] Many advocates of similar schemes concentrate upon the "crushing burden" of national debt, and, clearly, before we can come to a final conclusion regarding the merits of a spending policy, we will have to decide whether or not the national debt imposes a real economic burden, whether there are any limits to the rise of the national debt.

B. Is There an Economic Limit and Economic Burden to an Internally Held National Debt?

In *An Economic Program for American Democracy* it is argued that the national debt may be increased indefinitely — apparently, in fact, without limit.[15] In this section I propose to examine some of the bases for such a contention. The subject is too comprehensive to be adequately discussed in any brief treatment, and it is my aim merely to present certain relevant considerations and the tentative conclusions which they would appear to indicate.

The argument of the writers of *An Economic Program* runs in part as follows:

> The long range public investment program should be financed chiefly through borrowing. This will of course mean a steadily increasing total of public debt. To many people — perhaps to most

[14] Meade, *Consumers' Credits.*

[15] R. Y. Gilbert, G. H. Hildebrand Jr., A. W. Stuart, M. Y. Sweezy, P. M. Sweezy, L. Tarshis, and J. D. Wilson, *An Economic Program for American Democracy* (1938). The authors do not precisely commit themselves to the proposition that 100 per cent of the national income can be taxed and transferred without imposing a burden; yet that is what their argument, literally applied, would approach as a limit. Most of the discussion which follows has appeared in the *Quarterly Journal of Economics*, vol. LV (November 1940), in my article "The Economic Limit and Economic Burden of an Internally Held National Debt."

people — the prospect is terrifying. The public debt, they say, cannot continue to increase forever. . . . The burden of taxation will eventually become intolerable. These and other apprehensions are the result in part of confusion, in part of hostility. . . .

If we look at the whole nation as a going concern, we see that its internal debts, business and governmental, are merely another aspect of its assets. Debt in the broad sense is the obverse of investment. . . .

Individual debtors do, of course, get into trouble by improvident borrowing. But for the economy as a whole, trouble comes only when the nation falters in the course of its economic expansion. . . . The expansion of debt at a rate sufficient to absorb the nation's savings is both sound and necessary. This rate could be excessive only in the sense that the rate of saving itself was excessive. . . .

It is ridiculous to maintain that debt in general must be repaid. The mere attempt to repay debts all around . . . would result in complete economic paralysis.[16]

Senator Sheridan Downey expresses the ordinary man's reaction to this as follows:

Where will this process end? Are we to increase our government deficit several billions each year — indefinitely? We know that is out of the question. Our public debt would mount to astronomical heights, and as it did confidence in public credit would sink to lowest depths. Before long government finances would collapse, dragging down with them our banks and insurance companies, already loaded with Federal bonds.[17]

Which is the sounder view? Are there any definite limits to the rise of the public debt? [18] Few questions evoke more controversy and more confusion. The layman is likely to consider merely what *he* would do, if he were confronted by an

[16] Gilbert *et al.*, *An Economic Program*, pp. 62 *et seq* Regarding the concluding statement that "debt in general" cannot be repaid, Hardy says in his *Credit Policies* (p. 333), "No major fraction of the underlying transactions which are represented by short-term credit operations of all types could be liquidated except at the cost of a breakdown of the whole industrial order." The same is true of long-term loans as a group.

[17] Sheridan Downey, *Pensions or Penury* (1939), p. 91.

[18] Compare A. H. Hansen, *Fiscal Policy and Business Cycles* (1941), p 168; and also chapter by R. A. Musgrave and B. H. Higgins in *Public Policy*, vol. II, Annual Yearbook of the Graduate School of Public Administration, Harvard University (1941).

ever-increasing number of bills which had to be paid by a certain date — and is inclined to transfer this picture without modification to the case of the national debt. Such a mode of thought is clearly inadequate, but it is equally unwarranted to go to the opposite extreme and deny that an internally held debt can *ever* be a burden. Truth, it is submitted, lies somewhere in between, but we must realize from the start that we cannot speak of "limits" in the sense of a *sudden* line beyond which one cannot possibly go. We must speak rather of *increasing frictions*. At what point these frictions will become unbearable depends on the political attitude and enthusiasm of the people. The economist cannot prophesy a breaking-point; he can only indicate tendencies toward one. Let us, however, first discuss the more definite fiscal and institutional limits and then pass on to the question of economic burden generally.

The most nearly definite short-run limit on the amount of government spending is the desire to avoid a price inflation. The *stimulation* of the money income, therefore, which can be given in any one period of time is limited by the flow, not of *all* goods and services (including free goods), but by the flow of goods and services for which a price or fee is charged, plus those services for which an *indirect price* is levied in the form of a general tax. Clearly, credit creation within a period must not exceed the flow of purchasable goods in that period; if the flow of credit creation is greater, price inflation will result.

But aside from this limit on stimulation there are certain other limits of an institutional nature which are said to confine the growth of the national debt. I need not mention the statutory debt limit of the country, for that can obviously be changed. The two problems which concern us most here are, first, whether the size of the national debt is limited by the size of bank reserves, and second, whether the expansion is limited by a saturation of the market for government bonds.

In this country, with our enormous bank reserves, the limitation of the debt by reserves seems very far away. Yet technically it might be possible for the expansion of deposits

resulting from government spending to restrict the supply of credit available for bank loans, even though government bonds are eligible for rediscount. This limit, however, is largely hypothetical, for nothing could be easier, so far as the institutional set-up is concerned, than to decrease the amount of required reserves. In weak countries with small gold holdings and large foreign trade the problem, as has already been pointed out, might become serious; but in the United States the sale of government bonds to the banks does not, under present circumstances, diminish the supply of credit available for other purposes.

It has been argued, however, that there may come a time when the public and the banks may refuse to buy bonds. Such a thing could unquestionably happen in the case of the public. Whether it could happen in the case of the banks is more doubtful. It is probable (whatever one may think of the merits of such a measure) that the banks could be coerced into continued buying. Certainly the institutional set-up could be changed to permit this coercion. Consequently, we cannot treat either of these institutional frictions as final limits in any strictly economic sense of the term. However, as long as any reliance is placed on voluntary purchase, the exhaustion of the private market must be reckoned with. We cannot, therefore, periodically wipe the slate clean and start all over again, unless we are *forcing* people to buy. For no one will willingly buy an asset which he expects shortly to become worthless. Thus our institutional frictions cannot be disregarded.

Leaving the more definite "limits," we come to the question of burden. What, after all, is the real burden of government and government spending? Clearly, the immediate "real" burden is to be found in the factors of production — men and resources — deflected from private industry.[19] In a full employment economy any increase in government spending (barring inflation) means a smaller percentage of total output from

[19] It is not strictly accurate to treat all the resources deflected by government as a "burden." For if they are producing desired utilities they are not a burden.

private production; but if there are unemployed resources, government spending may take place without drawing any resources from private production, and hence without *any* immediate real cost. Of course, if the spending program is badly planned, an uneconomic distribution of resources may be perpetuated. For example, by subsidizing a declining industry men may be kept in a line of endeavor which should be abandoned, and considerable economic loss may, in the long run, result. Again, a spending program may be badly timed and resources put to work which are then idle, only to cause acute labor shortage when private business is revived. But these difficulties of distribution and timing are not of primary significance *analytically*. We may say, as a general principle, that, if the spending program puts resources to work which would *otherwise* be idle, its immediate real cost is nil.

So far, we have spoken of *immediate* real cost. We cannot stop, however, with the primary spending and reëmployment of idle resources. We must consider the financial burden and such *secondary* real costs as may arise therefrom. How are we to measure the financial burden? Here we find the first great confusion concerning our subject. The man in the street is apt to measure the burden of the national debt by its capital amount. This is a mistake. Under nearly all circumstances government debt may be refunded at *some* interest rate. Or if it is desired to avoid refunding, the debt may be issued without any maturity, as the English public debt is now issued. The financial burden of the national debt is therefore to be measured principally by the effects of the *interest charges* and the *taxes* levied to meet them. The only way in which the capital amount can be of interest is if it should happen to indicate the size of the "idle" hoards which may have resulted from deficit financing. Sudden dishoarding of these sums might give rise to a tendency toward inflation and necessitate increased taxation. However, since such a dishoarding would simultaneously provide an increase in money income, the aggregate money income remaining *after* taxes might be unaffected,

and hence the burden would be relatively slight. One must always remember that the relation which the taxes for interest bear to the national money income is the question of primary importance. One cannot, however, consider that the entire interest charge is a burden. Insofar as the interest paid to banks simply reimburses them for their services in providing the country with a circulating medium, the interest charge merely represents an expense which must be met anyhow, and which cannot be considered a part of the burden of government finance. This point will be discussed in detail in the next sections of this chapter.

While large *foreign*-held debts are admittedly a burden, it is frequently said that the taxes levied to pay interest charges on an *internally* held debt do not impose an economic burden on society.[20] It is admitted that income may be redistributed in individual cases, but since the payments are mere transfers, no net burden results for the economy as a whole. This point of view, however, overlooks the effect of *tax friction* on the community and its possible real cost.

Tax friction is likely to seem a somewhat vague term. In order to give some idea of what is meant, three types of it will be outlined, though an exhaustive catalogue is not attempted. There is, first of all, the reluctance of people to pay taxes and of parliaments and congresses to vote them. Even though, in fact, the taxes levied would be mere transfers of no economic significance, parliaments might hesitate to vote an increase, and thus starve essential social services, merely because of the *political* aspects of the case.[21] A second form of tax friction is found in the well-known fact that a *disproportionate* tax on a particular field may discourage the development of that

[20] *Cf.* the Colwyn Report, *Report of His Majesty's Committee on National Debt and Taxation* (1927), esp. pp. 357–358 *et seq.*, in which the minority views are presented.

[21] *Cf.* J. M. Keynes, *Essays in Persuasion* (1932), p. 129. "Our whole economic policy during recent years has been dominated by the preoccupation of the Treasury with the problem of debt conversion . . . they have exerted themselves to curtail as far as they can all public borrowing, all capital expenditure by the State, no matter how productive and desirable in itself. . . . To all well-laid schemes of progress and enterprise, they have (whenever they could) barred the door with, No!"

field. Thus it is said that modern American tax policy discourages the heavy industries because, owing to their high degree of cyclical fluctuation, they pay a disproportionate income tax. Finally, some experts may say that at certain stages of economic development, taxes should be levied on *saving*, and at other times on *consumption*. Insofar as a very large tax bill prevents the *adjustment* of the tax structure to foster saving or consumption — whichever is needed at the time — a *real* burden is imposed.

Another friction closely allied to tax friction is the deterrent effect upon business enterprise of a fear of inflation. While this fear may be quite unwarranted, if we assume rational action on the part of our government, and while much of it is due to pure ignorance, still it is a factor in the situation and does impose some real burden on the growth of the national income. Many people, however, believe that the fear of the government debt is not so much the fear of "debt" as the fear of the *policies* of a particular government. Finally, we must not overlook the real and financial nuisance and cost of tax collection and tax administration.

Still another point is the rigidity which the necessity for meeting a large annual interest charge imposes on the economy in an unstable world.[22] A country with a large interest bill will find it highly inadvisable to permit a serious decline in its national money income.[23] For the economy as a whole the taxes for interest operate as a fixed charge, and a serious decline in the national money income means that the percentage transferred in taxes will increase, with a consequent probability of increased tax friction. The government may not be placed in a dangerous financial situation, but the taxpayer will feel the taxes more keenly.

[22] Compare the discussion of the need for "equity capital" in Hansen, *Fiscal Policy*, pp. 388 *et seq* Hansen believes (p. 159) that the government debt does not impose such a serious rigidity because "the solvency of the government is not subject to the risk of structural changes which may cause the decline or even death of certain industries." But the effect on the individual firm of a heavy fixed volume of taxes could be quite serious.

[23] If a drop in the price level were permitted to occur, the real value of the government debt would also be increased.

We have thus seen that even though debt service may be a mere transfer payment, and even though it is expended only to keep men at work who would be otherwise idle, it *can* impose a real burden on society. To a greater or less extent this burden may be neutralized by careful tax policy, but it will always be a problem. However, even though interest charges and consequent tax friction are rising absolutely, the relative tax friction may be decreasing, if the national money and real income is increasing at a *faster* rate. Thus, if we have a genuine growth in the taxable capacity of the country, a rising interest bill is not a matter of immediate concern. Nor will it be a matter of concern as long as the taxable capacity continues to grow as fast as the taxes, or faster. But what happens if the national income fails to grow? This, in a sense, is the kernel of the matter, and to it we now turn our attention.

It has been argued by many authorities that the national money income will necessarily grow as a result of government spending. The "multiplier" argument is constantly invoked. Mr. A. A. Berle, for example, states the crude interpretation of the multiplier as follows:

> Likewise, during the past decade, the work of Maynard Keynes has indicated the importance of capital financing in a national economy. The point of interest here lies in his demonstration that capital financing directly increased the national income by more than its amount. A dollar put into construction . . . would increase the national income in that year or in the subsequent year by *not less* than one and three-quarter dollars nor more than, approximately, three and one-half dollars. To put it differently, ten billion dollars spent in sound capital financing would increase the national income by not less than seventeen billion five hundred millions nor more than thirty-five billions.
>
> The theory of the "Keynes Multiplier" has been both attacked and defended. . . . My own conclusion, after reading the discussion, is that as a matter of theory Keynes' demonstration stands up. There is evidence based on the work of Schacht who put the theory into practice in Germany, that it stands up in practice.[24] [Italics added.]

[24] A. A. Berle, *A Banking System for Capital and Capital Credit*, a memorandum submitted to the Temporary National Economic Committee, May 1939, p. 3.

This quotation implies an undue definiteness and dogmatism in the *theory* as well as the practice of the multiplier. While Mr. Keynes, hastily read, does give the impression expressed by Mr. Berle, it is not difficult to collect a number of quotations from the *General Theory* which tell quite a different story. For example, Mr. Keynes points out that there is likely to be "some confusion between the *logical theory* of the multiplier . . . and the consequences of an expansion in the capital goods industries which take gradual effect subject to time lag and only after an interval." [25] The increase, if any, may not take place in "that year or in the subsequent year," as Berle says, but may occur only after a considerable time interval, as J. M. Clark has pointed out.[26]

Regarding the actual taking effect, Keynes says: "We have to assume that there is no offset through decreased investment in other directions and also, of course, no associated change in the propensity of the community to consume." [27] In other words, other things must "remain equal." As to whether or not other things do remain equal, we can find some striking remarks elsewhere in the book. Thus:

> Economic prosperity is excessively dependent on a political and social atmosphere which is congenial to the average business man. If the fear of a Labour Government or a New Deal depresses enterprise this need not be the result either of a reasonable calculation or of a plot with political intent — it is a mere consequence of upsetting the delicate balance of spontaneous optimism. . . .[28]
>
> If . . . we . . . assert that money is the drink which stimulates the system to activity, we must remind ourselves that there may be several slips between the cup and the lip. . . .[29]

[25] Keynes, *General Theory*, p. 122. See also the discussion in Hansen, *Fiscal Policy*, Chapter XII.

[26] J. M. Clark, *The Economics of Planning Public Works* (1935). See also Fritz Machlup, "Period Analysis and Multiplier Theory," *Quarterly Journal of Economics*, LIV (November 1939), 1; P. A Samuelson, "Interactions between the Multiplier Analysis and the Principle of Acceleration," *Review of Economic Statistics*, XXI (May 1939), 75, and P. A. Samuelson, "The Theory of Pump Priming Reëxamined," *American Economic Review*, vol. XXX (September 1940).

[27] Keynes, *General Theory*, p. 119.

[28] Keynes, *General Theory*, p. 162.

[29] Keynes, *General Theory*, p. 173.

For a large increase in the quantity of money may cause so much uncertainty about the future that liquidity preferences due to the security motive may be strengthened.[30]

Finally, and most explicitly, Keynes says:

If, for example, the government employs 100,000 additional men on public works, and if the multiplier (as defined above) is 4, it is not safe to assume that aggregate employment will increase by 400,000. For the new policy may have adverse reactions on investment in other directions.[31]

Thus, on the word of Keynes himself, the multiplier is by no means *necessarily* fixed or invariant. It is theoretically possible for deficit financing actually to cause a *decrease* in investment and consumption. I do not believe that uncertainty resulting from deficit financing is likely actually to decrease private industrial activity in the consumers' goods industries to any serious degree. It undoubtedly may at times discourage *new* investment, and it may also cause some postponement of replacement; but as long as consumers' demand in the aggregate is maintained, it seems likely that output in the consumers' goods industries will also be maintained at a level to satisfy that demand. The chronically "over" expanded capital goods industries may be running at less than full capacity, but consumption will be maintained and the physical plant necessary to satisfy that consumption.

But while an actual decrease is unlikely, it is quite possible in certain circumstances for government spending merely to *offset* voluntary saving. The New Dealers in this country may have done their cause a disservice by concentrating their arguments on pump priming and the multiplier. We should realize that there are weighty reasons for a spending program, not because you will somehow *get* three dollars for every dollar you spend through the government, but because you may *lose* from

[30] Keynes, *General Theory*, p. 172. While an increase in "liquidity preference" might not, strictly speaking, affect the "multiplier," the two are likely to be closely connected.

[31] Keynes, *General Theory*, p. 119.

private enterprise three dollars for every dollar you do *not* spend.[32] In other words, there may be a negative multiplier at a time when there is no positive one. We may spend to maintain economic activity, even if we cannot rely on increasing it.

To return, now, to the main line of our argument. Suppose we have a condition in which government spending and deficit financing merely offset hoarding, and do not, for a considerable period at least, increase activity at all. Will not the taxes for interest progressively increase with constantly rising tax friction? Certain arguments have been advanced to deny this conclusion, and the whole question is one that cannot be successfully handled by catchwords.

The question, as phrased, has implicit a certain ambiguity. Mere failure of *private* business activity to increase does not mean that the national real or money income, or both, may not increase. Obviously, government spending may increase the national real and money income, or either one, *directly* without conceding any multiplier effect. Let us therefore assume merely that *private* economic activity and *privately* generated money income do not increase as a result of government spending. Let us assume that the absolute amount of hoarding from private money income in a certain period continues unchanged, and that government spending merely offsets this hoarding.[33]

[32] In other words, unless offset by new investment, the removal of a large block of purchasing power may start a process of cumulative deflation

[33] Let us assume, for example, that the national money income is X + 100 units. In period one, 100 units are hoarded But the government injects 100 units which are spent within the period so that total income spent in period one remains the same In period two, 100 units are also hoarded and 100 units again injected by the government, and so on *ad infinitum*. Idle balances accumulate at the rate of 100 units per period, but money income spent remains the same. Of course it is likely that more than 100 units will have to be injected by the government to make up for that amount which will be hoarded before it is even spent at all. A somewhat similar model may be found in D. H Robertson, "Saving and Hoarding," *Economic Journal*, vol. XLIII (September 1933). The writer has made certain qualifications in Robertson's model, and the one used here, in an article entitled "Internal Inconsistencies in D. H. Robertson's Saving and Hoarding Concepts" to appear in an early number of the *Economic Journal* Strictly speaking, according to the Robertsonian technique, the injection should be made the "day" *before* the "day" in which the hoarding is to occur.

With these assumptions in mind, we can discuss the effects of some of the possible types of government spending.

Let us first take the case of what Dr. Ursula Hicks refers to as "dead weight" spending. The "gap" in money income is made up only by doles to the unemployed. They do no work, and the national real income is in no way increased. At first it would appear that the burden of taxes and tax friction would progressively increase. But we must not judge superficially. Under some circumstances the money supply might be increased in such a way as to provide an increased monetary income, from which taxes could be collected without encroaching upon the monetary income remaining in the hands of the public. Suppose, for example, that the hoarding in each period is 100 monetary units. Suppose the government pays 3 per cent on its loans. The government might then borrow, not 100 units, but 103.092, to spend 100 of it, using the remainder to pay the interest charge in the first year.[34] If the 3.092 of interest paid in the second year is received by the persons connected with banks in salaries and dividends, money income will have increased by that much. Taxes in this second year will also have increased by 3.092. Thus the rise in money income has paralleled the rise in taxes, while real consumption has not changed at all.[35] Since hoarding, however, is still at the same absolute amount of 100, a second loan of 103.092 must be made in this second year, with a second injection of 100 and 3.092 left over for interest. Each year the tax bill and each year the interest payments and national money income will go up by 3.092.

Since the *aggregate* money income remaining in the hands of the public will be unchanged, it might be argued that no real burden is imposed. This does not follow, however. Although

[34] We suppose for the sake of simplicity that all 100 units injected are spent in the first period and hoarded in the second. *Cf.* note 33.

[35] Something of this sort may have been going on in Nazi Germany. Businessmen were making large profits, but these profits were being heavily taxed. It was, moreover, the patriotic duty of the citizen to invest most of the remaining income in government bonds. So, while money income was being increased, before it could be spent by individuals it was taken away from them through one method or another.

the aggregate income after deduction of taxes has remained stable, there is a relative shift. Unless we tax away all the interest charge as it reaches the hands of the individuals connected with the banks, there will be a shifting of purchasing power into the hands of bank employees, the owners of bank stock, and the like. It would seem clear that no one would buy bonds if his entire income from them were going to be taxed away. Hence some net gain would probably have to be allowed to the bankers and the owners and operators of banks. If this is the case, the recipients of money income in other parts of the economy would find themselves being progressively squeezed in favor of those receiving bank income. Obviously, there might be friction.

Nor is this the only difficulty. It is well enough, theoretically, to talk of creating a species of ever-growing revolving fund for the payment of bank interest, which is paid out to the consumer but taxed away again before he has a chance to spend it; but in any likely case it is probable that some of this money would escape into active circulation, for a time at least, during its perpetual motion. There are numerous "velocity" periods — some money streams turn over faster than others — and it would appear that more or less of the revolving fund would escape into circulation, with a possible large increase in prices.[36] This increase in prices might generate a recovery, to be sure, and hence do away with the necessity of increasing the size of the fund. It might even permit increased taxation and actual reduction in the total money supply. Unless this happened, however, the constantly growing monetary circulation unaccompanied by an increase in real income would be a danger. In any event, the shift of consumption to the holders of bonds — even though the aggregate demand remains the same — might be a cause of increasing friction. Thus we see that in this first case cumulative stresses may develop which

[36] Compare the argument advanced by D. H Robertson in his critique of Foster and Catchings (A. C. Pigou and D. H. Robertson, *Economic Essays and Addresses*, 1931, p. 139). Of course, increased taxes could take care of this danger.

after a very long period might result in repudiation or inflation or both.

Let us now consider the case of spending, not for "dead weight" debt, but for public projects which will in the future yield a flow of utilities. Men will not simply receive a dole but will be put to work on public enterprises of some sort. These public enterprises may be of two sorts: (a) "self-liquidating," i.e., those which charge a fee for their services and thus "automatically" cover their own costs; and (b) non-self-liquidating, i.e., those financed by taxes, no fee being charged for their services.

It has been said with considerable justice that we tend to overstress the difference between these two types of spending. As Mr. Berle puts it,

> In New York there are two bridges: the Brooklyn Bridge which is free and the George Washington Bridge, which is a toll bridge. The Brooklyn Bridge . . . is supported out of the tax roll. The George Washington Bridge . . . pays its way by a standard charge collected from each passing car. . . . It is absurd to say that the Brooklyn Bridge is not "wealth" and that the George Washington Bridge is "wealth," merely because of this difference.[37]

In other words, taxes are merely "compulsory prices" for government utilities, and we should not distinguish the utilities for which we pay directly from those for which we pay indirectly in the form of a tax.

While there is undoubted weight in this argument, it is too facile. First of all, we are dealing largely with tax *friction*. A *compulsory* price would seem more likely to cause friction than a voluntary one. The people who *use* the George Washington Bridge, to employ Mr. Berle's example, are the ones who pay for it. The people who pay for the Brooklyn Bridge may never have used it, and they may dislike paying for it more than in the other case. Government "self-liquidating" enterprises, moreover, subject themselves to the test of the market in order to determine whether they are desired. We have some positive basis of calculation. In the case of free parks and

[37] Berle, *Capital Credit*, pp. 7 *et seq.*

playgrounds the test may be purely subjective. To assume *prima facie* that government projects which are free are not worth their cost is doubtless erroneous, but it is equally erroneous to assume that they are.

Let us assume, however, that the parks and playgrounds do yield utilities which are "worth" exactly what the taxes levied to pay for them "cost" the community.[38] Under this favorable assumption, does a government spending program which yields a flow of government utilities, and hence increases real income, impose an increasing friction on society? It should be obvious that if a spending program increases the flow of government produced consumers' goods and services (utilities) which must be paid for directly or indirectly out of money income, and if the national money income does not increase, then the price level of consumers' goods must fall. It is thus theoretically possible for a spending program to have a depressing effect on the price level and consequently on business.

Here, too, it is argued that the flow of government utilities may be a legitimate ground for permitting a monetary expansion sufficient to provide an increased monetary income. So far as interest on the capital amount is concerned, that might be handled in the same manner as was pointed out above in connection with "dead-weight" spending — with the same advantages and disadvantages. This borrowing and revolving fund method might also be used in connection with maintenance, operation, and depreciation costs. But, in addition to difficulties already discussed, the attempt to finance depreciation costs in such a manner raises obstacles of its own. The depreciation costs covered must be matched by outlay, or there will be deflationary tendencies; yet sequence models may be set up which indicate that expansion at an *increasing rate* may possibly be necessitated, in some cases, if an increasing burden

[38] There is a certain ambiguity in evaluating costs in our treatment, since we are assuming that only men and resources which would otherwise be idle are being put to work. Hence the immediate real cost is nil What is meant is rather that the projects yield increments of satisfaction which would be equal in money value to the amount of other satisfactions which the amount of money paid in building them would buy at the given price level

is to be avoided. Mr. Keynes has touched upon some of the difficulties of offsetting depreciation in speaking of the effect of large-scale depreciation allowances in the United States. "In a stationary economy," he writes, "all this might not be worth mentioning, since in each year the depreciation allowances in respect of old houses would be exactly offset by the new houses built in replacement. . . . But such factors may be serious in a non-static economy, especially during a period which immediately succeeds a lively burst of investment." [39] There also may be trouble arising from the "obscure difficulty" spoken of by Durbin in his Problem of Credit Policy, which is entailed by expansion from a "stationary situation with general unemployment." [40] "Circulating balances," he tells us, "would have to be provided at every stage, including that of direct consumption." [41]

Whether or not we believe it will be necessary in some cases for investment to be made at an increasing rate during an expansion, as Keynes appears to do, one possible difficulty remains. If our money is spent on "self-liquidating" works or any government projects which employ a large number of men *after* their completion to *operate* them, we may find it increasingly difficult to make the necessary injection. Remember we have assumed that the absolute amount of hoarding from private money income continues unchanged.[42] Consequently, in each time-interval the same sized injection must be repeated. If x number of men are employed in building, say, a government hospital, and 10 per cent of x are needed to operate the hospital after it is completed, then in the next time-interval we shall have only $9/10\ x$ men to carry on a *new* project.[43]

[39] Keynes, *General Theory*, p. 99, and esp. pp. 105–106.

[40] Durbin, *Credit Policy*.

[41] Durbin, *Credit Policy*, p. 37.

[42] Since total money income may be rising, *relative* hoarding may be decreasing.

[43] This difficulty is similar to the point which we found in § 1 of Chapter II of this book, namely, that after new plants are built they must steal factors from existing enterprises (in full employment) or cut down the supply of unemployed in other circumstances. Only if population increases or labor-saving inventions occur can the difficulty be avoided.

Yet the same amount of money must somehow be spent, since, although unemployment is decreasing, we have assumed that the absolute amount of hoarding remains the same. Raising the *general* wage level will do no good, for that would merely raise costs everywhere.[44] Giving ever-higher wages to the men who are working for the government would help, but this might disrupt private industry and encourage malingering. Short of giving the money direct to consumers, it is difficult to find an answer. The amount of injection needed financially and the number of new projects physically possible *need* not correspond.

This difficulty has been elaborated because it is logically important. However, if the spending program succeeded in putting everyone back to work, even though it be only in direct employment from the government — for example, as forest rangers, clerks, and park attendants — it is likely that hoarding would be much diminished, and our problem might be solved in that manner.[45] Moreover, as long as we stick to public works which require almost no operating labor or proportionately very little, such as roads and bridges, there will be little likelihood of a genuine shortage of labor which would prevent us from making our injections. It must again be stressed, however, that unless some way is found to increase the monetary circulation, government spending which is *productive* of utilities which have to be paid for directly or indirectly may have a depressing effect on the price level, as is also the case with private production under similar circumstances.

The argument thus far has been so detailed that it may be advisable to summarize its main points before proceeding to the conclusions which it indicates. The "real" burden of the national debt, we saw, lay in the men and resources deflected from private industry. However, it is not correct to describe all of this outlay as a "burden," for part of it may be used to produce utilities desired by the community which could not be

[44] An even larger money injection would then be needed to maintain real consumption.

[45] Compare the discussion as to possible changes in the propensity to consume in § 3 of Chapter VIII, this book.

supplied by anyone else. Even taking a stricter view, it should be clear that if a spending policy puts men to work who would otherwise be idle, the immediate "real" cost is nil.

Yet in addition to immediate "real" cost we must consider secondary financial costs and tax friction. These are usually best indicated by comparing the growth in the amount of taxes for interest with the growth in the national income. The *capital* amount of a debt is not an adequate measure of its financial burden. Tax friction may be minimized by careful tax policy but is always a problem.

The question then arises whether tax friction will increase *relatively* if the community embarks on a long-continued spending program. It is probable that if unemployment is eliminated a generally stimulatory effect may result, private persons may dishoard, etc., and the national income may rise faster than the growth in the interest charge. However, such a result does not *necessarily* follow.

Suppose that private industry does not expand and private persons continue to hoard — what then? The government may offset this hoarding by injections of money to finance (a) simple relief payments or (b) public works of all sorts. In the first case the national real income does not rise; in the second case it does. There is an increased flow of government-produced utilities. It is argued that in either case the monetary circulation may be increased so that aggregate money income *after taxes* might remain the same. We have seen that even in this case, there were many difficulties. Serious lateral shifts in income distribution, for example, might ensue which after a long time could cause considerable friction.

We may conclude that, while the burden of the national debt is usually enormously exaggerated, a certain burden does exist, even when the debt is internally held and even when it takes the form of a mere transfer payment among members of the same community. This burden is primarily a matter of tax friction. Careful tax policy could reduce it almost to the vanishing point. Unwise tax policy could make the interest charges on the national debt a heavy burden holding back the growth

of the national income. Thus the burden is not something which can be mechanically determined but rather depends on the intelligence and forethought of the governing body. Finally, it appears likely that the national real and money income could be made to grow faster than the growth in the interest charge, if private investment be stimulated, but we cannot rely dogmatically upon such a result.

We come, therefore, to one of the most interesting features of the problem and one which has not hitherto been discussed. Our treatment so far has assumed the present methods of deficit financing with the usual payment of interest to banks, etc. But there is no financial reason why the government, in times of slump, should pay interest to the banks in order to create added purchasing power. Save for matters of convenience the government could do it directly just as well — so far at least as the mere mechanics of injection are concerned. Some payment to the banks might be necessary to reimburse them for genuine cost of services rendered, but this could be done without involving us in the highly unstable relationship of banks, bonds, and the market likely to obtain under the present system. Some of the problems raised by such an attempt to avoid the payment of interest will be treated separately in the next section.

C. Bonds, Bank Assets, and the Rate of Interest

A good deal of criticism is levelled at the present method of deficit financing on the ground that the income which the banks derive from the sale of government bonds is largely unearned. To this argument it is replied that the banks provide the community with a monetary medium, that if the banks did not do it the government would have to, and that the banks deserve a fair compensation for their services.[46] So far the spending program has not seriously faced the problem for two reasons. First, deficit financing has not been going on long enough for the cumulative friction to be seriously felt. Second, the government has been able to finance its requirements at

[46] Hansen, *Fiscal Policy*, p. 178.

such low rates of interest that the problem of cost is only beginning to be important. As long as we can finance our borrowing at very low interest rates, we delay the growth of acute frictions on the side of cost, and with it the need for careful cost analysis. But these low interest rates are in themselves a potential source of instability, and before going into the question of cost itself we will discuss the "highly unstable relationship" of banks, bonds, and the market which was spoken of in the previous section.

During a long-drawn-out period in which the expected profit rate on new investment is very low and risk very high, it is possible for the government to finance its requirements at extraordinarily low rates. Bonds are sold at approximately 2 per cent and shorter-term obligations at a fraction of 1 per cent. In doing this the government greatly reduces its interest bill, but there is another side to the question. For, if the value of an asset be largely determined by "capitalizing" its yield, a fall in the rate of interest will, *ceteris paribus*, increase the capital value of the asset and *vice versa*.[47] Thus if the rate of interest falls from 4 per cent to 2 per cent, the capital value will be greatly increased. But what is much more important, if the rate of interest rises from 2 per cent to 4 per cent, the capital value of a 2 per cent bond may be very much diminished.[48] This is the consideration which at present gives a certain instability to the banking picture.

To the banks the government bonds which they own are *saleable assets*. Furthermore, they are assets which bear a very low yield. Any rise in the market rate of interest will cause a fall in the market value of these assets which may wipe out any net return there may be upon them. Not only that, but, with the banks as heavily in bonds as they are now, a fall in the

[47] This idea plays an important part in Mr. Keynes' liquidity preference, especially his development of the "speculative motive."

[48] Of course it is doubtful if the prices of bonds would behave entirely in so mechanical a way. Differences in *risk* would make a difference in the degree of reaction, and there are special circumstances connected with government bonds which would make their decline serious enough, but not quite so drastic as the pure theory would indicate.

market value of government bonds may leave the banking system technically insolvent.[49] Thus in 1936 and 1937 a rise in the rate of interest helped to cause a decline in bond prices which alarmed the banks and had an adverse effect on public confidence. The writer has heard one authority say — speaking paradoxically, of course — that the only thing which saved the banks was the 1937 slump! For, if interest rates had continued to rise with recovery, the value of their bonds would probably have continued to depreciate, and they might have been seriously embarrassed.

If the banks purchased the bonds merely for the sake of the income which they yielded and held them until maturity without thought of resale, much of the difficulty in the situation would be avoided. But we can scarcely blame a banker who sees a chance of making 4 per cent or more for wishing to dispose of an asset which yields only 2 per cent and which is rapidly depreciating. He may also be encouraged to unload by supervisory policy. For bank examiners may constantly remind him of the danger of depreciation and may refuse to carry his bonds at par. Especially if the credit authority and the supervisory authority are imperfectly integrated, difficulty may result. A recent report of the Federal Reserve Board explains some of the problems involved here.[50]

How to avoid the "prosperity depreciation" of government bonds is indeed a problem. Some have suggested that the bonds be rendered nontransferable. In the case of sudden unlooked-for demands for cash they might be used as a means of obtaining cash for short periods from the Federal Reserve but otherwise would have no transferability.[51] From the point of

[49] That is to say, their assets at a "fair valuation" would not equal their liabilities if *market* value were used as the approximate basis of the "fair" valuation It should also be remembered that, if the proportion of deposits to capital is high, the "thin equity" remaining would not be much of a cushion against depreciation in the value of so important an asset.

[50] See *Problems of Banking and Bank Supervision* (1939), excerpts from the 1938 annual report of the governors of the Federal Reserve System.

[51] In the event of insolvency of a particular bank they could be redeemed by the Treasury.

view of the system as a whole this is probably a wise suggestion. A single bank may be able to sell its bonds in the ordinary way to obtain funds. But if the whole banking system did so, the bonds would rapidly lose their value. There are so many of them that it is probable they cannot be successfully *shifted* to any other class of holders.[52] Bank examiners may be worried about the depreciation of market value of bonds because they realize that a decline in market value may embarrass an individual bank which needs cash. But from the point of view of the system *as a whole* the only way in which government bonds *can* be shifted in emergency is for them to be taken over by the government itself in return for issues of currency. More and more the power of the government to print money is recognized as the ultimate financial asset of our banking system — a condition which has long obtained in England. The Bank of England has been unable to meet the demands made upon it during a crisis at least twice in its history, and the only way in which ruin was averted was through temporary special issues of currency.[53] On several other occasions notice from the government that the bank would be permitted to exceed its legal limit, if necessary, was enough to allay panic.[54]

As long, however, as we rely upon free subscription to government bond issues, the nontransferability suggestion seems unlikely to be adopted. While it makes sense for the banking system as a whole, it would seriously restrict, under present methods, the freedom of action of the individual bank, and it is rather doubtful if banks would be willing to tie their money up in assets of this sort.

It has also been suggested that government bonds should be issued for very short terms and refunded at higher or lower interest rates as the market might require. This, however, would introduce an element of great instability. The treasury might find it difficult to tell what amount of taxes for interest

[52] Compare the discussion of the "Quality of Credit" in Hardy, *Credit Policies*, pp. 328 *et seq.*, esp. p. 331.

[53] A. E. Feaveryear, *The Pound Sterling* (1931)

[54] Feaveryear, *The Pound.*

was going to prove necessary in any one period, while the periodic refunding might greatly disturb the financial mechanism and lead to anticipatory speculation.

Finally, the plan has been suggested of issuing government bonds at rather higher interest rates, say 3½ or 4 per cent, in order to avoid the tendency toward depreciation in a boom. The bonds would be no more "shiftable" en masse than previously but there would be less temptation to sell. But if we should do this we would remove a large part of the incentive on banks and individuals to look for investment. Moreover, the cost of borrowing is greatly increased and tax friction intensified. Thus we arrive once more at the question of cost. Low interest rates introduce an instability which is difficult to avoid. Higher interest rates intensify the problem of a cumulatively increasing interest bill.

In the past few years the scarcity of investment outlets and loans has made it difficult for the banks to find enough earning assets. Government bonds and service charges have been used to furnish a back log of income, and it is argued that since the banking system furnishes an essential government service we should continue to subsidize it indirectly through the payment of interest on government bonds. Many people now feel that the banks will some day develop into "warehouses for money" drawing an income from service charges, rather than lenders drawing an income from interest on loans. If it is true, however, that the banking field is becoming less profitable, the writer does not see any *prima facie* obligation on the government to maintain the banks on the present scale of operation, should it prove redundant. The banks may be entitled to payment for services rendered, but they have no right to expect a federal subsidization of profits *ad infinitum*.

Banks should be permitted to charge for the conveniences they render their customers in furnishing check money.[55] If the government chooses to use the banks for the creation of

[55] It must be remembered, however, that if banks charge too much the public will begin to use large quantities of currency instead of checks. Then the use of the bank-deposit method of credit creation would have to be discontinued.

credit rather than doing it directly itself, the banks should also be reimbursed for their services in this regard. But does this mean a cumulative issue of interest-bearing bonds? Mr. J. E. Meade has written regarding the payment of interest on the national debt as follows:

> The importance of the rate of interest on borrowings, whether by the government or by private enterprise, is that *in the absence* of "depression" unemployment it helps to guide the capital resources of the community into the most useful channels. . . . By this mechanism it is ensured that the *scarce* resources at the disposal of the community are distributed . . . in the most productive way. But in time of general "depression" unemployment, this mechanism is senseless. Since there is general unemployment, it is no longer true that if one type of development is expanded, another must be contracted.[56]

The injections of which we are now speaking will be made *ex hypothesi* at a time when there is no other large demand for loans. Were the government attempting permanently to divert resources from private activity, which were also being competed for in the private economy, then the interest rate on the government debt would be a fair charge reflecting the struggle for a scarce commodity. But when the government is merely offsetting hoarding and keeping men at work who would otherwise be idle, a different case seems to be presented. Payment for services rendered is one thing; a constantly increasing bill for interest is another.

A justification, then, for the payment of interest is the costs imposed upon the banking system, and we must analyze these more closely. The essential point is that, whether the cost to the bank, in the first instance, of creating a certain amount of credit for the government be low or high, it will probably be substantially the same from year to year. But the interest charge on a series of injections of purchasing power constantly increases. To be more specific, suppose that the government borrows 100 monetary units each year and that the initial cost

[56] Meade, *Consumers' Credits*, p. 49. *Cf.* discussion in J. Pedersen, "Some Problems of Public Finance," *Weltwirtschaftliches Archiv*, vol. 45 (May 1937).

of making the loan — i.e., writing up the deposit, etc. — is 2 per cent. The initial cost of making the loan on each additional borrowing will probably not change much from year to year. But since the interest payments on each bond continue indefinitely, the amount paid as interest will not be equal to 2 per cent on 100 units but will rise, in absolute amount, in a series of 2, 4, 6, 8, 10, etc., continuing indefinitely to increase. Unless the bank's expenses also increase in some way, there will be a consequent increase in an income that may be largely unearned.[57]

Will the bank's expenses increase? It is clear that after the deposits created by the government are transferred to private hands the process will probably have resulted in a net increase in checking accounts. But the expenses of operating checking accounts would be taken care of by service charges, so that the banks would suffer no loss on that score. Savings deposits present a different problem, since the banks pay interest and operating costs upon them. Thus, insofar as the government borrowing results in a net increase in savings deposits, there is a tendency for bank expenses to rise as income increases from interest on government bonds. Up to the present, however, the banks have been able to lend successfully a part at least of their funds, and we must balance receipts from loans against the interest charge on savings deposits. To sum up, if all the deposits created by government borrowing become savings deposits, and if the banks pay the same amount in interest plus operating costs on savings deposits that they receive from government bonds, and if none of these deposits are profitably lent out to borrowers, then bank expenses would rise in the same degree that receipts from interest on government bonds

[57] It may be argued that the banks run the risk of a failure of the government to repay the bond. But conditions are such today that the banks can scarcely be thought of as having any credit of their own as distinguished from that of the government.

It may also be said that the government borrowing encroaches on bank reserves, but in times of excessive reserves this encroachment is not very serious. Moreover, government bonds are eligible for rediscount and hence have a certain limited use as potential reserves.

increase. But under any likely set of circumstances there will probably be a definite tendency for the income of the banks from government bond interest to exceed the cost of the services which the banks render. Tax friction and the tax burden, therefore, might be considerably reduced if an attempt were made to relate the price of creating credit through the medium of the banking system (interest) to cost of services rendered, instead of mechanically paying larger and larger amounts in interest as time goes on.

The writer has heard some persons, indeed, ask why interest should be paid on savings deposits at all. One is reminded of Marshall's footnote in his *Principles*:

> It is a good corrective . . . to note how small a modification of the conditions of our own world would be required to bring us to another in which . . . people would be so anxious to provide for old age and for their families . . . , and in which the new openings for the advantageous use of accumulated wealth in any form were so small, that the amount of wealth for the safe custody of which people were willing to pay would exceed that which others desired to borrow; and where in consequence even those who saw their way to make a gain out of the use of capital, would be able to exact a payment for taking charge of it; and interest would be negative all along the line.[58]

Whether one feels that interest on savings deposits should be abolished or not, it is clear that, *during a slump*, interest on these deposits can be and has been reduced to a very low figure. Thus the element in bank costs which might tend to rise with the interest bill on government bonds is minimized, and, while interest on government bonds also decreases, there may be an increasing tendency for the price of government credit to exceed its cost.

To sum up — as we have seen, low interest rates on government bonds introduce an element of instability in the banking system. High interest rates increase tax friction. But, low or high, the interest bill may tend to increase cumulatively when purchasing power is being successively injected, but cost to

[58] Alfred Marshall, *Principles of Economics* (1920), eighth edition, p. 582.

the banks may remain substantially the same or, at least, increase much more slowly. Thus in a long-drawn-out stagnation the discrepancy between the price of bank credit and its cost may, in certain circumstances, progressively increase, and so does an element of pure economic rent which may be difficult to justify. *Prima facie*, therefore, it seems worth while to investigate methods of financing the national debt without this cumulative interest problem. The matter will be discussed in greater detail in the next two chapters. For the present we will leave purely financial matters and consider some of the distributive and political aspects of a program of deficit financing and public works.

D. Some Distributive and Political Difficulties of Deficit Financing and Public Works

In this section we will first discuss some of the basic distributional difficulties of any public works program and then go on to questions of political administration.[59] Of course, a "spending policy" and public works are not necessarily the same thing. The government may merely finance unemployment benefits by deficit borrowing and require no work whatever of the recipients of its bounty. For the present at least, however, emphasis in America has been on "work relief" and public works, and accordingly we shall pay primary attention to them.

There are at least two basic difficulties in any public works program. The first of these is that public works of a desirable character cannot be found automatically at just the times and places at which, from a credit and employment point of view, they are needed. The second difficulty is similar to the first. It is found in the fact that the total of public works which can be introduced without creating bottlenecks and labor shortages, and the total amount of income or purchasing power which is needed at any one time, may not be the same. To plan scientifically a program of public works we ought to know a great deal more than we do now about our real structure of production. Finally, it must be remembered that the maintenance of

[59] Compare §§ 2 and 3 of Chapter VIII, this book.

full employment and the maintenance of money *income* are not always the same thing.

In previous chapters we have classified the conditions under which a program of purchasing power injection would be undertaken in two main groups: (1) a temporary discontinuity in the demand for capital goods; (2) secular stagnation resulting in long-continued hoarding. Naturally, these two groups are not hard and fast, and frequently it would need a prophet to say whether one were in a condition of temporary slump or secular stagnation. Nevertheless, for the sake of analytical clarity we shall have to treat these two main classes separately.

Redistribution of wealth — as has been earlier pointed out — would not be an adequate remedy for the business cycle, since it could not eliminate spasmodic changes in investment outlet.[60] But if we once feel sure that we are in a condition of secular stagnation, we have seen that a transfer to a high consumption economy appears necessary. If a depression be due merely to a temporary discontinuity in investment, then our aim should be to busy the "nonoperating" factors in public works until private demand picks up. But if we are convinced that private investment demand will not return to its former level, then we want to shift some of the "nonoperating" factors to the consumers' goods industries.[61] We want to increase consumers' goods plants.

In the case of a temporary investment slump a public works program suffers at present from the fact that we have no way of telling when private demand may pick up. If we wish to avoid labor shortage, bottlenecks, and scrambles for factors, our public works program must be most carefully planned or else of a type which can be easily suspended when private activity increases. Yet it is here that trouble may arise. It would be difficult, for example, to abandon Boulder Dam half-

[60] See Chapter III, this book.

[61] By "nonoperating" is not meant that these factors are not busy. This expression is used as a catchall for those factors which are not "operating" factors in the terminology adopted in Chapter I of this study. Perhaps D. H. Robertson's "instrument-making trades" comes closest to approximating what is meant.

finished, and not complete it until four or five years later when another slump came along. If by statistical research we obtained a better knowledge of the prospective movements of capital goods demand, such, for example, as prospective replacement concentrations, we might be in a better position to handle the matter. Yet, since forecasts of this sort could never be more than approximate, considerable friction must always be expected.

In addition to this general problem, there is the additional question of geographical distribution. Planting trees in Oregon will not directly help unemployment in Pennsylvania. Of course, as Professor Hansen points out, the increased demand for, let us say, machinery in the West will help to reëmploy industrial workers in the Eastern plants.[62] There may be good reasons for not wanting to transfer unemployed workers from, say, Pennsylvania to Oregon. Population transfer may not always be easily managed, and, once private industrial demand picks up in the manufacturing area, acute labor shortage may develop. Indeed, large-scale projects in new locations may result in the accumulation of a number of "vested" interests — vested in an economic rather than a legal sense — which are dependent on a special government market. When government support is withdrawn — even though recovery may be going on elsewhere — considerable hardship and depression may ensue.

It takes time to plan public works and time to start them. They are extremely unwieldy and inflexible. Moreover, the number of public works technologically permissible — that is to say, those which can be undertaken without creating eventual bottlenecks and labor shortages — may be quite unrelated, in time of panic, to the amount of purchasing power it is desirable to inject. Finally, in all our calculations the acceleration principle and the multiplier must be reckoned with as perpetual dangers of too-rapid expansion.

There is another important problem which arises in connection with both secular and cyclical stabilization. This is the

[62] Hansen, *Fiscal Policy*.

fact that, while a spending program will maintain *aggregate* stability, it may also hamper the forces making for economic adjustment. Modern economic theory has shown us that, owing to the mutual interdependence of all parts of our society, a depression in a single important sector is likely to spread over the whole economy. Stability therefore requires the maintenance of the aggregate money income. But there may well develop a conflict of partial equilibrium and general equilibrium concepts. To maintain aggregate income we may subsidize a particular declining industry, or the men employed in it, but the subsidy may simply serve to keep factors employed in one line when they should shift to another. Thus the spending may simply perpetuate a stalemate. Aggregate stability may continue to require subsidization, yet subsidization may prevent transfer. There is no apparent end to such a process.

Coming specifically to secular stagnation, a very serious difficulty centers around the propensity to consume. Unless the propensity to consume shifts, the community will continue to save in excess of available private investment outlets and the difference must be made up by public works *ad infinitum*. Public works can put everyone to work directly, but, unaccompanied by a shift in the propensity to consume, they pose no final answer to the problem. They will tend merely to perpetuate that relative overdevelopment of the "nonoperating" sector spoken of in Chapter II. The relation between schemes of purchasing power injection, the propensity to consume, and the distribution of wealth will be considered in section two of Chapter VIII on "Distribution and Redistribution." The problem is a complicated one which some advocates of public works, and most purchasing power injection schemes, tend to slur over.

The second topic of this section is the political difficulties of a spending program. We need only mention the usual political difficulties of the "pork barrel" sort. Graft, of course, there may be. Allocation of individual projects on political rather than economic grounds is certainly possible. Attention here, however, will be focussed on some of the more technical difficulties.

In the introduction to this chapter we spoke of the emphasis which the purchasing power injectors place on "a certain flow of money in a given time interval meeting a certain flow of goods in the same time interval." This is too flattering a description of, at least, the American spending policy. It is, for example, almost impossible to determine, with any great accuracy, from month to month by the United States statistics just what the *net* monetary injection of purchasing power may be. There does not seem to be, unless the executive officers have a plan, any definite criterion of any sort for the injection of purchasing power other than a vague feeling that we should spend until we get "prosperity."

Even if Congress and the administration knew exactly what their general policy should be, it is doubtful whether the present system of Congressional appropriation and administrative spending could carry out a policy. A truly scientific endeavor to relate the flow of money income to the flow of consumers' goods seems almost impossible. An executive body might do it (were the basic facts available), but unless Congress granted very broad discretionary powers to spend and borrow, administrative difficulties would be exceedingly great. Delicate problems of timing and amount are scarcely capable of being handled by so large a body as Congress, which, moreover, meets only intermittently. Only if entrusted to some nonpartisan board, such as the Federal Reserve Board, which can act *all* the time, could truly scientific use be made of the spending program or any program of purchasing power injection.[63] Yet the chances of friction between the board, the executive, and the legislature are obvious.

The American Congress and executive have, it is true, avoided inflation in their administration of the spending program, but only by remaining within narrow limits. The reference to "narrow" limits may appear paradoxical, but we should think of the proportional injection *per month* and not of the whole capital sum. The general bewilderment is reflected in the adoption of such conflicting measures as the Social Security taxes,

[63] See the discussion in § 3, Chapter VIII, this book.

which fell upon the one portion of the national income almost certain to be spent.[64] Very little general policy can be detected, and even if there were one it may be doubtful if the present system would be capable of administering it.

2. SOCIAL CREDIT

If the spending policy represents the most "orthodox" or accepted form of purchasing power injection, Social Credit is perhaps the best thought out and most nearly acceptable of the definitely unorthodox proposals.[65] In dealing with it we must not confuse Social Credit as originated by Major C. H. Douglas, the well-known Scotch engineer, with the Alberta experiments of Premier Aberhart.[66] Aberhart's plan was chiefly a species of stamped money proposal which had little in common with Social Credit beside the name.[67] It is not fair, therefore, to say that the Douglas proposals were given a trial in Alberta.

A cardinal principle of Social Credit doctrine is the famous "A + B" theorem which attempts to demonstrate an "inherent flaw" in the pricing system. Under this theorem nearly all the diagnoses of the cycle may be subsumed which maintain that society fails to disburse sufficient purchasing power to buy the current output of consumers' goods. For example, the work of Foster and Catchings on profits calls attention to a special case of the A + B theorem. While space is lacking for detailed discussion, it must be conceded that in a disturbed society "lags" of purchasing power may well occur at times.[68]

[64] See Hansen, *Full Recovery*, p. 188, "Deflationary Aspects of the Old Age Reserve Fund." This is not to say that moderate taxes for social security are not justified.

[65] For a comprehensive discussion of Social Credit see Hansen, *Full Recovery*, Chapter IV. An interesting but very unfriendly account is given by M. G. Myers in *Monetary Proposals for Social Reform* (1940), Chapter IV. The Social Credit views are perhaps most ably presented in Philip Mairet, *The Douglas Manual* (1934).

[66] William Aberhart was elected premier of the Province of Alberta in Canada in 1935, nominally on a platform of Social Credit.

[67] As to Aberhart's experiments and plans see Myers, *Monetary Proposals*, pp. 157 *et seq.*

[68] For detailed discussion of the A + B theorem, see Mairet, *The Douglas Manual*, and Hansen, *Full Recovery*. Mr. E. F. M. Durbin commenced as a

However, the Douglas analysis does not seem correct for a static state with full employment — and with this conclusion some of the Social Credit writers, including Douglas himself, appear at times to agree.[69] One special case should be mentioned in which Douglas and the orthodox writers concur. Douglas shows that it is impossible for the industrial system, as a *whole*, ever to get out of debt to the banking system without causing a general collapse. C. O. Hardy, D. H. Robertson, and Schumpeter, among many others, have all touched on this difficulty, though they do not necessarily share the conclusions Douglas draws from it.[70]

More extensive treatment of the A + B theorem cannot be given here, but the practical recommendations of Social Credit may still be evaluated, for, as Professor Hansen writes:

> Whether or not it is inherently impossible for the current financial system, as now operated, to supply the community with adequate purchasing power, it will at any rate not be disputed by anyone that modern communities are afflicted periodically with business depressions, and that it is a characteristic of these depressions — whatever the causes — that the productive resources of the community are not fully utilized.[71]

Social Credit wishes to utilize "excess" production, avoid depressions, and cure unemployment by maintaining and increasing purchasing power. This line of thought is, of course, somewhat overoptimistic. Maintaining purchasing power would not, by itself, cure or avoid those "real" factors which lie at

---

severe critic of Douglas in his book, *Purchasing Power and Trade Depression* (1938), revised edition. In his second book, *The Problem of Credit Policy* (1935), he appears, however, to have adopted part of Douglas's analysis and to have been much influenced by him. See Durbin, *Credit Policy*, esp. pp. 37, 135, 238 *et seq.* Keynes' analysis in the *General Theory*, pp. 98 *et seq.*, has considerable resemblance to Douglas's. See also his summary of Douglas's work, p. 371 of the *General Theory*.

[69] See, for example, a letter by R. L. Northridge in the *New English Weekly*, December 19, 1935, p. 197.

[70] See Hardy, *Credit Policies*, p. 333; D. H. Robertson, *Essays and Addresses*, p. 157; Schumpeter, *Economic Development*, p. 233 *et seq.*, and *Business Cycles*, p. 136. Schumpeter uses the term "autodeflation" for disturbances of this type.

[71] Hansen, *Full Recovery*, p. 91.

the base of cycles. Nevertheless, maintaining purchasing power is a first step and a necessary step toward such relative stability as can be achieved.

Social Creditors wish to inject purchasing power financed either by printing paper money, which in some way would be sterilized against multiple credit expansion, or by the creation of bank deposits backed by non-interest-bearing and largely nonnegotiable government bonds.[72] They thus attempt to avoid the increasing interest charges on the national debt which have already been referred to in section one (*c*) of this chapter. Provision is made for the imposition of taxes in case of over-expansion. It is quite erroneous to state, as Mr. Meade does, that "Major Douglas would, I understand, advocate the payment of consumer's credits at *all* times in every community." [73] Despite certain references to taxation as "legalized robbery," the Social Creditors realize keenly the possibility of an over-extension of credit. They carry their fears to the point of advocating a 100 per cent reserve banking system of the Irving Fisher type, and would tax away any "surplus" of buying power.[74] The United States Social Credit bill of 1935, introduced by Representative Goldsborough of Maryland, calls for a policy of price stabilization which uses as its principal guide the Bureau of Labor Statistics index of wholesale prices.[75]

With one important exception, the *theory* of Social Credit can scarcely be termed inflationary. The inflationary exception

[72] See, for example, the bill introduced by Representative T. A. Goldsborough of Maryland, H. R. 9216, 74th Congress, 1st Session, August 22, 1935, p. 17, "Clearing House Operations," and the revised bill of 1938, H R. 7188, 75th Congress. The writer has been given to understand that this latter bill does not always represent the Social Credit point of view. Social Creditors, he understands, are interested in comparing the "rate of flow" of prices with the "rate of flow" of income. Using excess capacity is, to them, a subordinate consideration.

[73] See Meade, *Consumers' Credit*, p. v.

[74] See the Goldsborough bill of 1935. Professor Hansen says that "Social Credit approaches but does not go quite so far as the 100 per cent Reserve Principle advocated by Sir Frederick Soddy, Irving Fisher and others" (*Full Recovery*, p. 94). But see the Goldsborough bill of 1935, p. 18 "The privilege of the commercial banking system to make loans and issue deposits against them on the basis of fractional reserves is hereby rescinded."

[75] See the Goldsborough bill of 1935, p. 5.

is found in the proposal, which appears in some of the Social Credit literature, to issue money against the capital value of the accumulated social heritage of the nation expressed in a "national account." [76] This proposal is definitely fallacious and resembles the famous French "assignats" issued against the land. It is the flow of consumers' goods — not the "capital value" of all public and private assets — which limits the injection of added money income.[77] But in the practical administration of their scheme the Social Credit emphasis on the *flow* of consumers' goods and the *flow* of income, as well as their insistence on a stable price level, might render the mistake a harmless error. Any serious price rise would probably call for the imposition of restrictive taxes.[78]

The most interesting feature of Social Credit is its method of purchasing power distribution. First of all, it is suggested that retailers should be subsidized to sell their goods to consumers below cost. The difference is to be made up by the government. Thus the plan is similar to the subsidy proposals of Kaldor, Cromwell and Czerwonky, and Ezekiel which have been previously discussed. But, whereas they subsidize employment, the Social Creditors subsidize consumption. The impressive theoretical advantages of the "national discount," as the

[76] See C. H. Douglas, "Draft Social Credit Scheme [for Scotland]," *New English Weekly* (July 20, 1933), p 319. Douglas suggests that we place a "money valuation" on the whole of the "capital assets" of Scotland, with no distinction between public and private property. He would add to this a sum representing the present "commercial capitalised value of the population." Then "for purposes of the initial stages an arbitrary figure such as one per cent of the capital sum" shall be taken. Every man, woman, and child of Scottish birth and "approved length of residence" shall be entitled to share equally in the dividend.

[77] And, of course, should the price level go up, the "capital values" would go up, which would then, under this scheme, justify another issue, which would raise prices still more, and so on *ad infinitum*. But I do not believe Douglas realized this possibility, and he would certainly not favor the course of events I have outlined.

[78] See the Goldsborough bill of 1935, p 22. "If in the opinion of the President of the United States the operation of the Retirement Fund . . . is not sufficient in any instance to check an unduly expanded monetary condition . . . the President is authorized . . . to establish a negative retail discount rate not to exceed 20 per centum."

subsidy is to be called, are discussed at some length by Mr. Durbin, but he reaches the conclusion, in which Hansen concurs, that the plan is unworkable practically.[79]

The retail discount, according to the United States Social Credit bill of 1935,

> shall be that percentage which unused productive capacity bears to total productive capacity. . . . Productive capacity shall be ascertained by estimating the total capacity of the industries and people of the United States for the production of wanted goods and services for the next preceding three months period for which figures shall be available; to this shall be added an estimate of imports. . . . Unused productive capacity shall be reckoned as the difference between total consumption and productive capacity. Consumption shall be ascertained by estimating actual domestic consumption of goods and services for the next preceding three months period . . . plus a fixed percentage for capital depreciation.[80]

The mention of capital depreciation is another example of the Social Credit confusion of capital and income, but there is no need to labor this point at length, and in the bill of 1938 mention of depreciation allowances is deleted.

Suppose the discount is determined as outlined above. Let us say it is 25 per cent. Then all retail goods would be uniformly marked down 25 per cent, and the government would make up the difference to retailers on a basis of sales vouchers.[81] Since the discount is a percentage figure and uniform for all industries, it would not affect relative prices and competition. But it would mean a detailed Federal supervision over the accounts and sales of every retailer in the United States, with great opportunities for fraud and friction.[82] A more practical

[79] See Durbin, *Credit Policy*, p. 135. Hansen, *Full Recovery*, p. 104.

[80] The Goldsborough bill of 1935, pp. 4–5.

[81] The Goldsborough bill of 1935, p. 6: "The retail discount shall be paid in the manner prescribed by the regulations of the Secretary of the Treasury, and the disbursals of said retail discount in trade shall be evidenced by suitable vouchers, or forms prescribed by the Secretary."

"As hereinafter provided, said vouchers shall be used in reimbursing the retailer for his disbursal."

[82] The Goldsborough bill of 1935 would use the discount as a means of establishing a species of N.R.A. See the Goldsborough bill of 1935, p. 7.

version of somewhat the same idea is being used by the Agricultural Department in its trading stamp plan for disposing of surplus farm commodities.

If there were a danger of inflation under the Social Credit scheme, a negative discount or sales tax would be applied which would abstract excess funds from the system. Thus, as Professor Hansen says, "If we could assume that costs would be rigorously kept constant, then a scientific application of the scheme might indeed prevent inflation." [83] Professor Hansen believes that retailers would welcome higher costs as a group: "For the higher the costs the greater would be the necessary discount and hence the larger the governmental subsidy." [84] Only in case of vigorous competition would individual producers fight to keep their own costs down. The scheme in Hansen's opinion would greatly increase the tendency toward monopoly.

Professor Hansen also feels that Social Credit would "monetize" all sorts of unwanted goods that ought never to have been produced. "Inevitably some sort of restraining influence must be applied." [85] In saying this he has missed the suggestion contained in some of the Social Credit literature that the discount be denied to those firms which, after a period, fail to make a profit.[86] This would in effect raise the retail price of the goods offered by a concern in difficulties and would certainly tend to eliminate it. Yet the suggestion does not meet the difficulty encountered when a concern goes into bankruptcy, reorganizes, and thus lowers its prices. The scheme of eliminating firms which fail to make a profit is, moreover, based on the idea that pure profit is a cost of production. It is possible, however, in a world of "vigorous competition" for a concern to be

[83] Hansen, *Full Recovery*, p. 105.

[84] *Ibid.*

[85] Hansen, *Full Recovery*, p. 108.

[86] See the Douglas "Draft Scheme for Scotland": "Undertakings unable to show a profit after five years' operation to be struck off the register." "Unregistered firms will not be supplied with the necessary . . . forms . . . with the result that their prices will be 25 per cent, at least, higher than those of registered firms." These provisions were planned as a rough-and-ready method of getting rid of unwanted products. Still it would not be a very efficient one; five years is a long time to issue credit against unwanted goods.

producing *wanted* goods, yet still to be making no profit at all.

The second method of distribution advocated by the Social Creditors is the "National Dividend." They wish to mail checks for a certain definite sum to every member of the population regardless of the size of his income. The "National Dividend" is an alternative or complementary method of distributing purchasing power. Thus if the "percentage which unused productive capacity bears to total productive capacity" is 25 per cent, then the "discount" might be 12½ per cent, while the remaining 12½ per cent would be distributed through the "dividend." Or either one alone might be used.

Considerable criticism has been made of the idea of sending checks to everyone. Thus if the dividend be $5 monthly, as called for in the United States bill of 1935, the $5 would make very little difference to wealthy and middle-class recipients, while to, say, the Southern negroes, it would make an immense difference. It would be almost impossible, initially at least, to tell definitely how much of the money injected would actually be spent and how much hoarded, and a wide margin of error would have to be allowed. The statistical difficulties of estimation are patent.

Leaving aside questions of statistical difficulty, the payment of an equal sum to everyone is criticized on the ground that it unduly helps the rich. To this the Social Creditors reply that the "unused capacity" is the birthright of the *entire* nation and should be distributed accordingly. But if the "gap" of purchasing power be due, say, to the unemployment of the laborers in the heavy goods industries, *those* particular laborers are not going to be helped by giving money to everyone else. There are clearly intricate difficulties of distribution.

The Social Credit philosophy, however, places most of its emphasis on increases in *general* purchasing power and does not appear to be greatly concerned with questions of distribution as between groups. In particular, Social Creditors have not, to the writer's knowledge, developed any explicit machinery for dealing with the problems of redistribution which are probably entailed by attempts to change the aggregate pro-

pensity to consume in times of secular stagnation.[87] Presumably the "dividend" and "discount" might be set at so large a figure that, even making allowance for the hoarding of part of society, the purchases of the remainder section — most likely the poorer part — would still serve to maintain or increase consumption. Yet suppose that, after liquidity preference is saturated, the wealthy commence to dishoard and to invest or consume. In that case, in order to avoid inflation, the dividends and discounts must be lowered, or else the wealthy taxed and the dividends to poorer persons indefinitely continued. As J. E. Meade points out in connection with his scheme, the poorer classes, after first enjoying an increase in their standard of living, might be deprived of their extra benefits in order to avoid inflation.[88] That such a situation could cause considerable friction is obvious.

One final point must be mentioned. Social Credit and any other scheme which contemplates unusual changes in the currency system can only be undertaken safely in a large, well-balanced national community with strong gold reserves. Take the province of Alberta in Canada. It is largely an agricultural one. Were Social Credit installed, the monetary buying power of the Albertans would be greatly increased. They would buy or attempt to buy manufactured goods from other provinces and countries. The "trade balance" of Alberta would become "adverse." The "money" or "warrants" would depreciate. In the long run Alberta can buy no more manufactured goods than she can give agricultural products in exchange. If the exchange value of agricultural products is low, there is no way in which Social Credit can remedy this. Social Credit is equally inapplicable to New Zealand and perhaps to Australia. Certainly it could not (even leaving aside legal difficulties) be applied in a single state of the American Union. The United States *as a whole*, however, is so nearly self-contained and strong in gold reserves that a careful program of purchasing power injection

[87] See Chapter VIII, § 2, this study, for a discussion of the problem at greater length.

[88] Meade, *Consumers' Credits*, p. 34, "An Objection to the Principle."

need probably fear little difficulty from the foreign currency situation.

We may thus conclude that, while the theory of Social Credit is, with one exception, noninflationary, the plan has very serious weaknesses both in practical administration and as regards the propensity to consume. Nevertheless, in fairness to Douglas it should not be forgotten that he began working in the correct general direction at a time when the majority of trained economists were still confined by a rigid monetary "orthodoxy" — now almost completely discarded.

3. MISCELLANEOUS SCHEMES OF PURCHASING POWER INJECTION

Mr. J. E. Meade in his *Economic Analysis and Policy* and *Consumers' Credits and Unemployment* is perhaps among the first reputable and orthodox economists to espouse a program of direct purchasing power injection financed not by loans but by printing special issues of notes.[89] His plan, as explained in detail in the latter book, is taken over almost entirely from Major Douglas. Meade avoids the Social Credit confusion of capital and income and he discards the "discount," but the remainder of his plan is largely drawn from Social Credit.

Dividends to consumers of less than a certain income are to be financed by means of "issues from the Treasury of new money which bears no interest." [90]

> The banks should agree (?) not to treat the consumer credit notes as cash, and not to pay them out again as cash when they have once been paid into the banks. . . . In return the government would agree, in the event of any bank finding it difficult to pay out cash to its depositors, to accept liability for an amount . . . equal to its [the bank's] holdings of consumer credit notes, so that . . . they could safely cover with consumer credit notes an amount of their deposits equal in value to their holding of these notes.[91]

The principal original feature in Mr. Meade's analysis is the use of the volume of *employment* as the criterion of injec-

[89] See J. E. Meade, *An Introduction to Economic Analysis and Policy* (1937), and *Consumers' Credits*, already cited. [90] Meade, *Consumers' Credits*, p. 44.

[91] Meade, *Consumers' Credits*, pp. 81–82.

tion. Meade distinguishes between (1) intermittent or "seasonal" unemployment, (2) structural unemployment, mainly arising from the ousting of old industries by new techniques, etc., and (3) depression unemployment.[92] He proposes an issue of consumer credit notes whenever unemployment rises above 13 per cent and the imposition of a special tax when employment falls below 11 per cent.

This suggestion, however, could be quite inflationary. It tends to overlook the existence of asymmetry in the real structure of production. Where the capital goods industries are depressed because of a shortage of new investment outlets and replacement slump, a dumping of consumer credit notes on the market without reference to the price level and solely with regard to employment might cause a great rise in the price of consumer goods.[93] The trouble with Meade's analysis is that, like many theoretical economists, he seems to consider the cycle a purely monetary affair.[94] The work of Robertson, Einarsen, etc., is overlooked, and it is apparently thought that consumption and employment must necessarily move together. Such an idea is definitely not always true, and Mr. Meade's scheme — even if he succeeds in disentangling his different kinds of employment — is therefore faulty. Meade also fails to develop problems of secular unemployment. His books, however, contain extremely valuable discussions of other aspects of the problem.

Another economist of good standing who has approximated the Social Credit recommendations is Professor Jesse H. Bond of the University of Oregon.[95] Professor Bond proposes that the Bureau of Labor Statistics index of wholesale prices, with certain adjustments, should be used as the guide for the injec-

[92] Meade, *Consumers' Credits*, p. 1.

[93] Mr. Keynes' definition of inflation (*General Theory*, p. 303) might encourage Meade's point of view.

[94] Yet his reference to durable consumers' goods (*Consumers' Credits*, p. 16) might have led him to something approximating the "replacement wave" analysis.

[95] The writer's information is drawn from an unpublished memorandum by Professor Bond entitled *A Consumptionstat, Its Nature and Necessity*. I am greatly indebted to Professor Bond for permission to read this work.

tion of purchasing power. This, of course, is substantially the Social Credit proposal. Purchasing power will be inspected by the issue of Federal trading stamps to consumers, redeemable in cash. Thus we have another, and more workable, form of the Social Credit "discount." When the index falls below 95, stamps will be issued; and when it rises above 105, a sales tax will be imposed. It is hoped that the taxes in prosperity will redeem the stamps issued in a slump, but any difference will be made up by, apparently, regular deficit financing and high progressive inheritance taxes. Professor Bond's idea is thus essentially no more than deficit financing with payments direct to consumers rather than via public woks. It has, therefore, many of the merits and demerits of a spending policy which have already been discussed in detail. Professor Bond has an elaborate diagnosis of the business cycle which closely approximates that of Major Douglas. The emphasis on the role of depreciation allowances is also quite similar to that of Keynes.

Professor Bond's suggestion regarding trading stamps is worthy of study, and a somewhat similar scheme is now being used by the Department of Agriculture. The use of the B.L.S. index of wholesale prices appears, however, to be somewhat too mechanical. As has already been pointed out, a stabilization of consumption need not imply a stabilization of employment.

Another scheme which must be briefly mentioned is Technocracy.[96] Now quiescent, Technocracy was at one time extremely prominent in popular discussion. The principal idea here is the issuance of notes on some sort of basis of man-hours or "ergs." The basic defect of this scheme is the basic defect of the labor theory of value, namely, that the amount of energy or labor that goes into a good has no necessary relation to the amount people want of that good. The idea is naïve and mechanical and overlooks the subjective nature of desires, though it might possibly be qualified to take some account of

[96] See Allan Raymond, *What Is Technocracy?* (1933); and J. E. Johnsen, *Select Essays on Capitalism and Its Alternatives* (1933).

the point. Engineers will always be able to calculate the most efficient method of producing an article — but will the public want it? The essential unreasonableness of human tastes will always foil too elaborate a rationalization program. When such a program is attempted it is likely to degenerate into a dictatorship of the producer. Note the following quotation from *What Is Technocracy?*

> A certain degree of liberty of choice as to what goods a person shall consume is to be *granted* by the engineers. But the technicians in charge of the state will *decide* what goods society needs the most, and how much of them it is socially valuable to make.[97] [Italics added.]

One final scheme may be briefly mentioned though it belongs more properly in the chapter on changes in bank policy. This is the "Multiple Commodity Reserve Plan" recently proposed by the "Committee for Economic Stability." [98] The plan would set up "commodity units" consisting of a composite of, say, "twenty-five or more basic, storable raw commodities." The relative amounts of the commodities in the unit would be determined by their "relative importance in commerce." There would be "periodic but infrequent" changes in the commodity units. If the aggregate market price of the group of commodities should begin to fall, anyone could buy those commodities on the exchanges, deliver to the Treasury a group of warehouse receipts, and take out their equivalent in currency. Should prices rise above the total redemption value of the group, anyone could withdraw units from the Treasury at a fixed currency value and sell them on the market. The plan is advocated as a "superior alternative" to public works expenditures, and "other" such means of providing employment in times of depression. It is also pointed out that "a large sector of the economy would be sustained or even stimulated in any

[97] Raymond, *Technocracy*, p. 99.

[98] My information and the quotations reproduced here are drawn from a circular sent out by the "Committee for Economic Stability," January 15, 1941. See also R. A. Lester, "Gold Money, Bank Money, and Real Money," *Virginia Quarterly Review*, vol. XVII (Spring 1941).

incipient depression, just as gold mining is now stimulated under similar circumstances."

To discuss such a proposal adequately would involve an evaluation of the enormous literature on price stabilization. Since this is beyond the scope of the present study, only two principal observations will be made. In the discussion of the cycle in Chapter II it was pointed out that the fundamental unstabilizing factor in our economy seemed to be the discontinuity in the demand for capital goods. These capital goods are not necessarily "basic, storable raw materials." The capital goods industries we saw were overbuilt for *continuous* operation.[99] The commodity reserve plan, insofar as it would concern capital goods, would operate as an attempt to subsidize the continuous operation of the capital goods industries and as such would be liable to most of the difficulties and bottlenecks which were indicated in Chapter II and in the discussion of Ezekiel.

The second main criticism is also similar to that made of Ezekiel's scheme. Under the commodity reserve plan, since it is offered as a "superior alternative" to public works and "other such" methods of increasing employment, the government, if it wishes to increase purchasing power in time of slump, is apparently limited to the purchase of a certain group of commodities. But even the purchase of *all* the stocks of the selected commodities and of their current production might not suffice to inject adequate purchasing power. Also, while a great stimulus might be given to the production of certain articles, these might be some of the very ones which were already being *relatively* overproduced, and the plan could operate to accentuate a distortion of the real structure of industry. Finally, if the propensity to consume is too low, it has been suggested earlier in this study that payments to persons of small income would serve to increase the aggregate propensity to consume. Under the commodity reserve plan such payments

[99] This is looking at the matter from the point of view of a closed economy. In foreign trade our "surplus" capital goods might be absorbed, but foreign trade considerations are outside our particular field here.

would only be made via the increased production of the commodity units and might be quite inadequate for the purpose. Thus the commodity reserve plan offers a rather restricted method of stimulation not related directly to such problems as the need for changes in the propensity to consume, liquidity preference, etc. For these reasons, it does not seem to the writer that it offers an adequate substitute for more direct methods of maintaining purchasing power. The scheme might prove to have a degree of usefulness as a subordinate measure, but it is not, in itself, an adequate means of ensuring full employment or aggregate stability.

The various plans mentioned in this section have been given a rather cursory treatment, and there are literally hundreds of others which could be discussed. The investigator, however, soon comes to recognize certain basic ideas which are repeated again and again. The combinations in which the different methods are brought together vary considerably, but, once the component ideas are grasped, there seems no point in attempting to enumerate all the various suggestions that have been made to date. We shall therefore pass on to the next chapter, in which a comprehensive synthesis is attempted.

CHAPTER VIII

SYNTHESIS

THE PRESENT chapter is primarily constructive in purpose. In this study so far we first considered the reasons why purchasing power creation and stabilization were sometimes felt to be desirable, and next discussed some of the principal methods suggested for carrying out such a policy. In this chapter we will try to piece together the results of our critical survey. Is it possible to derive, from the various plans so far treated, a scheme which will be workable, noninflationary, and superior to the methods now used? We will try to answer this question, and then, having completed our synthesis, we will proceed in the final chapter to criticize and evaluate it in the light of general economic theory and political conditions. For the present, however, criticism will be largely subordinated.

In the first chapter of this study an attempt was made to demonstrate that the causes of industrial fluctuation, unemployment, and insecurity were far too deeply rooted to be eliminated by monetary means alone. The cycle was traced to innovation, replacement concentration, and changes in general investment opportunity, and it was said that no program of redistribution or injection or both, by itself, could eliminate the *discontinuous* and jerky nature of investment outlet which lies at the base of the cycle. Even though we could not eliminate cyclical unemployment, however, it was concluded that a first step and a necessary step in that direction would be taken if it were possible by some method to maintain consumers' purchasing power in a slump.

It must be understood that this study is concerned primarily with the prevention or amelioration of secondary deflation after a crisis but before the downturn has gathered momentum. As Professor Haberler and many others have pointed out, there

may be times when a failure to *decrease* consumption is the cause of the crisis.[1] But such occasions as these are likely to arise at the height of a boom when there is substantially full employment. A plan of the sort we are seeking to evolve, would not, from its very nature, be invoked in a period of rising prices and full employment. In the same way we were not thinking of an attempt to offset a fall in the price of consumers' goods or a decline in their consumption which resulted from a "fundamental change in time preference for present over future goods" under conditions of full employment.[2] Our aim, as far as cycle policy is concerned, was merely the relative stabilization of consumption when factors are unemployed.

The argument, however, passed from a consideration of the cycle to an examination of secular stagnation. Secular stagnation presented a larger problem than the mere maintenance of consumption in a slump. The difficulty was pointed out of saying *a priori* whether or not there would be in the future a general slowing-down in the rate of expansion and innovation, though the rate of growth of population appeared definitely on the decline. Once, however, it was decided to proceed on the hypothesis of a permanent reduction in investment outlets, it seemed that a long-range program of redistribution was probably necessary. However, it was indicated that it was a mistake to assume the existence of any relatively great surplus capacity in the consumers' goods industries. Unemployment and "overexpansion" were concentrated in the capital goods industries, not in the manufacture of consumers' goods. To cure this condition *more* capital goods were needed though of a different type. We needed fewer blast furnaces and more clothing plants, etc., etc. However, saying that we needed more consumers' goods plants was equivalent to saying that we needed more *investment*, though, to be sure, of a largely different type than had previously obtained, and this conclusion, in the short run at least, was of considerable importance in the matter of redis-

[1] Gottfried Haberler, *Prosperity and Depression* (1939), revised edition, p 104.

[2] See, for example, the discussion of Hayek's theories by A. H. Hansen, *Full Recovery or Stagnation?* (1938), p. 73.

tribution. For, if too enthusiastic a program of progressive taxation were imposed, the inducement to invest might be seriously reduced and the stimulus to consumption waste itself in higher *prices* but with no real increase in consumption.

At this point purchasing power stimulation again entered the picture. If, instead of imposing heavy income taxes in stagnation, it were possible to offset hoarding by purchasing power injection without an increase, or at least without a proportionate increase, in current taxation, adverse effects upon the marginal efficiency of capital might be much reduced. Taxation could be deferred until any really inflationary tendencies showed themselves. Barring repercussions on confidence or expectations, later to be discussed, a process of injection which maintained or increased the marginal efficiency of capital in the consumers' goods industries, without a corresponding increase in taxation, should lead to an increase in investment in the consumers' goods industries and in consumption. Realized profits in the consumers' goods industries may be raised by making money payments to poorer persons, thus increasing consumption. An increase in realized profits should lead after a time, *ceteris paribus*, to an increase in the marginal efficiency of capital.

Again, it was shown that it was the essence of the Keynesian criticism of the demand and supply for loanable funds theory of interest that the latent *ceteris paribus* assumptions were quite invalid. An increase in the rate of saving or a decrease in the demand for new investment would, *ceteris paribus*, diminish total income and be likely to send the economy into a deflation *before* there could be any readjustment of interest rates and the propensity to consume. If, however, aggregate money income were maintained, the chances for an adjustment would be greatly increased. Thus in both instances, and without necessarily subscribing to any purely monetary theory of the cycle, the conclusion was reached that a good case could be made out for the injection of purchasing power as an ameliorator of the cycle and of stagnation. In succeeding chapters the long-range ineffectiveness, and short-range disturbances were

demonstrated which were likely to result from an attempt to redistribute wealth and increase purchasing power by changing the level of money wages. We also stopped to define "inflation" as the condition which resulted when an increase in attempted spending exceeded the adaptive power of the time-elasticity of supply so that a price rise ensued which seriously affected the purchasing power of the fixed-income classes and money debts in general. Specific schemes were then discussed. Let us now see what the result of our examination has been. What sort of system can we evolve? The problem will be treated under three heads: (1) finance, (2) distribution, (3) politics. The first heading is perhaps the easiest, and we shall begin with it.

1. FINANCE

The first group of suggestions dealt with in this study is the group entitled *Bank Credit and Changes in Bank Policy*. The essential weakness of bank credit as a means of stabilization is its fundamentally passive nature, and none of the suggestions discussed seemed to come to grips definitely with this problem. Mr. Berle's "Capital Bank" is either a sophisticated version of the spending policy or else an attempt to infuse new life into the American and Central European tradition of long-term bank credit. His plan might not cause an inflation in a slump, but as a permanent policy it could, it is believed, easily get out of control. *Aside* from positive government subsidies, etc., the suggestion is not a "causative" one, as Berle appears to think. His bank, like other banks, would in the main have to wait for customers to come to it, though it might offer more generous terms than other banks.

Even more definitely passive is the 100 per cent money suggestion. Mr. Berle thinks the banks lend too little. The 100 per cent money men think they lend too much. Both are right — but at different times. Both seem to make the mistake of thinking that the instability comes primarily from the banks rather than that the banks reflect the instability. One hundred per cent money might help to restrain overexpansion in a boom,

and in a slump it would mitigate the scramble of the banks to become liquid, but it would not help to stimulate in a slump or stagnation. And the system would definitely not prevent slumps.

More "causative" are the negative interest rate and subsidy plans. Here, too, however, we run into the fact pointed out by D. H. Robertson that at times the market for capital goods may have temporarily collapsed for *physical* reasons.[3] General subsidies might not help much in such a situation and would run into problems of bottlenecks, etc. Preferential subsidies to the consumers' goods industries might be of assistance in the short run, but we must not forget the dangers pointed out in Chapter I which might arise from an attempt permanently to transfer idle factors to consumers' goods production as a means of *cyclical* stabilization. Mr. Ezekiel's guaranteed output plan took notice of some of these problems but overlooked the necessity of bringing about a change in the propensity to consume in a period of secular stagnation. Taxes and subsidies, however, might theoretically be so manipulated as to take care of this problem.

The "velocity stimulators," the second main group, therefore presented a strong *prima facie* case as a means of dealing with secular stagnation, for by taxing idle funds they sought to *force* hoards into circulation. As a remedy for the cycle, however, they tend to overlook those real discontinuities in the demand for capital goods which underlie boom and slump. Closer analysis of velocity stimulators revealed a number of weaknesses, even as a means of dealing with secular stagnation, and for reasons given in Chapter VI the purchasing power injectors were preferred.

It must not be supposed, however, that many of the objections raised against the velocity stimulators are not also applicable to the injection of purchasing power. The difference is frequently only one of degree. For example, it was pointed out, regarding the taxation of idle hoards, that if the initial disturbance increased risk sufficiently to negative the temporary increase in realized profits resulting from increased monetary

[3] D. H. Robertson, *Banking Policy and the Price Level* (1926), p. 95, note.

demand, then prices might be raised all along the line without a great increase in investment and real consumption. Once costs overtook selling prices, the initial stimulus would disappear.

This statement is also theoretically possible with a program of purchasing power injection. Entrepreneurs might, in times of great lack of confidence, simply pocket their temporary gains without increasing output. Even in such a condition no initial price rise need result from purchasing power injection. The initial payment, if made to poorer persons whose propensity to consume was high, might exhaust inventories of consumers' goods and thereafter might be hoarded. It is true that, if confidence were at such a low ebb that no new orders would be placed by entrepreneurs on any terms, a second injection of purchasing-power after inventories were exhausted would only raise prices. But a second injection need not be made, and thus no price rise need necessarily result, unless, of course, the business community temporarily raised prices in expectation of another injection. It is unlikely that such a condition of absolute lack of confidence would arise from deficit financing, but before considering the matter in more detail let us see what would happen in the case of a heavy tax on idle hoards in similar conditions of absolute lack of confidence.

A tax on idle hoards might also induce no rise in prices just at first (though the precise degree of stimulus would probably be less susceptible of forecast). Like an injection of purchasing power the initial increase in spending need only clear the shelves, as it were, without raising prices. But, unlike the case of purchasing power stimulation, there could be very little hoarding because of the tax imposed on hoards. In consequence, the funds released would have to be spent and respent, and, if there were no increase in output, prices would go up all along the line. Thus the disturbance to price levels in a condition of absolute or very great lack of confidence would probably be much greater in the case of a tax on hoards than with a program of purchasing power stimulation.

It is much more likely, moreover, that confidence will be upset by a heavy tax on idle hoards than by a program of, say,

deficit financing. A tax on idle hoards heavy enough to force any great dishoarding would interfere, it is likely, with the personal habits and concerns of nearly every individual. Deficit financing, however, or more unconventional types of purchasing power injection, could be introduced almost imperceptibly to the great majority of persons. Therefore, it is probable that if consumer demand be maintained or increased by a program of purchasing power injection, consumer goods output will also be maintained or increased to satisfy that demand, though, if confidence be impaired, long-term investment is likely to be postponed. Hoards meanwhile would be accumulating in the hands of the public and, barring a flight from the currency itself, would tend gradually to satisfy liquidity preference. These problems will be examined in greater detail later on.

To return to the taxation of idle hoards, it is probably an actual disadvantage that the measure would be so immediately effective. For people would be forced by the tax to spend within a relatively short period all along the line, and the major stimulus to profits would come just at the time when the risk factor due to the introductory crisis was greatest, and, in consequence, just when entrepreneurs were most reluctant to increase output. Prices might rise all along the line and profits disappear, as costs rose, before any very great increase in output or consumption had ensued. The production of commodities suitable for hoarding in real terms might be increased, but, barring this, the tax might have done all that it could. Short of an even higher tax nothing more could be done.

We have contrasted, so far, purchasing power injection by itself with a tax on hoards by itself. It may be that a moderate tax on hoards in conjunction with a "spending" program might do some good without creating too much disturbance. Certain types of taxes on hoards might possibly sometimes be preferable to a steeply progressive income tax. But it would probably be difficult to adjust the tax so as to obtain just the necessary amount of spending. Perhaps a refund on the income tax of individuals spending more than a certain percentage of their income might have some effect. However, the injection of pur-

chasing power seems definitely preferable to the taxation of idle hoards, because purchasing power injection is less likely to create initial disturbance, is more flexible, and makes it easier to relate the stimulus of consumption to the flow of consumers' goods. It must be remembered that the taxation of idle hoards is, on any count, not an appropriate cycle remedy.

Even after we have decided that purchasing power injection is probably the best plan, the emphasis on confidence leads to another question. Does the confidence argument alone suffice to justify the present somewhat awkward and expensive method of deficit financing, or is it possible, without creating too much disturbance, to invoke more unconventional but cheaper methods? To answer this question we should know something of the working of the alternate proposals.

The discussion of governmental regulatory machinery will be postponed to section three of this chapter. In consequence the special political weaknesses of schemes of purchasing power creation will not be treated here. But, before examining some of the other methods of injecting purchasing power, we should summarize the financial objections to the present system. It will be remembered that the burden of an internally held national debt was found to consist largely of tax friction.[4] This tax friction was to a considerable extent the outgrowth of the necessity for taxing in order to pay interest on the national debt. A removal of the necessity for paying interest would therefore seem to remove one of the principal causes of tax friction. Another financial objection to the payment of interest on the national debt lay in the possible tendency for the price of credit to the government to outrun its cost to the banks. Finally, fluctuations in the value of government bonds, owing to changes in the rate of interest, were a source of instability to the banking system. These objections are not necessarily fatal to the present system of deficit financing, but they do make a weighty case against it. The remainder of this chapter, therefore, will discuss the possibility of a system in which purchasing power is injected, during a slump, without incurring an

[4] See § 1 (b) of Chapter VII, this book.

interest charge, and in Chapter IX we shall attempt to make a final evaluation of the two systems.

It should be clear, though, that *no* program of purchasing power injection which expects to avoid inflation can entirely escape the necessity of taxation at *some* point of time. However, the time at which the tax is imposed can be shifted and also the amount of tax needed may in some circumstances be greatly reduced. As Professor Pedersen says, the national debt should "never be repaid for its own sake" but only when repayment has a "beneficial effect on economic life." [5] To explain in more detail, if we inject purchasing power into the system by one method or another, then the money may for a time be hoarded. If business activity revives, a certain amount will be dishoarded and may have to be removed from the system in order to avoid inflation. But some of the funds will be absorbed in the increased business activity and in maintaining the price level despite an increase in real income. This could occur although there was no substantial price rise or no price rise at all. Further, some of the money hoarded may never be dishoarded, and until there is some real danger of inflationary price rise there is no purely monetary reason for taxing it in. To sum up, when the advocates of the various plans we are about to discuss speak of "avoiding taxation," they should mean first that taxes for interest, as distinct from service charge, would be avoided *in* a slump, second that the taxation and cancellation of the purchasing power injected should take place only as a matter of credit control and not as a mandatory repayment, and finally that even if we do have to tax or cancel, in a boom, in order to eliminate excess purchasing power, there is no guarantee that we will need to tax *as much* as if we automatically repaid all that we had "borrowed" from the banks under a deficit financing system. Thus a considerable saving in tax friction might be made. Taxation during the slump need

[5] See J. Pedersen, "Some Problems of Public Finance," *Weltwirtschaftliches Archiv*, vol. 45 (May 1937). This article, which is in many respects extraordinarily consonant with my own point of view, was only brought to my attention after this book was completed and ready for the printer.

not be increased and during the boom might not be so severe as otherwise could be the case. The matter of taxation will be considered in more detail in the next section of this chapter.

Coming now to specific schemes, a plan to maintain consumption must conform to at least four general criteria: (1) it must not be inflationary; (2) it must not alarm the general public and bring the intrinsic value of the currency into question; (3) there must be a minimum dependence on confidence and a minimum institutional friction; (4) permanent dislocation of foreign trade and injury to the external value of our currency must be avoided. There are also certain more specifically financial requirements which must be borne in mind. Postponing for the moment a consideration of the proper standard of policy and assuming that we have decided how much we wish to inject from period to period, we must (a) keep watch against possible inflationary effects of increased reserve balances and multiple expansion; (b) be able to sterilize excessive accumulations of idle balances should they be released.

The traditional and direct method of increasing the national money income without borrowing or taxing "idle" hoards is the printing of paper money. But issues of this kind are open to objections. One of these is that they would add to bank reserves and serve as a potential basis for multiple expansion. Mr. Meade attempts to meet this objection by suggesting a special issue of notes which the banks would "agree" not to use as cash, or to pay out again as cash, or to use as a base for multiple reserves. They would be counted as reserves for deposits to the extent of their face value only.

Mr. Meade's scheme is theoretically adequate, with one exception later to be noted, but on the whole it appears inadvisable because of the second criterion laid down at the beginning of this discussion. A monetary scheme, it was there said, must not alarm the general public and bring the intrinsic value of the currency into question. Nowhere should anyone be confronted with a type of currency or means of payment different from that to which he is accustomed. Confidence might be more adversely affected if the public sees and handles

a form of currency parallel to that which it is accustomed to use, and perceptibly different from it.

It has also been suggested that the government sell its bonds directly to the central bank, but this has the disadvantage that when the balances created in favor of the government are spent they will be added to the reserve balances of the member banks and hence become a possible source of multiple expansion.

The proposals contained in the Goldsborough bill of 1935 are perhaps the most elaborately and carefully worked out in regard to objections of this sort.[6] We are speaking here of machinery and not of criteria for injection. In outline, the proposals are to finance government spending of a particular type by the issuance to the commercial banks not of bonds, as at present, but of "credit certificates."[7] Deposits would be created as now in favor of the Federal government by member banks who might charge a service charge on deposits so created, but the type of security for the deposits would be changed. The "credit certificates," unlike government bonds, would bear no interest, would not be eligible for rediscount, would be redeemed only at the option of the monetary authority, and could be counted as reserves, but only to 100 per cent of their face value.

While not eligible for rediscount in the ordinary sense of the term, in case of a sudden run, or emergency demand, on a particular bank the credit certificates could be redeemable in cash for short periods of time by the Comptroller of the Currency. After the crisis had passed, the special issue of currency would be returned to his hands. The method is similar to that used by the Bank of England when unable to meet emergency demands.[8] Should a bank become insolvent the F.D.I.C. and other creditors would be reimbursed by the treasury to the face value of certificates held by the bank. An advantage of these certificates would be that they would meet the objection

[6] H. R. 9216, 74th Congress, 1st Session, August 22, 1935.

[7] The special method of distribution advocated in the bill was the Social Credit "discount" and "dividend." But the particular financial machinery could be used for any type of distribution.

[8] See A. E. Feaveryear, *The Pound Sterling* (1931).

sometimes urged that deficit financing tends to increase deposits excessively relative to capital stock of individual banks. If the increase in deposits is matched by a riskless asset which cannot depreciate, this problem is greatly reduced.

Should the credit authority, later to be discussed, feel that there is danger of an overexpansion of credit through the release of idle deposits, and should it feel that the ordinary weapons of credit control are not enough, it should have the power to impose a sales tax of some sort and with the funds thus collected it should repay and cancel the certificates in the hands of the banks. But this taxing and cancellation is definitely a measure of credit control and not a mandatory repayment. Under the Goldsborough bill a 100 per cent reserve is to be introduced for the whole system. But, with one exception, shortly to be discussed, we might treat it as if only the "certificates" were to be reserves for 100 per cent of their face value, and the remainder 20 per cent system left undisturbed. If there are no excess reserves, repayment of the certificate will result in a *decrease* of total deposits by the amount taxed and repaid.[9] If there *are* excess reserves, the result will be merely a transfer of funds from private depositors to the banks which will, however, reduce M until bank loans increase.

[9] By repaying the certificates the reserves of the banks are decreased, and, unless excess reserves are available, loans will have to be curtailed somewhere. This would be true even if the bank took the funds paid them by the government and bought securities, for the net effect would be to increase or maintain deposits somewhere in the system.

Perhaps this point should be explained in some detail. Let us consider the banking system as a single bank. Or else let us think of a single bank in a system all of whose members are in about the same reserve situation and expand and contract simultaneously. Suppose, in either of these cases, the bank, or a bank, to have deposits of 900 and a reserve balance of 100. If reserves required are in a ratio of 10 to 1, then the bank is free to lend 100 more. Suppose it does so to an individual, taking a mortgage as security. Suppose now the individual receives 100 in checks on the same bank and uses them to repay the loan. The mortgage is canceled, deposits drop to 900, and 10 of reserves is set free. So the bank can lend 100 to someone else.

Now suppose the government "borrows" 100, giving certificates as security which are *counted as part of reserves to their face value*. The lending capacity of the bank is then in no way affected. It can lend to others just as much as it could before the "loan" to the government was made. Suppose now the gov-

In order, therefore, to be effective the retirement policy must be accompanied by appropriate reserve control measures. The two together would be entirely effective.

Disregarding the broader issues of possible mismanagement and political friction, it would appear that the machinery set up in the Goldsborough bill of 1935 is financially workable. However, there is one point in which friction might develop in similar schemes of this sort. We spoke, in discussing fluctuations in the value of government bonds, of the suggestion that bonds be made nontransferable, and it was objected that this would seriously restrict the freedom of action of the individual bank.[10] Particularly if clearings were against an individual bank in a particular period it might be embarrassed if not allowed to sell its bonds. The Goldsborough bill deals with the problem of clearance by providing that "certificates" may be used in settlement of interbank balances in the ratio which certificates held by a particular bank bear to its total deposits. The certificates are, however, nontransferable outside the banking system and can only be held by banks.

In the later bill of 1938 Representative Goldsborough substituted issues of "interbank currency" as backing for the deposits to be created. These could circulate freely in the banking system but not outside it and would be counted as reserves to 100 per cent of their value. Certain difficulties arise from this change. The Goldsborough bill of 1935 established a species of 100 per cent reserve system for the banks. In consequence, the fact that a particular bank received "certificates" rather than checks in payment from another would make little

---

ernment receives 100 in taxes and uses it to repay the "loan." The certificates will be canceled and reserves reduced.

In the case of the private loan, repayment released certain reserves which could then be backing for another loan. But in the case we are supposing government repayment would not leave any reserves free. If the banks attempted to use the government checks to buy securities, etc., someone would have to be squeezed, for total deposits would then be overextended with reference to remaining reserves.

In a 100 per cent system the same restraint would be exerted by the government's hoarding cash.

[10] See § 1 (c) of Chapter VII, this book.

difference to the receiving bank. Reserve position would not be greatly affected. However, in the bill of 1938 Representative Goldsborough does not include a mandatory 100 per cent system. This might make for friction and brings out a difficulty which might arise also in Mr. Meade's scheme. It is not clear whether Mr. Meade contemplates interbank transfers of his "consumer credit notes," but, if such were the case, and also in the case of the Goldsborough bill of 1938,[11] considerable trouble might result.

If there are circulating in the banking system at the same time two means of payment, one of which can be used as the basis of a tenfold expansion and the other of which is capable of no expansion at all save to its own face value, it is clear that banks would prefer to receive that means of payment which can support the tenfold expansion. Each bank would try to pass on as much "interbank currency" or "consumer's credit notes" as possible, and considerable maladjustment might ensue. A game of "last-tag" might develop in which each bank attempted to transfer as much as possible to the next. The special notes might tend to depreciate, unless legal tender provisions proved sufficient to prevent, and clearing house operation could become quite complicated.

The Goldsborough bills have been reviewed at some length because they represent one of the most careful attempts to deal with the mechanics of credit creation. It is probable, however, that the bills are unnecessarily complicated. In times of slump the existence of excess reserves is not an immediately pressing problem, and the great lengths and complications to which Mr. Goldsborough, and to some extent Mr. Meade, go to avoid the danger appear perhaps an excess of caution. No plan is much better than those who administer it, and any board which had at its disposal a power to raise and lower reserve requirements and also, perhaps, a power to impose special taxes would, barring mismanagement, be capable of dealing with the problem of excess reserves and idle hoards should they become dangerous.

[11] See H. R. 7188, 75th Congress.

It is suggested that, if it is decided to try to avoid the unnecessary expense and friction entailed by the present system of deficit financing, it would probably be better for the Federal government to obtain advances from the Federal Reserve Banks in return for non-interest-bearing treasury certificates. A service charge could be paid at the time of each advance but not thereafter. During a slump advances would be made from time to time as purchasing power was injected, and consequently the Reserve Banks would probably receive a fairly steady revenue from this source. These advances, when spent, would, of course, become part of the reserves of member banks, and the Reserve Board should be given very broad powers to raise and lower reserve requirements. In addition special taxes might be imposed, the receipts from which could be used to cancel excessive reserves by redeeming the certificates. The question of political machinery is considered in section 3 of this chapter. Certificates might be contributed by each of the banks *pro rata* to the inter-district settlement fund should clearance difficulties develop between the Reserve Banks if government funds were moved in large volume between districts. This method is similar to the permanent loans without interest made by the Bank of France to the French government in return for its exclusive monopoly of note issue.[12] The possibility of multiple expansion by checks would appear to have been somewhat less in France, owing to the more general use of bank notes, but otherwise the method is closely similar.[13]

A system of the sort suggested would only be inflationary if it were mismanaged and would be furnished with much more effective methods of credit control, both positive and negative,

[12] The first such advance appears to have been made in 1848. (See Gabriel Ramon, *Histoire de la Banque de France* (1929), p. 232.) Since then many have been made. They have not *always* caused an inflation, but, being usually used as war measures, when genuine scarcity was present, they have tended to become associated with inflation. Pedersen ("Some Problems of Public Finance") suggests this method and also points out that it is the connection with war which gives it its inflationary reputation.

[13] See M. G. Myers, *Paris as a Financial Center* (1936), p. 100. As to advances without interest, see p. 17. See also J. H. Rogers, *The Process of Inflation in France* (1929).

than now obtain. The disturbance to confidence and institutional friction would be much less than in the plans surveyed so far — particularly the taxation of idle hoards. Speculative dealing in governments would be avoided and also the irritation to the member banks of "interbank" currency or special credit certificates. The member banks would derive no direct revenue from the process other than that which might be passed on by the Reserve Banks in the shape of dividends, but they would be able to make service charges, on the accounts created, sufficient to earn operating expenses therefrom. It does not seem likely that the demand for loans could fall so low as to make it impossible for the banks as lenders to be able to earn minimum interest rates of, say, 1 per cent or 1½ per cent on savings deposits and time deposits. It should be remembered that the banks are the archetype of business "affected with the public interest" and hence subject to stringent regulation for the public good. In expanding and contracting the principal means of payment of the community they are trenching upon some of the sovereign powers of the state as embodied, for example, in the Federal Constitution, and in return for this privilege they must assent to regulation.

In concluding this discussion of purely financial machinery which might be used, it should be stressed that the writer does not advocate *any* particular scheme. Once the decision is made to break away from the deficit financing method, a number of possible solutions present themselves, and no special *a priori* validity is attached to any one of them. We have merely summarized some of the more promising alternatives, and it may be concluded that it is definitely possible, as far as *financial* machinery is concerned, to set up a system by which credit can be created for the government, yet which avoids much of the expense and friction entailed by deficit financing. The last scheme suggested does have the risk of multiple expansion, but this is largely hypothetical. If we were in a condition in which banks promptly expanded when reserves increased, there would be no need for a program of purchasing power stabilization. *Ex hypothesi* plans of the type we are outlining would be in-

voked only at a time when multiple expansion was largely an academic question. Once expansion did get under way, taxation and changes in the reserve ratio could prevent excessive expansion. It should again be stressed that we are dealing here only with financial machinery and not with the means by which the funds injected reach the public or the method of governmental administration. They will be considered in succeeding sections.

Before going further in our discussion we should specifically consider the matter of confidence and repercussions on the marginal efficiency of capital. If the last scheme suggested were followed, the effects on realized profits should be wholly favorable. The scheme in effect operates as a combination of open market operations and direct wage or subsidy payments to consumers. It is not inconsistent with the maintenance of some types of gold standard. Instead of increasing bank reserves and hoping that the banks will re-lend, bank reserves are increased, and at the same time consumer demand is increased or maintained. The necessity for *current* taxation during the slump will be much reduced. However, realized profits are not the same thing as the marginal efficiency of capital. That consists of prospective or *expected* profits. Businessmen may fear future taxation, or they may fear "inflation," or they may fear other policies introduced at the same time but not integrally connected with the program of purchasing power injection.

If the government, at the same time at which it injects purchasing power, embarks on a mistaken cost-price policy — if, for example, it raises money wages very rapidly or taxes unwisely — then the entire stimulus may be negatived. In the same way, if policies which frighten businessmen generally are introduced, some adverse effects may be expected. As Keynes has said:

> Economic prosperity is excessively dependent on a political and social atmosphere which is congenial to the average business man. If the fear of a Labour Government or a New Deal depresses enterprise this need not be the result either of a reasonable calculation

or of a plot with political intent; — it is a mere consequence of upsetting the delicate balance of spontaneous optimism.[14]

Considerations of general confidence can be quite important. For example, Bresciani-Turroni, in discussing the "miracle of the Renten-mark" and the German stabilization after the great inflation, tells us that the Germans accepted certain paper issues in essence exactly similar to those previously made but:

> The public generally allowed itself to be hypnotized by the word "wert-beständig" (stable-value) written on the new paper money. And the public accordingly accepted and hoarded these notes . . . even while it rejected the old paper marks.[15]

If the plan is introduced with tact and care, no disturbance need result, once the introductory crisis is past. If a government does not use unwise policies in other respects, there is no reason to anticipate a permanent loss of confidence. A good deal depends on the manner of introduction. But since some of the plans suggested do not interfere with ordinary habits of payment, or with the conduct of individual commercial banks, their repercussions are very much minimized. Some businessmen, looking ahead, may indeed fear increased taxes in a boom, but, unless inflamed by adverse propaganda, this should have no more effect on investment than the fact that some businessmen looking ahead should know today that every boom is bound to be followed by a slump.

To sum up, if the plan is introduced tactfully, or by a government "sympathetic" to business, or if an attempt is made to educate the public, very little disturbance should immediately result. If, then, wage levels are not unduly increased and tax policy is not of a type to discourage investment, continued realization of profits in the consumers' goods industries and the absence of serious signs of inflation should bring about an increase in investment in the consumers' goods industries.

In the matter of foreign trade some introductory disturbance

[14] J. M. Keynes, *The General Theory of Employment, Interest and Money* (1936), p. 162.

[15] Constantino Bresciani-Turroni, *The Economics of Inflation* (1937), Sayers translation, p 344.

might ensue, but since the program will be aimed merely at maintaining consumption at its normal level, or increasing it slowly, the long-range relationships between nations and currencies would not be seriously affected. Professor Haberler points out that "we may take the United States as an example of a country in which only a very small proportion of an increase in consumer's income will find its way abroad." [16] Thus even a considerable increase in consumption would not be likely to seriously affect the American balance. Even if an increase in imports did result, this would be no more than would normally be expected, under conservative gold standard policies, in a country with as much excess gold as we now enjoy, and it might help to ease the international trade situation. Some further discussion of problems of this sort will be found in Meade's *Consumer Credits and Unemployment.*[17]

One difficulty remains. If we attempt to increase consumption by increasing the money income of those consumers who have a high propensity to consume, there may probably be, in the short run, some degree of price rise, if the increase in demand exceeds the time-elasticity of supply. Exaggerated fears of inflation may then have serious repercussions on the marginal efficiency of capital, especially if businessmen are nervous about the whole system. It is difficult to see how this particular source of difficulty can be avoided save by general public education. Considerations of this sort are one of the reasons which led to the definition, in Chapter IV, of inflation not as a price rise but as a price rise which *seriously* affected the purchasing power of the fixed-income classes and money debts in general. The question leads us to a point which has been so far avoided, namely, the question of a standard of credit administration. Are we to insist on absolutely rigid price stabilization, or shall other criteria be invoked?

It should be made clear that the suggestions which are now being discussed are not inseparably linked with any specific standard of monetary policy. Our concern is with *weapons*

[16] Haberler, *Prosperity*, p. 410.

[17] J. E. Meade, *Consumers' Credits and Unemployment* (1938).

rather than standards. Aside from deficit financing by the government, no modern banking system possesses really adequate methods of dealing with cumulative deflation, and the present study is an attempt to explore the possibility of more effective weapons. But these methods could be employed equally well whether one had decided to follow a constant income policy, or a constant price level, or a slowly rising price level, or constant income per head, or any of the other numerous standards which at one time and another have been suggested. Thus for purposes of this volume one may take a somewhat agnostic position in the battle over price stabilization. The plans we have examined do imply, of course, some degree of price stabilization. But this does not mean absolute rigidity, but only that cumulative deflations, especially of consumers' goods prices, should be avoided.

Some of the unorthodox theorists, notably the Social Creditors, have developed a standard which is perhaps reasonable from the point of view of mathematical logic. The "Credit Commission" would statistically determine the existing and expected "gap" between the sales price of consumers' goods production and the expected money value of effective income (spending) and would issue credit for just that amount. It should be obvious that no such mechanically precise scheme is possible. There are the questions of hoarding, dishoarding, velocity, and the multiplier already discussed in earlier chapters. Setting them aside, we remember the fact that our figures for production and consumption are never available in time to make any definite future prediction from them. We must also make allowance for changes in consumers' choice and other unstabilizing factors.

Mr. Meade suggests the volume of "depression unemployment" as a standard, but it will frequently be impossible to eliminate unemployment, without causing inflation, by merely pumping money into the system. If we were at the bottom of a wave in investment demand, a stabilization or increase of purchasing power might help recovery, it is true, but, as explained in Chapter IV, to inject money into the system regard-

less of the physical structure of industry and without reference to anything save employment seems highly dangerous. However, if in view of the existing trade situation it is felt that reëmployment and increased output can be best ensured by a slowly rising price level, there does not, on the whole, seem to be any objection to such a program, provided it is kept within reasonable limits.

In conclusion, it would seem that, at least in the beginning, credit would have to be issued largely by rule of thumb. Reference would be made to all available figures on production, prices, and unemployment, but we have as yet no adequate single standard for administration. I do not feel, however, that this conclusion should make us unduly pessimistic. With all our theory and all our statistics there can be little doubt that the Reserve System largely proceeds by trial and error, and there seems no *monetary* reason why other plans discussed could not be successfully administered. This is especially true in view of the fact that they would provide for more effective weapons both of stimulation and restraint.

2. DISTRIBUTION AND REDISTRIBUTION

Up to now we have considered only the size of the injections which we might wish to make and methods of financing them. In this section the problem arises of how the additional purchasing power is to be put into circulation. The specific effects upon the distribution of wealth must also be considered. In the course of this study a number of suggestions as to the method of injection have been encountered. Ranking them in the order of their "orthodoxy" they are:

(1) Ordinary bank credit
(2) Public works
(3) Unemployment benefits
(4) Subsidies to producers (Kaldor, Cromwell and Czerwonky, Ezekiel)
(5) Discounts to consumers (Social Credit, trading stamps, the Consumptionstat)
(6) Direct payments to all or most consumers (Meade, Social Credit)

(7) Direct payments to the aged, and compulsory spending (Townsend Plan)

Method number 1 — bank credit stimulation — is outside our special field. We may expect the credit authority to do the best it can with its present weapons such as the rediscount rate and open-market operations. Method number 7 must probably be discarded for cyclical purposes because it is the essence of a stabilization plan that payments *vary* over the cycle. Pensions for the aged, however, should be of fixed amounts. While use might be made of them in secular stagnation, it would not be very helpful to pensioners to give them two hundred dollars one month, require them to expend it at once and then pay them only five dollars or so for the next six months. As a result they would constantly alternate from extravagance to poverty.

It is impossible in a general survey, such as the present, to give a detailed account of the particular methods by which purchasing power can be made to reach the public. This is especially the case because the injections, at any one time, must be adapted to *current* conditions. Since we cannot prophesy what conditions will obtain ten years hence, so also we cannot tell what special method of injection will be appropriate at that time. Certain general observations can, however, be made.

Methods 1 and 7 have been discussed so far; there remain methods 2–6. At least two of these, *theoretically*, present a complete solution. *Theoretically*, a combination of subsidies to producers (number 4) with taxation of idle hoards could be used to solve the entire problem. Similarly, an omniscient public works board might bring about full employment without running into the bottlenecks and difficulties spoken of in section 1 (d) of Chapter VII. Particularly in the case of the cycle, the argument for public works appears very strong. But neither subsidies nor public works are mechanically simple in their operation. A combination of the two will be needed. By public works, it should be understood, are meant not simply post offices or other government buildings, but health pro-

grams, increased educational facilities, slum clearance, parks, recreation centers, and many other things beside the rather restricted popular meaning of the term.

A special type of subsidy which would be of value is the food-stamp plan. It has been pointed out several times that while people may need more food they are likely to buy luxuries in preference. The use of subsidies on food might be of great value in improving the nutritional habits of large sections of the population.[18] On the other hand, preferential subsidies can be overdone and if not kept within bounds could furnish a large field for pressure-group politics of all sorts.

To supplement a public works program a comprehensive scheme of employment insurance should be set up. The amount paid out to the unemployed would have the advantage of showing a tendency to vary automatically with the cycle. Being in considerable part payments to active heads of families, benefits would help to maintain homes and population. It is suggested that the social security taxes be reduced and only a moderate "reserve" collected. When the reserve fell below a certain prearranged figure, the administrator of the fund could be authorized to call upon the credit authority for funds, and, until the margin of safety was once more reached, payments might be financed by one of the various techniques analyzed earlier in this chapter.[19] Benefits might run to, say, two-thirds of salary and be paid during the full period of unemployment with appropriate penalties for malingering.[20]

It is also possible that insufficient study has as yet been given to the feasibility and advantages of Mr. Meade's direct payments to consumers. These would avoid many of the difficulties of allocation spoken of in the previous chapter and are more flexible, at least in an upward direction, than many other methods. There are, however, two weighty objections against

[18] *Cf.* A. H. Hansen, *Fiscal Policy and Business Cycles* (1941), p. 442.

[19] In some cases, owing to divergences between price level and employment movements, such a plan might cause some price rise unless offset by taxes elsewhere in the system. See the discussion of Meade in § 3 of Chapter VII.

[20] From a purely monetary view it would be better to pay benefits of full salary, but this might have a tendency to encourage malingering

direct consumer payments — the political clamor for higher payments and the possibility of undermining public morale. In addition, it will be recalled that, in discussing Social Credit, serious problems of income distribution were also mentioned. Direct subsidies, therefore, have many disadvantages, but the idea deserves study.

It is advisable in this connection to consider a basic problem which has so far largely been avoided. We must discuss the relationship between methods of purchasing power injection, changes in the propensity to consume, and changes in the distribution of wealth. It should be clear that the purchasing power injectors are more easily adapted to the cyclical than the secular problem. Cyclical stabilization, it will be remembered, probably does not call for a large-scale change in the propensity to consume or the distribution of wealth. The difficulty lies in the *temporary* lack of a market for the capital goods industries. This temporary deficiency could well be supplied by public works. As Robertson puts it, "there is nothing inherently foolish about attempts to organize a collective desire (say for municipal lavatories) to take the place of a private desire (say for factories) which has temporarily failed." [21] Purchasing power injected in the slump to finance public works need not be accompanied by *current* taxation. Tax friction can be postponed until the boom and even then need only be invoked as a measure of cycle control. Thus both secondary deflation and tax friction are avoided during the slump. In consequence, there need not be as much postponement of replacement and new investment (owing to inventions, etc.) as is usually the case, and tendencies toward the concentration of capital goods demand in a boom will be mitigated. Such a policy might do a good deal toward the "spreading out" of the installation of capital goods.

In the case of secular stagnation, however, we must modify this pleasant picture. Two conflicting desiderata present a serious problem. On the one side an increase in the aggregate propensity to consume is indispensable to any final solution.

[21] Robertson, *Banking Policy*, p. 95.

This is usually thought to involve a redistribution of wealth. On the other hand, unless the state steps in, any sizeable increase in real consumption will entail a large amount of new private investment in consumers' goods plant. Yet new private investment in consumers' goods plants will be hampered if the tax and wage increases advocated to force a redistribution of wealth unduly reduce the marginal efficiency of capital. Both the increase in the propensity to consume *and* the new investment are needed — yet it would appear that the one checks the other.[22]

It is not my purpose in this study to discuss in detail specific methods of taxation which would accomplish the most in redistribution with the least deterrence to investment. All that is desired here is to call attention to the fact that the problem does exist. In his recent work, *Fiscal Policy and Business Cycles*, Professor Hansen reaches the conclusion that it is "highly probable that taxes on consumption played a far greater role as a deterrent to full recovery in 1936–37 than did corporate and personal income taxes." [23] The writer would agree with this conclusion; yet it may lead some of the more enthusiastic advocates of spending and redistribution to conclude that one may ignore the effects of corporate and income taxes on investment and the marginal efficiency of capital. It is submitted that this is a *non sequitur*. To use a simile, if a man has both a heart attack and a broken leg it may be wisest to concentrate on the heart attack; yet the fact remains that until *both* ailments are corrected the patient cannot walk. In the present state of public education it may be wisest to stress the need for spending and demand, but we must not forget the supply side as well.

To return to the problem of taxation and redistribution, while we cannot enter into detailed discussion, certain general

[22] For a popular treatment of the effect of taxes on new investment see J. T. Flynn, "Scared Dollars," *Collier's Weekly* (March 11, 1939), p. 72. See also the articles cited by Arthur Dahlberg in "Recovery Plans," *Monograph No. 25, Temporary National Economic Committee*, 76th Congress, 3rd Session (1940), p. 87.

[23] Hansen, *Fiscal Policy*, p. 398.

considerations may be offered. It seems to the writer that a proper tax and redistribution policy should pay as much attention to the *time* at which the tax is imposed as to the nature of the tax.[24] Mr. Meade's excellent discussion in *An Introduction to Economic Analysis and Policy* is an example of treatment from a static or quasi-static point of view and the measures appropriate thereto.[25] But a tax policy should be part of a long-range policy, and what is good at one stage may be bad at another. Until the transfer of factors to the consumers' goods industries has been carried through, therefore, it may be well to postpone a severe redistribution and tax program. On the other hand, such a suggestion appears somewhat paradoxical, for, if redistribution is postponed, whence will come the increased demand for consumers' goods? It is here that the purchasing power injectors enter as a possible means of reconciling conflicting points of view.

In earlier discussion we have seen that the aggregate propensity to consume from a given real income may be increased by payments to poorer persons even though the more well-to-do may not be taxed and are allowed to continue to hoard. For example, Mr. Meade's consumer credit payments might increase the aggregate propensity to consume and in the first instance need cause no inflation. However, in discussing Meade and Social Credit we saw that, when liquidity preference was satisfied by the accumulated hoards, the more well-to-do might then commence to spend. It is true that liquidity preference refers to holding earning assets, not to consumption, but an abstention from consumption is nevertheless involved. If liquidity preference be satisfied, one must spend or invest; and if opportunities for investment are few, spending is the logical alternative. Taxation would have to be applied in order to prevent inflation. It might, indeed, appear that all that is

[24] Mr. Keynes has repeatedly stressed the time element in taxes for redistribution. See J. M. Keynes, *How to Pay for the War* (1940), pp 48–49; *Essays in Persuasion* (1932), p. 372.

[25] J. E. Meade, *An Introduction to Economic Analysis and Policy* (1937), second edition.

needed is to discontinue the pensions, etc. But, if this is done, as the well-to-do dishoard, the standard of living of the poorer classes falls to the level of their privately paid salaries. The decrease must occur, since we are talking of a case of full employment in a high consumption economy. As one group increases its consumption another must restrict its purchases.

Yet need the pensions, etc., be discontinued? There will no longer be so pressing a reason to be afraid of the taxation of profits, etc. A great program of private investment in the consumption goods industries having been carried through, the need for *net* new investment is greatly restricted. Repercussions upon the marginal efficiency of capital need not be feared. We may, therefore, continue the payments of pension dividends, etc., and finance them by taxing the well-to-do. The *absolute* share of the wealthy in the flow of consumers' goods need not be restricted. It is only if a shift in *their* propensity to consume leads them to attempt to increase their *relative* share that taxes need be imposed. In the modern world it is no longer necessary to cut down the absolute consumption of the rich in order to increase the relative consumption of the poor.

The writer can see no objection to this solution except that it leaves a part of the income of the poorer members of society permanently payable in the form of pensions, etc., which would be received in *addition* to the "earned" salary of the individual. Since pensions would ultimately come to be payable out of taxes from the wealthy, considerable political friction, etc., might ensue. There is also the problem of public morale already spoken of.[26] Perhaps if, at the time the pensions are withdrawn, there is an attempt to subsidize wage increases from taxes, a slightly better system might result, though it would be difficult to stop such a process once it had begun.

The discussion so far has, however, dealt with direct payments to consumers which are outside ordinary wage payments and which do not arise as a result of the usual methods of in-

[26] But these "pensions" or "national dividend" payments, in the case of any one individual, need not be so large as to enable him to leave work entirely. In other words we need not develop a Roman mob.

come distribution. A more conventional form of reëmployment program, in secular stagnation, would aim at placing as many as possible of the unemployed to *work* on public projects rather than paying a national "dividend" or pension. What are the prospects for this more usual method of purchasing power injection?

Unless something happens to change the volume of savings a spending program of the conventional type does not, by itself, furnish a permanent solution. The public works program — even though it be of a type to yield consumer utilities such as free concerts, etc. — will tend to perpetuate that overbuilding of the capital goods industries which, initially at least, usually accompanies secular stagnation. Even if everyone be put to work and the labor supply exhausted, there is the possibility, spoken of in the section on the national debt, that *net* hoarding might still continue and injections of purchasing power still be needed.

In such a case a taxation of the wealthy might be imposed, the proceeds of which would be used to pay the operating expenses of the government playgrounds, etc. In effect the men left idle by private hoarding would have been permanently transferred to an enormous government welfare "industry" which could be so planned as to occupy those factors of production which had formerly been employed by private industry in the "expanding" and "supplanting" sectors of the economy. Furthermore such a program, which does not aim at an increase in privately produced consumers' goods, could largely tax without reference to repercussions on the marginal efficiency of capital. Heavy taxation would be used to finance the projects, and there would be little field for purchasing power injection.

The difficulty of this scheme is that it imposes upon the public a permanent diversion of a large part of our resources to government produced utilities. Yet it may, on the other hand, be true that, if the public, especially poorer persons, had a greater amount of purchasing power, they would prefer to have an increase in privately produced consumers' goods of a

more usual type. Instead of wishing to walk in a public park they might wish to go to a private movie. Of course, unless the public has purchasing power, this desire cannot be expressed in an effective manner. We have seen how subsidies to consumers would enable poorer persons to express their preferences while delaying taxation until after a large-scale expansion of the private consumers' goods market had been carried through. Conceivably also the proceeds of heavy taxation of the wealthy could be used by the government to go into the consumers' goods business itself directly. In other words, government movies, clothing stores, etc., would parallel the private economy. But there are weighty reasons for believing that it is in exactly this consumers' goods field that government operation would be most clumsy and unsatisfactory.

Another possible solution appears, though it is by no means so clear, analytically, as consumer subsidies, or so direct as state operation of industry. If a public works program is being carried through without any large-scale attempt at redistribution, and if it is financed by net injections of purchasing power, liquidity preference will gradually tend to be satisfied and the "pure" rate of interest will probably fall to zero. Also in such a static condition the level of realized profits, barring monopoly, would tend to fall greatly and the marginal efficiency of capital even more. All these forces might make for a higher propensity to consume on the part of the middle and wealthy class. *Eventually* one might expect a considerable shift in the pattern of income disposal. In consequence, private demand for consumers' goods would increase and with it the marginal efficiency of capital in the consumers' goods industries. As these consumers' goods industries increased, any additional public works could be discontinued and a transfer of factors to consumers' goods allowed. This system is a possible one, but it does not commend itself to prevailing modes of thought because it seems to leave the eventual fruits of an increase in income too much in the hands of the well-to-do. Yet even in this case, if taxes are imposed on the well-to-do *after* new consumers' goods plants have been completed, and if payments are then made to poorer

persons, a transfer of income and consumption will be brought about.[27]

Thus we find at least four possible solutions of the problem of full employment in secular stagnation, two of which allow a considerable role to the private investor and two of which rely upon direct state operation.[28] The two state-operated solutions are: (1) the direct and permanent employment of the factors formerly occupied by the "expanding" and "supplanting" sectors in government projects yielding government-produced utilities (parks, playgrounds, etc.); (2) the permanent use of the same factors by the government in government-operated consumers' goods enterprises of a type usually confined to private industry (movies, clothing, etc., etc.). In both cases the money will be largely raised by taxation, and repercussions on the marginal efficiency of capital can be generally ignored.

The two private ownership solutions are: (1) direct subsidies to consumers with a resulting increase in the demand for consumers' goods and new consumers' plants; (2) public works financed by *net* injections of purchasing power which will eventually satisfy liquidity preference, bring down the "pure" rate of interest, and cause a shift in the propensity to consume of the well-to-do. In both these cases taxation will be delayed until *after* the transfer to a high consumption economy has occurred, so as to avoid adverse repercussions on the marginal efficiency of capital.

The government-operated solutions have the advantage of paying out money to consumers largely in return for work. The

[27] This solution does not work as well as the use of direct payments to consumers because, in the case of direct payments, the new consumers' goods industries would be of a type appropriate to the wants of the poorer part of the population, but in the second case the new industries might be more of the luxury type not easily transferred to the satisfaction of mass purchasing.

[28] The author does not list the fifth "solution" — the one most in vogue today. It consists in *simultaneously* taxing and raising wages in order to shift the propensity to consume, and hoping that at the same time private investment in the consumers' goods industries will increase The writer does not believe that this attempt to do two quite different things at the *same* time will succeed.

private investment solutions, especially the first, have the advantage of allowing a much greater freedom of consumers' choice as to the direction of production. On the other hand, direct subsidies to consumers are a permanent feature. Yet even in a completely socialized society something in the nature of a "national dividend" is likely to be necessary, and therefore the alternatives are not as sharply drawn as might at first appear.[29]

None of these solutions are easy, or automatic, nor do they avoid the necessity for innumerable policy judgments in particular cases. Yet *if* we become sure that we are in a state of secular stagnation, they do summarize, to the best of the writer's knowledge and belief, the principal alternate lines of approach. It is clear that which course an individual will prefer will depend upon his ethical and philosophic bias. The writer feels that a combination of the first and second private investment solutions — greater importance being given to the first — would be the course most consistent with his own outlook, but he selects it not because it is any way free from faults or difficulties but simply because, *relatively* speaking, it seems the most reasonable course, and the one likely to combine the most in social benefits with the least in social friction.

3. SOME NOTES ON POLITICAL ADMINISTRATION

Political administration is a subject concerning which the economist, as such, can have little that is authoritative to say. It would be easy, therefore, to dismiss the matter by saying that there would be "political difficulties" and go no further. However, the question of political feasibility is of the utmost importance, and therefore certain suggestions are offered with the aim at least of bringing out some of the important facets of the problem.

Earlier in this study certain political difficulties were pointed out in our present system of deficit financing. We spoke, for

[29] See Oscar Lange, "The Economic Theory of Socialism," *Review of Economic Studies*, IV (October 1936), 64; A. P. Lerner, "A Note on Socialist Economics," *Review of Economic Studies*, IV (October 1936), 73.

example, of the difficulty of coördination and the impossibility of managing a deficit financing program through Congress, owing to the delicate problems of timing involved. The conclusion was reached that only if entrusted to some nonpartisan board, such as the Federal Reserve Board, which can act all the time, could truly scientific use be made of the spending program or any program of purchasing power stimulation. But there is much more to be said in criticism of the present system.

The banking system itself is in a most unsatisfactory condition. The need of a genuine central banking system is imperative; yet we continue with an extraordinarily complex, overlapping, and ineffective structure. As Mr. Burgess has said, "The country has been through a disillusioning and humiliating experience with respect to banking. It is discouraging for a great country to find it had such a poor banking system." [30]

Yet elsewhere: "The failure to include in the Federal Reserve Act . . . and even in the revisions of the act just completed in the Banking Acts of 1933 and 1935, systematic and comprehensive supervision over banking is consistent with the extraordinary patience of the American people in tolerating an unsatisfactory banking mechanism." [31]

Moreover, since the above was written, the limited controls of the act of 1935 have been dangerously weakened by the almost furtive repeal of the provisions requiring that large banks which are members of the F.D.I.C. should also belong to the Federal Reserve System. Thus the control of the banking system itself is ineffective.

Looking at the matter also from the point of view of the government, there are unsatisfactory features. Why should the government in the exercise of its sovereign rights over the currency, and its obligation to maintain a socially tolerable degree of monetary equilibrium, be dependent upon the nerves of the market and the banking system? It is not as if the government were attempting to borrow money at a time when it was genuinely scarce. The mention of genuine scarcity brings

[30] W. R. Burgess, *The Reserve Banks and the Money Market* (1936), p 126.
[31] Burgess, *The Reserve Banks*, p. 139.

up another problem. The present system confuses the ordinary conduct of government finance with the special credit policy functions which the Treasury has been compelled to assume, and it is difficult to obtain a clear idea as to which is involved in a particular measure. Finally, any realistic thinker today must realize that the problems of the governmental deficit and the problems of credit administration are so intermingled as to be almost identical; yet the only unifying sanctions are largely informal and extralegal.

Can any solution be suggested for these various difficulties? First of all, the banking system should be unified and the powers of the Reserve Board greatly strengthened. Some have even suggested that in order to remove the board from political pressure, its functions and the number of its members should be placed in the Constitution itself. Others have objected to this policy on the ground that it would cause undue conflict. Yet in any event there is still probably a necessity for keeping the banking and cycle control activities of the government distinct from its ordinary budget and ordinary borrowings.

Perhaps the following suggestions might be worthy of examination. The planning and administration of public works could be placed under a special department of the government. When the Reserve Board felt that an injection of purchasing power was needed, it could serve notice upon the department of public works that thereafter it would finance public works to a specified amount by the use of one of the financial techniques discussed in section 2. As regards unemployment payments, upon receiving notice from the administrator of the unemployment fund that his reserve had shrunk to a prearranged figure, the Board could be compelled to honor requisitions from the administrator at any time thereafter until withdrawals from the reserve fund had shrunk to normal according to the system previously described. Finally, should the Board feel that there was danger of an inflationary price rise, it might have the power to compel the Secretary of the Treasury to impose a special tax, and the proceeds thereof could be given into the

custody of the Reserve Board not to be released or deposited in any bank save at their discretion. Since the ordinary budget of the federal and state governments would not be under the control of the credit authority, it might happen that they would attempt to retrench as the credit authority expanded. In this way the net effect would be neutralized, much as the states have neutralized a good part of federal spending today. To deal with this situation the credit authority could have power to withhold funds unless they were matched by state and federal expenditures sufficient to maintain their level of expenditure as high as was financially possible. Finally, the credit authority might be allowed to issue dividend payments to consumers if it could find no other means of distribution.

Even such fragmentary suggestions as these serve to show the many political complications which might arise. It is submitted, however, that we, as *economists*, are not justified in dismissing the idea on political grounds; we can merely indicate possible economic advantages, leaving it to the political theorists and the public to infer whether or not these advantages are worth the inevitable frictions involved.

4. WAR AND POST-WAR

In view of the contemporary situation it seems advisable, at this point, to inquire briefly what usefulness the financial techniques we have outlined would have during and after a war.[32] It must be realized at once that their application to war-time problems is severely limited. Initially it is possible, of course, that injections of interest-free purchasing power would not cause inflation. But any war which is more than a skirmish is likely to lead to conditions not merely of "full" employment but almost of "more" than full employment. If a tendency toward dishoarding shows itself, the accumulated purchasing power already injected may not be idle, and will intensify the

[32] Since this section is not intended as a comprehensive treatment of war finance, no bibliography will be given The reader will find valuable material in the series of articles appearing in the May and February numbers of the *Review of Economic Statistics* (1941)

problem of taxation presented by the war. These considerations, it should be borne in mind, apply equally well to the present method of creating purchasing power by deficit financing through the sale of bonds to the banks. Such so-called "borrowing," as has been seen, is frequently no more than a refined method of bringing about a net increase in the supply of effective money.

On the other hand, occasions may arise in which overwhelming military necessity calls for an inflation. During a large-scale war, as Keynes points out, *consumption* must be curtailed.[33] Since the poorer classes do by far the greatest amount of consuming — both absolutely and relatively — it is they whose purchases must be most restricted. Even if the well-to-do ceased to buy anything, the restriction of consumption might not be sufficient. A government, therefore, which is unable or unwilling to tax must squeeze the purchasing power of the fixed-income classes by inflating. Pressure toward inflation will be very greatly strengthened if during the war no steps are taken to prevent general money-wage increases. Some groups of workers may gain, but since there must be a *net* reduction in the spending of the poorer classes, inflation, once the slack has been taken up, becomes inevitable, and the needed reduction in consumption will be forced by that method.

None of these considerations are very comfortable, but neither is war comfortable. If, then, we resign ourselves to the consequences and are forced into inflating, there may be a considerable saving in cost and tax friction if the payment of interest is eliminated. This suggestion has been approximated by the London *Economist* in an article on the "Technique of Inflation."[34] The suggestion is there made that, in the case of war loans, banks should be compelled to take government bonds at one-half of one per cent. Modern thought is overwhelmingly of the opinion that we cannot "shift" the burden of the war on to "future generations" in any usual sense.[35] But

[33] Keynes, *How to Pay for the War.*

[34] See "The Technique of Inflation," London *Economist*, January 27, 1940.

[35] See Horst Menderhausen, *The Economics of War* (1940).

we do bequeath a source of tax friction which the *Economist's* suggestion minimizes.[36] In this regard it should not be forgotten that the English are still paying interest on the debt floated to defeat Napoleon.

Since this section is not intended as a detailed treatment of war finance, we will pass to a discussion of post-war slump. Broadly speaking, a war might be thought of as an "investment boom" generated by the government, and it is usually followed by most of the characteristic results of a private investment boom. Outstanding among these are an inflated price level, an "overbuilt" capital goods structure, and an eventual slump. The war boom is further complicated by the fact that the industries which it has stimulated will in large part have to be permanently *transferred* back to peace-time uses. The private boom does not present the difficulty of transference to so great a degree. Usually the majority of the capital goods industries stimulated will be needed again when another boom comes along. The problem, after the private boom, is simply to find a government market to take up temporary slack. The post-war slump, however, presents two main difficulties — the transfer difficulty and the more usual one of preventing secondary deflation.

In deciding what policy is to be pursued after the war, the most serious decision to be taken concerns the price level at which it is desired to stabilize the situation. The choice is not an easy one to make, for, even if war finances have been managed with maximum skill, some inflation is likely to have occurred. If we stabilize at war boom prices we work great hardships on the fixed-income classes and destroy a large part of the real value of insurance policies, government bonds, and of debts in general which were contracted before the price rise.

The alternative is equally forbidding. If we try to return to the pre-war price level, this will almost certainly entail wage reduction, unemployment and some business stagnation. The coöperative action of labor, government, and business in reducing wages and prices by direct agreement will help largely.

[36] Compare the discussion in § 1 (b), Chapter VII, this book.

But the American labor situation — so far at least — shows little capacity for this sort of action, and we are more likely to find labor making a last-ditch fight for its money-wage level. If it does so, the boom price level must be retained, or else labor must be forced to submit through the slow action of unemployment and stagnation. However, Australia has shown that *some* labor movements can coöperate in a general adjustment. The tragedy of the whole thing will be that the *real* wage — for which labor thinks it is fighting — may not suffer any very great changes whichever policy is adopted. At least it will probably not change greatly for those who are employed.

It will be seen that post-war problems cannot be easily solved by a mechanical application of any monetary remedy. Yet I do not think that a very useful purpose will be served by injecting into such an explosive situation the added social friction of a cumulative deflation. Once the decision has been taken as to the appropriate price level, then, if stagnation still continues, the injection of purchasing power and the various methods we have discussed should be invoked.

How far can we apply this typical schema to the prospects of the present struggle? It would be ridiculous to hazard any definite forecasts; yet certain remarks may be made. As long as Hitler remains in the ascendant there is likely to be little unemployment in the United States. Our armament program will not only absorb the "expanding" and "supplanting" sectors but probably some of the "operating" and "replacing" as well. The peace, however, may not be accompanied by quite as serious economic problems as some have thought — though they will be serious enough. We are not talking here of the economic reconstruction of Europe but solely of the problem of domestic employment.

The transfer of factors to the consumers' goods industries will be much facilitated by the piled-up backlog of demand for durable consumers' goods.[37] The production of these will have been largely discontinued during the struggle, and hence after the war they should be in great demand. Taking a wider view,

[37] *Cf.* Hansen, *Fiscal Policy*, pp. 439 *et seq.*

the enormous destruction of wealth which has gone on in Europe should furnish an outlet for savings and investment which may occupy all our energies for years to come. Of course, ultimately any boom is bound to be followed by a slump, but it *need* not be of such catastrophic proportions as the 1929 crash. If the United States will only learn that in order to sell, one must buy, and if our people realize that employment *can* be kept from varying over as wide a range as it has formerly done, the outlook for world stability will be immensely improved. But, to repeat, all of this is predicated upon the United States' ensuring its own internal economic stability and prosperity. Some readjustments of price levels may be equitable and necessary, but if a severe, general, and prolonged deflation is allowed to follow the war, world revolution seems inevitable.

CHAPTER IX

CRITICAL SUMMARY AND CONCLUSION

IN THE preceding chapter an attempt has been made to evolve a comprehensive system from the many suggestions discussed in this study. Before criticizing the results of our synthesis, it may be advisable to summarize them briefly. In outline the policies proposed were as follows: In dealing with cyclical stabilization an attempt would be made to maintain private consumption, in a slump, at as close to boom levels as possible. To do this the money income of those temporarily out of work would in large part be maintained and the money income of the poorer classes generally would be maintained or even increased. Public consumption as manifested in public works of all sorts would be increased during the slump and lowered in the boom.

In the matter of secular stagnation it was suggested that there should be an attempt to satisfy liquidity preference and increase the aggregate propensity to consume from a given real income by injections of purchasing power, a large part of which would be paid to poorer persons. Money income would be maintained and increased by means of payments to consumers through public works, unemployment benefits, and possibly direct subsidies to consumers' goods industries and the consumer. Increased taxation would be deferred until a transfer of the "expanding" and "supplanting" factors to the consumers' goods industries had occurred, or until serious signs of inflation were shown. Thus, while the marginal efficiency of capital in the consumers' goods industries would tend to increase, an attempt would be made to avoid adverse repercussions on the inducement to invest via high taxes and rapid increases in money-wage levels.

As to financial mechanism, it was suggested that if we wished to avoid the frictions and perhaps unnecessary expense of

deficit financing, numerous techniques might be invoked. These, like any other system, including the pre-1929 and the present banking machinery, would be inflationary only if mismanaged. On the whole, it was felt that a system of advances by the Federal Reserve Banks to the government with a small service charge might be the best. The system suggested was similar to that used by the French government and the Bank of France and also resembled some of the ideas underlying the House of Representatives version of the banking act of 1935 as originally proposed.[1] Advances by the Central Bank were open to the objection that the advances might, when spent, form the basis of a possible multiple expansion, but a broad power to raise and lower reserve requirements would be adequate to deal with this danger.[2] Special taxes might also be imposed at the instance of the Federal Reserve Board in order to remove excess purchasing power.

Advances by the Central Bank and similar systems are capable of a number of variations. In particular, certain issues of bonds might be floated which would carry special reserve features and in return would bear a very low rate of interest. For example, the bonds bearing a circulation privilege under the National Banking Act bore a very low rate of interest. Thus it would be possible to issue special series of bonds and substitute for present reserve requirements the holding of a certain ratio of these bonds to deposits. However, it is submitted that the methods outlined in Chapter VIII of this study might cause less friction and disturbance.[3]

Certain technical financial objections may be made. These largely center around problems of timing and foresight, and our meager knowledge of the actual movements of the cycle. It is possible that the government might start certain public

[1] See H. R. 7617 and 5357, and S. 1715, 74th Congress, also *Hearings before the Committee on Banking and Currency, House of Representatives, Seventy-Fourth Congress, First Session on H. R. 5357*. See also, J. Hanna, "The Banking Act of 1935," *Virginia Law Review*, XXII (May 1936), 775–776.

[2] Such a power was contained in the first draft of the act of 1935. See authorities cited *supra*, note 1.

[3] See also "The Technique of Inflation," London *Economist*, January 27, 1940.

works under the assurance of the Federal Reserve Board that the works be financed by non-interest-bearing advances, only to find that recovery ensued so quickly as to make it inadvisable to continue injections of this type. Such a difficulty might be helped by the board's power to impose a special tax, but much disagreement could ensue. Again, it may be difficult to halt a boom without bringing on a slump. It is well-established in cycle theory that a mere decrease in the *rate* of increase may at times cause an absolute fall in business activity. But under the system proposed, the credit authority would be in a much stronger position than it is now because it would have at its disposal far more effective weapons for preventing secondary inflation. The same would also be true if the authority misjudged the timing of the cycle and imposed a drastic tax program before it was advisable.

Professor Alvin Hansen, however, has made a number of much more important criticisms of attempts to satisfy liquidity preference and to initiate recovery by interest free issues of currency, or "borrowing" from the banks at nominal rates of interest. He puts his case as follows:

> The multiplication of the money supply at the beginning of a recovery from any considerable depression is desirable. The means of payment are inadequate at this point to circulate a full-employment output of goods and services. At this point it is, therefore, permissible to finance a part of a governmental recovery program through the sale to banks of low-interest-bearing, short-term bills. But a progressive multiplication of money beyond the requirements of market transactions drives interest rates on government and gilt-edged securities to an artificially low level. . . . Pushed to its logical conclusion it means, in fact, the gradual "euthanasia of the rentier." [4]

He also writes:

> After the requirements of trade and the desire for liquidity have been reasonably satisfied, no useful purpose is served by a continued multiplication of the money supply such as would inevitably follow from a program to finance expenditures wholly through interest free issues, or even from continued borrowing at the banks at market rates. . . . The redundancy of money would . . . create an arti-

[4] A. H. Hansen, *Fiscal Policy and Business Cycles* (1941), p. 178.

ficial degree of liquidity. It would result in the accumulation of vast unused cash resources which, in a world of changing and volatile expectations, might magnify the instability in the price structure.[5]

Beside the question of "volatile expectations" and dishoarding, Professor Hansen also objects to great increases of currency and deposits, because, without adequate payments of interest, banks, life insurance companies, social security trust funds, colleges and other nonprofit institutions are deprived of a "reasonable return." Their services must therefore be financed in some other way and "the apparent escape from the payment of interest charges, it turns out, entails expenditures by the community elsewhere." He continues:

> It is just here that a strong case can be made for a continuing deficit corresponding to the requirements of thrift savings streams. Life insurance, savings banks and other thrift institutions, baby bonds and social security trust funds have taken in recent years annually about three billion in government issues . . . a wide diffusion of ownership is thereby encouraged. There is thus a solid basis in these thrift streams for controlled borrowing.[6]

The passages quoted raise a number of serious questions as to the validity of attempts to avoid the interest charge on government injections of purchasing power made during a slump or stagnation. They are not, however, altogether clear or consistent with one another and before going further must be carefully analyzed. It should be noted that in the first quotation objection is made to an increase in the currency supply by the sale to the banks of "low-interest-bearing, short-term bills," in excess of the requirements of *market transactions*. In the second quotation a broader statement is made, and objection is taken to an increase in deposits, brought about by "continued borrowing from the banks at market rates," in excess of the requirements of trade *and* the desire for liquidity. Obviously, the second statement is much broader than the first. The first restricts purchasing power injection to "market transactions" and objects to "short-term, etc., bills." The other points out a

[5] Hansen, *Fiscal Policy*, p. 184.

[6] Hansen, *Fiscal Policy*, pp. 178, 179.

danger in injection by *ordinary* bank borrowing, but allows room for satisfying the "desire for liquidity" *as well* as market transactions.

If we use the second criterion, it is submitted that Hansen's criticism becomes much less at variance with the point of view of this study. By definition, it would seem, an increase in purchasing power in excess of the "desire for liquidity" and the requirements of market transactions would cause an inflation. Such injections are certainly not contemplated by the plans discussed in Chapter VIII of this study. As long, however, as there is large-scale net hoarding on the part of society, it is submitted that the "desire for liquidity" is not satisfied, and hence, according to Hansen's statement, increases in currency or deposits are permissible. "Volatile expectations" would, however, in this case also raise a difficulty, as pointed out in Chapters VII and VIII; yet the problem of dishoarding is one which, analytically at least, can be met by appropriate taxation.

It is, nevertheless, correct to say that, even when the "desire for liquidity" is not satisfied, injections of purchasing power, made to offset net hoarding, may have an eventual adverse effect on the "pure" rate of interest. The government, having borrowed from the banks, would spend the deposits created, and these would come to rest, in times of stagnation, in the balances of individuals and corporations. Holders of these balances might, indeed, refuse to re-lend at less than the minimum rate set by their "liquidity preference" and such lending as there was would be at that rate, but as time went on and the expected future rate became less and less, the "pure" rate would fall to an increasingly low figure.

We must remember, however, that, as Hansen points out, the tendency toward a reduction in the rate of interest would show itself whether initial injections were financed by interest-bearing bonds or not. The banks would still be receiving interest on government bonds, but, since the supply of money had become so large and the expected rate so low, the remainder of society would not share the bank's privileged position. The choice is not, therefore, between paying interest and *avoiding*

the consequences which Professor Hansen fears, but rather of having the frictions of interest payments in *addition* to the consequences he fears. As long as government spending is not financed by taxation or borrowing from hoards and current savings, the consequences Hansen fears will follow.

To decide on the merits of eliminating the interest charge we must, therefore, pass to a more careful analysis of costs. The problem insofar as it relates to the banking system has already been discussed in detail in an earlier section, and there is no reason to repeat the analysis here.[7] It is obvious that if the banks are to remain in business at all they must earn operating expenses, but it has been suggested that a considerable saving in cost might be secured by the use of service charges instead of interest payments. Even if the saving in cost were relatively small, there would still be an advantage in that the use of service charges would effect a "thoroughgoing integration" of these costs with the price structure generally, which would serve to make possible a more direct handling of the whole problem.

Theoretically the same methods could be used in the case of colleges and many of the nonprofit institutions, but practically the chances are not so good. Few would dispute the immense cultural loss which would be entailed by the "euthanasia" of the great charitable foundations, colleges, and universities. Direct subsidization by the Federal government in lieu of the present payments of interest on government bonds would have the effect of eventually destroying the independence of these institutions which, with all their faults, remains one of their chief advantages. It might be desirable therefore to offer a *disguised* subsidy, in the form of interest payments, which would perhaps entail slightly less direct control. The government might issue bonds which could only be purchased by institutions and certain types of individuals (say small savers) whom it desired to help. Thus as a matter of public policy "thrift streams," etc., would be given special preferential treatment. Whether such treatment is desirable in the

[7] See § 1 (c) of Chapter VII, this book.

case of the banks is a matter of policy which need not be determined here. Unlike many other institutions, it is probable that banks could continue to exist without it.

Yet, although we must admit that preferential treatment for certain savers may be desirable, must we agree with Professor Hansen's suggestion that because insurance companies, etc., etc., take about three billion dollars of government issues annually, there is thus a "solid basis" in these thrift streams for controlled borrowing? Two problems must be distinguished: (1) the problem of obtaining full employment in stagnation and stabilizing the cycle; (2) the problem of giving institutions a disguised subsidy in the form of interest payments. The second problem has already been discussed, and we shall therefore concentrate upon the first.

The plans outlined in this study aim at the offsetting of hoarding during stagnation and the maintenance of income during the cycle. The present problem is largely one of stagnation. Aside from the question of a disguised subsidy, already mentioned, the only reason why the government should borrow the savings of particular institutions and individuals is because otherwise they might be hoarded. Even if they were being hoarded, dishoarding from other sources might offset the ill effects to the economy as a whole. Only if Professor Hansen's "thrift streams" gave rise to *net* hoarding need the government interfere. Furthermore, as the economy becomes more mature, the savings for insurance, etc., will, as Professor Hansen points out, reach an asymptote; if periods of prolonged stagnation occur after this asymptote has been reached, however, the problem of making injections would still be with us, but the peculiar reasons for incurring an interest charge on the new balances would have disappeared. Conversely, even if all the sums saved by thrift streams were borrowed, net hoarding might still occur and additional injections would have to be made for which, again, the special justification for interest payments would be lacking.

We may conclude that attempts to inject purchasing power, in stagnation, in order to satisfy the "desire for liquidity" may

have long-run adverse effects on the "pure" rate of interest. Such a development may, indeed, seriously affect the security of certain institutions of great cultural value. But this situation could be taken care of by special issues of government securities which would only be available to certain types of borrowers. On the other hand, there may very well still be a need for injections of purchasing power which are not financed in this way, and there is little reason, in that case, to superimpose the *additional* and unnecessary friction of interest payments and taxation.

The entire discussion of Professor Hansen's criticisms, so far, has, however, centered around the assumption that we found ourselves definitely in conditions of secular stagnation in which, in the absence of intervention of some sort, conditions of unemployment equilibrium would exist. But if this hypothesis turns out to be unwarranted, then the problem is in a certain way less complicated because the "euthanasia of the rentier" becomes much more unlikely. Two possibilities may show themselves: Either after an interval of indeterminate length the extremely low rate of interest may bring about a shift in the propensity to consume, or large new investment outlets may appear which will once again create a scarcity premium on capital.

It is possible, as Alfred Marshall has pointed out, that at times a few profitable new investments may be possible but that the supply of funds may be so great that no rate of interest would be necessary to obtain, let us say depositors for banks.[8] The existence, however, of large stocks of money would not long prevent the appearance of a real rate of interest if dishoarding occurred.[9] There would simply be an inflation, and after prices had adjusted themselves interest would show itself. This inflation, however, could be prevented by taxation and other measures.

[8] Alfred Marshall, *Principles of Economics* (1920), eighth edition, p. 582.

[9] As long as there were *unemployed* resources and the rate of increase in monetary demand did not exceed the "time-elasticity" of supply, there would be no inflation

It is probable that Mr. Keynes in his discussion of the "euthanasia of the rentier" has perhaps paid insufficient attention to the role of invention. Once the propensity to consume has been adjusted so as to obtain full employment, it seems likely that there would be a margin of possible technical change sufficient to create a scarcity premium on capital.[10] Were the technical situation taken as *given*, the result would be different. Mr. Keynes' purely monetary theory of the rate of interest has been shown to apply only to a *minimum* rate.[11] Constant technological change in some circumstances is quite capable of explaining the existence of a real rate of interest which could be translated into barter terms and which would not be dependent on the existence of money.[12]

[10] *Cf.* J. M. Keynes, *The General Theory of Employment, Interest and Money* (1936), pp. 374 *et seq.* Barring the effect of "liquidity preference" or "time preference" it might indeed be possible in a *given* technical environment to reduce the "pure" rate to zero, as Keynes advocates. See, for example, J. A. Schumpeter, *The Theory of Economic Development* (1934), Opie translation, Chapter V.

[11] Despite occasional remarks by Keynes which would appear to maintain the contrary, an increase in the "marginal efficiency of capital" will, *cet. par.*, have a tendency to raise the rate of interest. For an analysis of the terminological confusions which lead to a contrary but mistaken conclusion, see Gottfried Haberler, *Prosperity and Depression* (1939), revised edition, p. 211.

[12] Silvio Gesell (in *The Natural Economic Order*, 1934, Pye translation, p. 260), although he has a purely monetary theory of the rate of interest similar to Keynes, makes the following interesting concession: "Let us assume that a costly machine is discovered with which everyone can double his present production. This would cause an unprecedented demand for loan-money to purchase the new machine. . . . Even if interest upon loan-money had disappeared this enormous new demand would cause its reappearance . . . interest might even reach an unprecedented height." However, he continues, "This condition of affairs could not last long. Commodities would become fifty per cent cheaper."

Keynes also reasons in the long run. He says, "It will be profitable to increase (or decrease) the current scale of investment *until* the point of equality" with the rate of interest has been reached. But suppose *before* the "current scale" of investment has been pushed that far, a new invention comes in which *again* raises the marginal efficiency of capital. Compare Eugen von Böhm-Bawerk, *Positive Theory of Capital* (1890), Smart translation, pp. 333–335.

Of course if the rate of saving, in real terms, happened to coincide exactly with the demand for capital, in real terms, and if this saving would otherwise occur without a rate of interest, then "liquidity preference" might be the only possible explanation of a minimum rate — if we reject "time preference."

Thus after the propensity to consume has been adjusted, or after new investment outlets have shown themselves, the investor may once more be able to obtain a substantial rate of interest on gilt-edged securities. The plans we have discussed would then merely avoid the necessity for the government's paying interest on injections made during the slump.[13] The government might, indeed, protect certain favored classes of investors from fluctuations in the rate of interest, and furnish an outlet for their accumulating funds during the slump, by allowing them to buy government bonds at special high rates of interest, but it is submitted that there is no pressing reason to make this process general.

The lengthy discussion just completed leaves us once more confronted with the question of whether we are really faced with a secular shortage of investment outlets which makes necessary a permanent shift in savings habits. In this regard we have perhaps been too prone to take the volume of private investment as being something very definite and given which can be authoritatively forecast by a study of statistical charts. Some seem to have felt that we could assume that a certain volume of private investment — neither more nor less — would be forthcoming, regardless of what was done in the remainder of the economy. But it is submitted, on the contrary, that private investment is affected by a number of intangible factors — in Keynes's words, by the "delicate balance of spontaneous optimism." Such being the case, we are confronted with something which, in conjunction with the activity of the technician, cannot be accurately forecast by *ex pos* data.

We in the United States are also too prone to minimize the international aspects of the problem. For political reasons, the outlook for private foreign investment does not, it is true, now appear very promising. But the rebuilding of Europe, the opening up of the Orient, or of the huge Russian area, to private

[13] It should be noted that by this is meant not merely that interest will not be paid on these injections *during* the slump, but that, once the initial service charge has been paid, no interest will ever be paid on these particular issues made during the slump.

investment would furnish us with an outlet for savings for a long period to come. The present condition of the United States need not only be traced to the fact that the American "frontier" has largely disappeared. It can also be described by saying that, since the first world war, our capital-goods industries and our savings habits have been geared to making investments over the entire world, but that after 1929 we were once more largely confined to the home market.

The two alternate accounts may seem to say the same thing in different words, but the differences in emphasis and in indicated policy are very important. In one case, concentration on the "maturity" of our own country leads to a policy of relative economic isolation, coupled with attempts to change the propensity to consume. The other point of view would still stress the need for domestic stability, but would also cause us to bend our efforts toward the reconstruction of world trade.

Considerations of world trade are outside our special field, but the point which it is important to remember in dealing with the problems outlined in this study is that the business cycle, secular stagnation, and disturbances of other sorts are all part of a general cultural pattern deeply rooted in the nature of capitalism and a free exchange economy. The simplified aggregative treatment which we have used is therefore only an approximation and one which may be seriously misleading. We must not forget the influence of innovation and the fact that individual cycles may often be related to the expansion of a *particular* industry, rather than industry in general. In the same way we have, in this book, treated cycle and stagnation as separate and distinct phenomena. But in any actual situation the two types of unemployment and disturbance may be so intermixed as to be inseparable. They will be found, in a sense, not added or superimposed but fused.

In considering the relation of the two types of phenomena it is worth remembering Professor Schumpeter's "three cycle" schema.[14] It may not tell us anything more to say that what we call secular stagnation may also be the trough of a "Kon-

[14] J. A. Schumpeter, *Business Cycles* (1939).

dratieff"; yet something is gained thereby in perspective. Also it will be seen that the treatment of the cycle in the present analysis has been largely appropriate to the Juglar cycle rather than the other two movements — if the Kondratieff be a movement at all.

Thus we are compelled to qualify our previous sweeping approach via such broad concepts as "production," "consumption," "expanding" factors, etc., etc., and to recognize the necessity of more detailed analysis. Reference to particular groups, however, brings us to an important difficulty in the political administration of schemes of purchasing power maintenance. Purely monetary problems are not to be compared in magnitude with the problem of possible inflationary demands from organized groups which are in a bad bargaining position, as compared with the rest of the economy. Progressive squeezing of agriculture, for instance, is quite compatible with monetary equilibrium. Stabilizing aggregate purchasing power would prevent general deflationary crises, but it would not make industry purely competitive and farmers monopolistic. If we attempt to relieve the distress of the farmers by paying them money, that money, in full employment equilibrium, must come from someone else. Otherwise, there will be inflation. If during a slump the farmers receive money which does not come out of taxes, they may make clamorous political demands to continue the process in a boom, when it is no longer admissible.

It is an almost wholly mistaken idea that the problems of *all* groups can be solved by expanding purchasing power. As we have earlier pointed out, we must remember that there is a *pattern* of consumers' choice. Buying power cannot be issued against mere gross "capacity." Moreover, as income changes the pattern changes. We might try to "monetize" surplus farm stocks only to find that the money was being used to bring about an inflationary rise in the price of automobiles.

Another related difficulty arises in cases where the "gap" of purchasing power and tendency toward deflation occurs from the fact that one industry is ousting another so fast that there is *net* unemployment and shrinkage of income. In such

a case, maintenance of income by subsidizing the unemployed might tend to impede their movement into other industries. In the same way, subsidizing the industry itself may tend to perpetuate an uneconomic distribution of resources. The demand for disguised subsidies, tariffs, etc., is already one of our great political evils. We are caught in an almost insoluble dilemma. General social stability requires the maintenance of aggregate income. Yet if we maintain industries that are outmoded, waste is involved; and if we support men who have been thrown out of work because the current of trade has shifted, they may not attempt to make a transfer. The relative immobility of the unemployed in modern England is a case in point. The question is one of balancing the desire for security against the hampering of adjustment. It is submitted that there is a point at which stability becomes more important than the "optimum" allocation of resources; yet there is unquestionably a major problem posed for the political state as to how far it can maintain the one without losing sight of the other.

One of the most important of the pressure group problems is the problem of labor. The definition of inflation given in Chapter IV may, indeed, turn out to be a little old-fashioned in emphasis. Inflation is more likely to arise today from a concerted demand by many groups for higher prices and wages than from mere injection of money *per se*. Of course, in either case the increase in the money supply may be indispensable, but the motivation is quite different and while we are quick to realize the dangers of an old style "greenback" inflation, "pressure group" inflation — if a new term can be used — may come upon us unawares.

The constant demands on the part of labor for higher money wages are an obstacle which practically every writer on purchasing-power stabilization has mentioned. Thus Professor Hansen writes regarding Social Credit:

> While the demand for higher wages meets quickly, under the existing system, an inexorable limit in sales resistance when costs and prices rise, such is not the case under the Social Credit proposals . . . sales resistance would altogether vanish, and the pres-

sure for higher [money] earnings from all productive groups could not be resisted. . . . In consequence costs could be expected to mount rapidly . . . mounting costs would necessitate an ever expanding supply of money and therefore in effect a price inflation.[15]

Mr. Meade says concerning his plan:

If the unemployed were as well off as those in employment, trade unions and other bodies responsible for the fixing of money wage-rates by agreement with employers would be gravely tempted to neglect the volume of unemployment entirely, and to push up money wage-rates in spite of the fact that a very large number of persons could not find work at current wages. Such action might seriously prolong unemployment.[16]

And Mr. Kaldor:

The political danger, therefore, arising out of such a scheme as a permanent measure is that it might lead to an ever increasing demand for a rise in the rate of wages paid, which individual employers might be willing to concede in the hopes of recouping themselves by extorting from the state a corresponding increase in the rate of subsidies.[17]

Likewise Mr. Ezekiel:

Labor might deadlock the whole program by insisting on too great wage increases right away while production was still low.[18]

Mr. Keynes assumes as obvious that the proper policy for trade unions is to maintain the *relative* bargaining position of their members, not to push up the general level of money wages,[19] and he has even referred to them as "once the oppressed, now the tyrants whose selfish and sectional pretensions need to be bravely opposed." [20] Yet in the present state of affairs, at least, a constant clamor for higher money-wage rates seems likely.

[15] A. H. Hansen, *Full Recovery or Stagnation* (1938), p. 109

[16] J. E. Meade, *Consumers' Credits and Unemployment* (1938), p. 28.

[17] Nicholas Kaldor, "Wage Subsidies as a Remedy for Unemployment," *Journal of Political Economy*, XLIV (December 1936), 737.

[18] M. Ezekiel, *Jobs for All* (1939), p. 62.

[19] Keynes, *General Theory*, p. 14.

[20] J. M. Keynes, *Essays in Persuasion* (1932), p. 341.

The problem of the labor unions is, however, only one aspect of the general monopoly problem. If we spend money to increase purchasing power, special groups both of owners and laborers may raise their prices and absorb the additional funds without any real increase in consumption. The initiative for price change comes not merely from the buying side. It is not simply a process of putting in a number of money "bids" in a perfect market but a process of speculation and anticipatory price raising from the seller's side. The degree of price rise from a particular injection of purchasing power may thus become a function, at times, of the degree of monopoly control. But American large-scale business has shown itself on the whole, for institutional reasons, content with maintaining relatively stable prices. Adequate monopoly control could in any case probably take care of the problem, but we mention it to show how naïve those persons are who put all their emphasis on purchasing-power stabilization alone.

Yet are we to infer from all these criticisms that the whole idea of purchasing-power stabilization is unsound? That, it is submitted, would be too drastic a conclusion. It is obvious that far more questions have been raised than have been settled, but one must not lose sight of the broad outlines of a subject in running over a long list of qualifications. The importance of these qualifications may in consequence be very much exaggerated.

In evaluating a plan one must compare the magnitude of the evil which it is intended to remedy with the disadvantages which the particular plan entails. One must also ask what, if any, are the alternatives available. Applying this technique, let us first of all consider the problem of the business cycle. It is perfectly valid for the economist to say that the cycle is an almost inevitable concomitant of technical progress; yet it would be closing one's eyes to one of the most important factors in modern economic policy if we failed to recognize the general desire for security. Many of the restrictive measures which economists somewhat sweepingly condemn arise from this deep-seated desire to avoid the effects of economic fluctua-

tions. Some of the more obviously uneconomic of current beliefs obtain wide support on the ground that they will furnish employment, or increase aggregate demand. A policy of purchasing-power stabilization, it may turn out, furnishes the greatest possibility of reconciling these opposing desires for security and progress. For aggregate demand might be genuinely increased with a minimum resort to rigidities and restrictions.

Some writers maintain that it is not so much the "capitalist system" but industrial change which lies at the base of the cycle. There are, indeed, impressive arguments that a rapidly developing socialism would experience a movement similar to the business cycle.[21] Yet, theoretically at least, socialism enjoys one considerable advantage. It would probably not avoid the discontinuity of capital goods production, but at least, in the interval, consumers' income could be maintained and a needless process of secondary cumulative deflation avoided. However, the process of secondary cumulative deflation is not a necessary part of capitalism. By the financial techniques we have outlined, aggregate purchasing power can be maintained even though the attempt may involve some friction and waste. In this way, though disturbances cannot be prevented, we can at least cushion society against many of their effects.

The second great evil of modern economic organization is chronic stagnation and unemployment extending over several cycles. It ought to be possible to occupy the unemployed in some other way than the manufacture of war materials. Here too the techniques we have examined offer a promising line of attack, even though they do not permit a sweepingly simple solution.

What are the alternatives usually advocated? Price flexibility is of course the most conservative policy suggested. But even theoretically, price flexibility, in and of itself, could scarcely prevent the cycle, and the deflationary spiral might continue until there was general social upheaval. Practically

[21] See, for example, W. Röpke, "Socialism, Planning, and the Business Cycle," *Journal of Political Economy*, vol. XLIV (June 1936).

speaking, great masses of capital equipment cannot easily be revalued, and the social friction involved would hardly be worth the possible gains.

Frictions involved in the revaluation of capital goods, as Veblen pointed out, are one of the chief incentives toward the second alternative remedy which many businessmen intuitively advocate — a comprehensive program of "capitalistic sabotage." [22] The attempt is made to "freeze" the existing cost-price structure and marketing position of each firm. Technical innovation is discouraged, as is also "overproduction." Such a policy is largely ineffective, even against the cycle, when there are discontinuities in the demand for capital goods, and can be of no value in dealing with secular stagnation. The result would be merely to help fix the economy at whatever level of "underemployment equilibrium" it might chance to find itself.

The third and remaining alternative is totalitarian planning of the fascist or communist order. Yet if one has decided that the planning of purchasing power stabilization presents too many difficulties, it scarcely seems likely that an attempt to plan the entire economy would be any less difficult. If we cannot regulate banking we are in a poor position for regulating the whole economic system.

The case for and against general regimentation or socialism cannot be argued on purely economic grounds. One point, however, should be mentioned, and that is that the world envisaged by plans of purchasing-power creation such as we have been examining would be widely different from the world we have known until now. The methods of approach which have been suggested in this book may seem inadequate to those who advocate an immediate drastic redistribution of wealth, and to them it will doubtless appear that the author has evinced an undue fear of repercussions upon the marginal efficiency of capital. But if we rely at all on private enterprise, we must consider its mainspring — the hope of profit.

Simply because, however, one wishes to work with the private economy as much as possible, it should not be concluded that

[22] Thorstein Veblen, *The Theory of Business Enterprise* (1904).

the attempt is being made merely to maintain the *status quo*. The methods of distribution advocated during slump and stagnation will make possible many great reforms. It will be possible, without causing too great a disturbance of the remainder of the economy, to wipe out slums, both urban and rural, to set up a high standard of health, housing, and education, and to inaugurate numerous other policies which would eliminate many of the evils which distress us now. Yet the process does not involve wholesale transfers to government ownership, and the friction of taxes could be very considerably minimized.

For these reasons it is suggested that a comprehensive program of purchasing-power stabilization offers a promising means of ameliorating cyclical disturbance and diminishing secular stagnation. The difficulties are great, but it is not certain that they are overwhelming. Mere purchasing power maintenance is neither so simple as its advocates believe, nor is it yet so difficult as its opponents have tried to show. But in any event the economist cannot make the final choice. He can, however, indicate advantages and disadvantages, and that is what has been attempted here.

BIBLIOGRAPHY

BIBLIOGRAPHY

I. BOOKS

Böhm-Bawerk, Eugen von, *Positive Theory of Capital* (1890)

Bresciani-Turroni, Constantino, *The Economics of Inflation* (London: George Allen and Unwin, 1937)

Burgess, W. R., *The Reserve Banks and the Money Market*, revised edition (New York: Harper and Brothers, 1936)

Clark, J. M., *The Economics of Planning Public Works* (Washington: United States Government Printing Office, 1935)

Cromwell, J H. R., and H. E Czerwonky, *In Defense of Capitalism* (New York: Charles Scribner's Sons, 1937)

Dahlberg, Arthur, *When Capital Goes on Strike* (New York: Harper and Brothers, 1938)

Downey, Sheridan, *Pensions or Penury* (New York: Harper and Brothers, 1939)

Durbin, E. F. M., *Purchasing Power and Trade Depression*, revised edition (London· Jonathan Cape, Ltd., 1934)

——, *The Problem of Credit Policy* (London: Chapman and Hall, 1935)

Einarsen, Johan, *Reinvestment Cycles and Their Manifestation in the Norwegian Shipping Industry* (Oslo: Oslo University, 1938)

Ezekiel, Mordecai, *Jobs for All* (New York: Alfred A. Knopf, 1939)

Feaveryear, A. E., *The Pound Sterling* (Oxford: Oxford University Press, 1931)

Fisher, Irving, *Booms and Depressions* (New York: The Adelphi Company, 1932)

——, *100 Per Cent Money* (New York: The Adelphi Company, 1935)

Franklin, Benjamin, *Autobiography*

Gesell, Silvio, *The Natural Economic Order* (San Antonio, Texas: Free-Economy Publishing Company, 1934)

Gide, Charles, and Charles Rist, *A History of Economic Doctrines* (1915)

Gilbert, R. Y., *et al.*, *An Economic Program for American Democracy* (New York: Vanguard Press, 1938)

Haberler, Gottfried von, *Prosperity and Depression*, revised edition (Geneva: League of Nations, 1939)

Hansen, A. H., *Business Cycle Theory* (New York: Macmillan, 1927)

——, *Full Recovery or Stagnation?* (New York: W. W. Norton and Company, 1938)

——, *Fiscal Policy and Business Cycles* (New York: W. W. Norton and Company, 1941)

Hardy, C. O., *Credit Policies of the Federal Reserve System* (Washington: Brookings Institution, 1932)

Harrod, R. F., *The Trade Cycle* (Oxford: Oxford University Press, 1936)

Hayek, F. A. von, *Prices and Production*, revised edition (London: Macmillan, 1935)

Hicks, J. R., *The Theory of Wages* (London: Macmillan, 1935)

——, *Value and Capital* (Oxford: Oxford University Press, 1939)

Johnsen, J. E., *Select Essays on Capitalism and Its Alternatives* (New York: H. W. Wilson Company, 1933)

Kalecki, Michael, *Essays in the Theory of Economic Fluctuations* (London: Farrar and Rinehart, 1939)

Keynes, J. M., *The Economic Consequences of the Peace* (London: Harcourt, Brace and Howe, 1920)

——, *Essays in Persuasion* (London: Harcourt, Brace and Company, 1932)

——, *The General Theory of Employment, Interest and Money* (New York: Harcourt, Brace and Company, 1936)

——, *How to Pay for the War* (New York: Harcourt, Brace and Company, 1940)

Kurtz, E. B., *Life Expectancy of Physical Property* (New York: Ronald Press Company, 1930)

Lester, R. A., *Monetary Experiments* (Princeton: Princeton University Press, 1939)

Leven, M., *et al.*, *America's Capacity to Consume* (Washington: Brookings Institution, 1934)

Mairet, Philip, *The Douglas Manual* (New York: Coward-McCann, Inc., 1934)

Marget, A. W., *The Theory of Prices*, vol. I (New York: Prentice-Hall. Inc., 1938)

Marshall, Alfred, *Principles of Economics*, eighth edition (1920)

Meade, J. E., *An Introduction to Economic Analysis and Policy*, second edition (Oxford: Oxford University Press, 1937)

——, *Consumers' Credits and Unemployment* (Oxford: Oxford University Press, 1938)

Menderhausen, Horst, *The Economics of War* (New York: Prentice-Hall, 1940)

Moulton, Harold, *The Formation of Capital* (Washington: Brookings Institution, 1935)

Myers, M. G., *Paris as a Financial Center* (New York: Columbia University Press, 1936)

——, *Monetary Proposals for Social Reform* (New York: Columbia University Press, 1940)

Pigou, A. C., *Industrial Fluctuations*, second edition (London: Macmillan, 1929)

——, *The Theory of Unemployment* (London: Macmillan, 1933)

——, *Economics of Welfare*, fourth edition (London: Macmillan, 1938)

——, *Employment and Equilibrium* (London: Macmillan, 1941)

Ramon, Gabriel, *Histoire de la Banque de France* (Paris: B. Grasset, 1929)

Raymond, Allan, *What Is Technocracy?* (New York: McGraw-Hill, 1933)

Robertson, D. H., *Banking Policy and the Price Level* (London, P. S. King and Son, Ltd., 1926)

Rogers, J. H., *The Process of Inflation in France* (New York. Columbia University Press, 1929)

Schumpeter, J. A., *The Theory of Economic Development* (Cambridge, Massachusetts: Harvard University Press, 1934)

——, *Business Cycles* (New York. McGraw-Hill, 1939)

Slichter, S. H., *Towards Stability* (New York: Henry Holt and Company, 1935)

Smith, Adam, *The Wealth of Nations*, Cannan's edition (1904)

Veblen, Thorstein, *The Theory of Business Enterprise* (1904)

Whitney, Caroline, *Experiments in Credit Control* (New York: Columbia University Press, 1934)

II. ARTICLES AND ESSAYS

American Machinist, study of age distribution of machine tools, April 24, 1935

Bain, J. S., "The Relation of the Economic Life of Equipment to Reinvestment Cycles," *Review of Economic Statistics*, XXI (August 1938)

Bernstein, E. M., "Wage Rates, Investment and Unemployment," *Journal of Political Economy*, XLVII (April 1939)

Cannan, Edwin, "The Demand for Labour," *Economic Journal*, XLII (September 1932)

Colm, G., and F. Lehman, "The Economic Consequences of Recent American Tax Policy," Supplement I to *Social Research* (1938)

Crum, W. L., "Cyclical Changes in Corporate Profits," *Review of Economic Statistics*, XXI (May 1939)

Dirks, F. C., "Retail Sales and Labor Income," *Review of Economic Statistics*, XX (August 1938)

Douglas, C. H., Major, "Draft Social Credit Scheme for Scotland," *New English Weekly* (July 20, 1933)

Douglas, P. H., "The Effect of Wage Increases upon Unemployment," *American Economic Review*, XXIX, supplement (March 1939)

Einarsen, Johan, "Reinvestment Cycles," *Review of Economic Statistics*, XX (February 1938)

Economist (London), "The Technique of Inflation" (January 27, 1940)

Federal Reserve Bulletin, reviews of the year, January 1939 and January 1940

Flynn, J. T., "Scared Dollars," *Collier's Weekly* (March 11, 1939), p. 72

Franklin, Benjamin, "A Modest Inquiry into the Nature and Necessity of Paper Money"

——, "Remarks and Facts Relative to the American Paper Money"

——, "The Way to Make Money Plenty in Every Man's Pocket"

Frisch, Ragnar, "Circulation Planning," *Econometrica*, II (July 1934)

Haberler, Gottfried von, "The Interest Rate and Capital Formation," *Capital Formation and Its Elements* (New York: National Industrial Conference Board, 1938)

——, reply to Mr. Kahn, *Economic Journal*, XLVIII (June 1938)

Hanna, John, "The Banking Act of 1935," *Virginia Law Review*, XXII (May 1936)

Harrod, R. F., "Professor Pigou's Theory of Unemployment," *Economic Journal*, XLIV (March 1934)

Johnson, N. O., "The Pareto Law," *Review of Economic Statistics*, XIX (February 1937)

Kahn, R. F., "Notes on Ideal Output," *Economic Journal*, XLV (March 1935)

Kaldor, Nicholas, "Wage Subsidies as a Remedy for Unemployment," *Journal of Political Economy*, XLIV (December 1936)

——, "Professor Pigou on Money Wages in Relation to Unemployment," *Economic Journal*, XLVII (December 1937)

Kalecki, Michael, "The Lessons of the Blum Experiment," *Economic Journal*, XLVIII (March 1938)

Keynes, J. M., "Mr. Keynes' Consumption Function, Reply," *Quarterly Journal of Economics*, LIII (August 1938)

Kreps, T. J., "Consumption, a Vast Under-Developed Economic Frontier," *American Economic Review*, XXX (February 1941)

Lachmann, L. M., "On Crisis and Adjustment," *Review of Economic Statistics*, XXI (May 1939)

Lange, Oskar, "The Economic Theory of Socialism," *Review of Economic Studies*, IV (October 1936)

Lerner, A. P., "A Note on Socialist Economics," *Review of Economic Studies*, IV (October 1936)

——, "The Relation of Wage Policies and Price Policies," *American Economic Review*, XXIX, supplement (March 1939)

Lester, R. A., "Currency Issues to Overcome Depression in Pennsylvania, 1723 and 1729," *Journal of Political Economy*, XLVI (June 1938)

——, "Currency Issues to Overcome Depression in Delaware, New Jersey, New York and Maryland," *Journal of Political Economy*, XLVII (April 1939)

——, "Gold Money, Bank Money, and Real Money," *Virginia Quarterly Review*, 17 (Spring 1941)

Machlup, Fritz, "Period Analysis and Multiplier Theory," *Quarterly Journal of Economics*, LIV (November 1939)

Marjolin, Robert, "Reflections on the Blum Experiment," *Economica*, V (New Series) (May 1938)

Musgrave, R. A., and B. H. Higgins, chapter on the national debt in *Public Policy*, vol II (Cambridge, Massachusetts: Harvard University Press, 1941)

Northridge, R. L., letter in *The New English Weekly* (December 19 1935)

Pedersen, J, "Some Problems of Public Finance," *Weltwirtschaftliches Archiv*, 45 (May 1937)

Pierce, J. M., "Thirty-Thursday Plan," *Tax Digest* (September 1939)

Pigou, A. C., "Real and Money Wage Rates in Relation to Unemployment," *Economic Journal*, XLVII (September 1937)

——, "Money Wage Rates in Relation to Unemployment," *Economic Journal*, XLVIII (March 1938)

Robertson, D. H., "The Monetary Doctrines of Messrs. Foster and Catchings," *Economic Essays and Addresses of Pigou and Robertson* (London: P. S. King and Son, Ltd., 1931)

——, "Note on the Theory of Money," *Economica*, 41 (August 1933)

——, "Mr. Keynes' Theory of Money," *Economic Journal*, XLI (September 1931)

——, "Saving and Hoarding," *Economic Journal*, XLIII (September, December, 1933)

Röpke, W., "Socialism, Planning, and the Business Cycle," *Journal of Political Economy*, XLIV (June 1936)

Samuelson, P. A., "Interaction between the Multiplier Analysis and the Principle of Acceleration," *Review of Economic Statistics*, XXI (May 1939)

——, "Theory of Pump Priming Reëxamined," *American Economic Review*, XXX (September 1940)

Simons, Henry, review of A. H. Hansen's "Full Recovery or Stagnation?," *Journal of Political Economy*, XLV (April 1939)

Slichter, S. H., "The Downturn of 1937," *Review of Economic Statistics*, XX (August 1938)

Sprague, O. M. W., "Banks and Banking," *Encyclopedia Americana*, 1932 edition

Staehle, Hans, "Short Period Variations in the Distribution of Income," *Review of Economic Statistics*, XIX (August 1937)

——, "New Considerations on the Distribution of Income and the Propensity to Consume," *Review of Economic Statistics*, XX (August 1938)

Townsend Weekly, December 20, 1935

Villard, H. H., "Some Aspects of the Concept of Capacity to Produce," *Review of Economic Statistics*, XXI (February 1939)

Wright, D. McC., "The Economic Limit and Economic Burden of an Internally Held National Debt," *Quarterly Journal of Economics*, LV (November 1940)

——, "A Neglected Approach to the Acceleration Principle," *Review of Economic Statistics*, XXIII (May 1941)

III PAMPHLETS, MEMORANDA, STATUTES, COMMITTEE REPORTS, ETC.

Berle, A. A., *A Banking System for Capital and Capital Credit*, memorandum submitted to the Temporary National Economic Committee, May 23, 1939

Bond, Jesse H., *A Consumptionstat, Its Nature and Necessity*, memorandum privately circulated, 1936

Colwyn Report, *Report of His Majesty's Committee on Debt and Taxation* (London, 1927)

"Committee for Economic Stability," circular, January 15, 1941

Dahlberg, Arthur, "Recovery Plans," *Monograph No 25*, Temporary National Economic Committee, 76th Congress, 3rd Session (1940)

Federal Reserve Board, *Problems of Banking and Bank Supervision* (Washington: United States Government, 1939)

——, *Charts of Industrial Production, October 1940*

Fisher, Irving, *A Program for Monetary Reform*, memorandum privately circulated, February 1939

General Motors Corporation, *The Dynamics of Automobile Demand*, New York, 1939

Hearings on H. R. 5357, 74th Congress, 1st Session (Banking Act of 1935)

H. R. 5357, 7617, 74th Congress (Banking Act of 1935)

Hearings on H. R. 7188, 75th Congress (Social Credit Bill of 1938)

H. R. 7188, 75th Congress (Social Credit Bill of 1938)

H. R. 9216, 74th Congress, 1st Session (Social Credit Bill of 1935)

Means, Gardiner C., *Patterns of Resource Use* (Washington: United States Government, 1938)

S. 1715, 74th Congress (Banking Act of 1935)

Spahr, W. E., *The Fallacies of Professor Irving Fisher's 100 Per Cent Money Proposal* (New York: Farrar and Rinehart, 1938)

Tax Policy League, *The Townsend Plan Analyzed* (1936)

Townsend Plan Headquarters in Chicago, the following leaflets: "Lessons from a Loaf of Bread"; "Thirty-Three Questions and Answers on the Townsend Plan"; "The Townsend National Recovery Plan — New Reference Book" (1941)

Townsend Plan Bills (not a complete list of all which have been introduced) H. R. 3977, January 16, 1935 (First McGroarty Bill)

H. R. 7154, April 1, 1935, amended April 17 (Second McGroarty Bill)

H. R. 1036, January 3, 1941 (the O'Connor Bill)

University of Chicago Roundtable, *The Economic Meaning of the Townsend Plan*, Public Policy Pamphlet No. 20 (Chicago: University of Chicago Press, 1936)

Walker, G. R., *Toward Monetary Stability*, a privately circulated memorandum

INDEX

INDEX

Aberhart, W., 162
Adjustment, economic, and aggregate stability, 160, 225, 226
Advertising, 17 n.
Aggregate monetary purchasing power, defined, 7; when increases permissible, 7, stabilization of and economic adjustment, 160. *See also* Purchasing power
Alberta, province of, 162, 169
American Machinist, 30 n.
Anglo-American law, 67
Australia, 42 n., 169; labor movement and wage adjustment in, 212

Bain, J. S., and life span of machinery, 32
Bank credit, and bank policy, 10, 179; inadequacies, 75–76; and credit creation, 76; and interest rate, 76; weakness summarized, 77; and long term loans, 78–79, and deficit financing, 129, lack of standard for control of, 195
Bank of England, and emergency currency issues, 152, 186
Bank of France, and loans without interest, 190, 215
Bank reserves, increases in, 88; and control of dis-hoarding, 125; and deficit financing, 129; and national debt, 133–134; and Goldsborough act, 187, 189
Banks, service charges of, 136, 149; currency issues as ultimate asset of, 152; cost and price of money created by, 153–155
Berle, A. A., Jr., 130 n.; and capital credit banking, 77–85, 179; and multiplier, 138–139; on public and private wealth, 144
Bernstein, E. M., 49
Böhm-Bawerk, E. V., 26, 222 n.
Bond, J. H., 171, 172
Bonds, "prosperity depreciation" of, 151, 183; shifting of, 152; and changes in interest rate, 152–153
Bresciani-Turroni, C., 61, 62 n., 193
Brooklyn Bridge, 144
Burgess, W. R, 207
Business cycle theory and economic thought, 5; possibility of socialist cycle, 229

Canada, dominion of, 162, 169
Cannan, E., and demand for labor, 47 n.
Capital goods industries, overbuilding of, 33, 92, 94; shifts in demand curve of, 33, 180; attempts to smooth out concentrations in, 34–36, 38, 92, 95, 180, 199; transferring workers from in secular stagnation, 92, 158; subsidizing continuous operation of, 92
"Capitalistic sabotage," and labor unions, 53 n ; and security, 230
Cassell, G., 26
Catchings, W, 21 n , 143 n., 162
Clark, J. M., 139
Colm, G., 44 n.
"Colwyn Report," 136 n.
Commons, J. R , 86 n
Consume, propensity to, adjustment, 28, 199–200; and jerky investment outlets, 29; flexibility in, 36, 38; increase in and cyclical fluctuations, 38–39, 199, and Ezekiel's "Industrial Expansion," 96–98; and velocity, 103; excessive, 108; and tax on hoards, 111; and Townsend Plan, 118; public works not a substitute for changes in, 160, 203; and Social Credit, 168–169; and "Multiple

Commodity Reserve Plan," 174–175; and eventual shift in secular stagnation, 204–205; and war conditions, 210
Consumers' goods industries, and consumers' choice, 43, 95, 203–204, 225; transferring factors to in secular stagnation, 158, 214; government built, 203–206
Credit creation, and credit "recognition," 76; and single bank, 83, 130; and mechanism of deficit financing, 128–131
Cromwell, J. H. R., 89 n., 90, 91, 92 n., 196
Crum, W. L., 52 n.
Czerwonky, H. E., 89 n., 90, 91, 92 n., 196

Dahlberg, A , 9 n., 100, 110 n., 113 n., 115 n., 200 n.; and need to disburse money, 101; and concept of hoarding, 104; and "calendar currency," 115
Debt, impossibility of general repayment of, 132 n., 163. *See also* National debt
Deficit financing, 128–162
Delaware, state of, 73
Depreciation allowances, and flow of purchasing power, 145–146
Dirks, F. C., 46 n
Dishoarding, and prices, 68, 125
Distribution of wealth, primary and secondary, and the Pareto law, 41; and purchasing power stabilization plans, 196–206. *See also* Redistribution of wealth
Douglas, C. H , 162, 163, 165 n., 167 n., 170, 172
Douglas, P. H., 45 n.
Downey, S., 106–108, 116, 132
Durbin, E. F. M., 15 n., 16 n., 21 n., 24 n., 45 n., 76, 82, 126 n., 127 n., 162 n., 163 n., 166; and unimportance of interest rate, 23; and purchasing power "lags," 20, 146

Economist (London), and technique of inflation, 210, 215
Economists, classical, 4 n., 22, 24; unorthodox, 7, 8; welfare, 40 n., 90, 104
Einarsen, Johan, 30 n., 31, 171
Employment, and stabilizing consumption, 127, 170–171; and standard for credit issue, 195–196; insurance, 198
Equilibrium, dynamic, 9, 12–22; defined, 15
——, monetary, 9
——, static, 15
Euthanasia of the rentier, and increases in M, 216–221
Expanding factors, 12; defined, 13; and profit, 17
Ezekiel, M , 33 n., 89 n., 93–96, 105, 165, 174, 180, 196, 227

Feaveryear, A. E , 152 n., 186 n.
Federal Reserve Banks, interest free advances by, 190–191
Federal Reserve Board, 33 n., 79, 161
Federal Reserve System, 78, 79
Fisher, Irving, 114, 124, 164 n.; and 100 per cent money, 85–89; and inconvertible paper, 86 n ; on velocity, 88 n , 99, 101 n.; tax on hoards and hoarding, 113
Flynn, J. T , 200 n.
Foreign trade, 11; and deficit financing, 129, 134; and Social Credit, 169–170; and purchasing power injection plans, 194; and world stability, 213; and investment, 223–224
Foster, W. T , 21 n., 143 n., 162
Franklin, Benjamin, 70–73
Frisch, R., 6

General Motors Corporation, 30 n.
George Washington Bridge, 144
Germany, Nazi, 142 n.
Gesell, Silvio, 105, 111, 114, 115, 222 n.
Gide, C., 73 n.
Gilbert, R. Y., 131 n , 132 n.
Goldsborough, T. A., 164, 165 n., 166 n., 188, 189

Gosplan, the, 34
Graduate School of Public Administration, Harvard University, 132 n.
Graham, F. D., 86 n.

Haberler, G., 22, 23, 25 n., 27, 28 n., 44 n., 47 n., 62 n., 70 n., 100 n., 122 n., 124 n., 194, 222 n; on price reduction and hoarding, 6 n., 27; and effect of wage cuts, 50; on inflation, 66; on consumption and crisis, 75 n., 176–177; on definition of hoarding, 102, 104
Hamilton, E. J., 86 n.
Hanna, J., 215 n.
Hansen, A., 85 n., 121 n., 127 n., 132 n., 137 n., 149 n., 159, 162 n., 163, 164 n., 166, 177 n., 198 n., 200, 212 n., 226, 227 n.; and industries not geared to consumption, 25; on unwanted goods and Social Credit, 167–168; and increases in money, 216–221
Hardy, C. O., 126 n., 132 n., 152 n., 163
Harrod, R. F., 49, 89 n., 92
Harvard Business School, 75 n.
Hawtrey, R. G., 76
Hayek, F. A., 26 n., 127, 177 n.
Hicks, J. R., 23, 52
Hicks, Ursula, 142
Higgins, B. H., 132 n.
Hildebrand, G. H., Jr., 131 n.
Hitler, Adolf, 212
Hoarding, and employment, 27; and inflation, 67–68; and velocity, 100–102, Haberler's definition, 102; distinction between "hoards" and "net" hoarding, 104; and deficit financing, 124, 128, 141, 142; taxes on compared with purchasing power injection, 180–183. *See also* Net hoarding
Hobson, J. H., 23, 108
Hundred per cent money, 85–89, 164, 179

Income flow, in dynamic equilibrium, 17–21; and current flow of consumers' goods, 19; and velocity, 122–123
Inflation, as increase in M V, 5; and perfect competition, 5; analysis of concept of, 60–69; definition summarized, 69, 179, 194; and gold standard, 69; historical note on, 69–74; and deficit financing, 138; and increase of national debt, 133; fear of, 137; and Social Credit, 164–165; and wage increases, 210, 226–227
Innovation, 13, 14, 35–36
Interest rate, in equilibrium, 16; minimum, 26; and propensity to consume, 29, 204; negative, 89–98, 180; avoiding payment of on government debt, 131, 183–196, and tax friction, 135, 183; and economic rigidity, 137; borrowing to pay, 142, 145; and value of bonds, 149–157; unnecessary in slump, 154; Marshall's views on negative rate, 156; disadvantages of on government bonds, 156–157; preferential for colleges, etc., 220–221; Keynesian theory of, 221–222
Invention, flow of, 17
Investment, definition of, 16; rate of expected profit on, 16; importance of current or new, 16; reduction in outlets and propensity to consume, 26; discontinuous outlets and cycle, 29, 176; replacement waves in, 31–32; and forced saving, 39; needed in redistribution, 43; and wage increases, 56–57; and changes in velocity, 103; difficulty of predicting, 107, 158, 223; and increases in purchasing power, 125, 140; means of financing public, 131; by government, 203–204

Johnsen, J. E., 172 n.
Johnson, N. O., 41 n.
Juglar cycle, 225

Kaldor, N., 50 n., 89 n., 90, 91, 165, 196, 227

Kahn, R. F., 25 n., 90
Kalecki, N., and wage increases in France, 54; on money wage increases and redistribution, 55
Keynes, J. M., 6 n, 18, 24, 26, 31 n, 44, 45 n., 47 n., 65 n., 66, 68, 81 n., 96, 100 n., 105, 108, 109 n., 114, 123 n., 134, 136 n, 150 n., 163 n., 171 n., 172, 192, 201 n., 223, 227; and classical interest-rate theory, 24; and jerky changes in investment outlet, 25; two types of unemployment equilibrium, 27; on multiplier in high consumption economy, 39; and shift in propensity to consume of the wealthy, 40 n; and difficulty of distinguishing cycle from secular stagnation, 41; omission of changes in taste and technique, 42; on taxes and marginal efficiency of capital, 43; on wage cuts and liquidity preference, 48, on prices and wage increase, 54; on earned profits and marginal efficiency of capital, 56; on uncertainty of wage changes, 57, and "semi-inflation," 63; and price cuts, 70, and commodity hoarding, 111, 112, 120; and multiplier, 138–140; on depreciation allowances and purchasing power injection, 146; on consumption in wartime, 210; and purely monetary theory of interest, 222
King, W. I, 86 n
Kondratieff wave, 224
Kreps, T J., 43 n
Kurtz, E. B., 32 n.

Lachmann, L. M., 25 n, 36, 50 n.
Lange, O., 206 n.
Lehman, F., 44 n.
Lerner, A. P., 45 n., 206 n.
Lester, R. A, 72, 73, 74 n., 173 n.
Leven, M., 38 n.
Liquidity preference, insatiable, 29, 121, 123; and increases in quantity of money, 123–124, 140, 182; and consumption and hoarding, 201; attempts to satisfy, 48, 214

Machlup, F., 139 n.
Mairet, P., 162 n.
Marget, A. W., 63 n., 65, 99 n., 100 n., 102, 123 n.
Marginal efficiency of capital, and taxes, 43; and wage increases, 56–57; and earned profits, 56; and taxation of hoards, 109–110; and adverse effects of taxation and purchasing power injection, 178; and plans to avoid interest on national debt, 192–193; and redistribution of wealth, 43–45, 200; and taxes on consumption as compared with taxes on corporations, 200; and rate of interest, 222. *See also* Profit
Marjolin, R., and wage increases in France, 55
Marshall, A, 24, 221; and expectation of quasi-rents, 16 n.; and negative interest, 156
Maryland, state of, 73
Meade, J. E., 8, 36, 40 n., 75, 89 n, 90, 122 n, 131, 164, 185, 189, 194, 198, 201, 227; and interest on government bonds, 154; and fluctuations of standard of living of poor, 169; and consumers' credit, 170–171; and financial defects of "consumers' credits," 157, 195–196
Means, G. C, 33 n., 94
Menderhausen, H, 210 n.
Mill, J. S., 4 n., 8
Monetary "flaw" theorists, and full employment, 20; and A + B theorem, 162–163
Money, stamped, 114–116
Money supply and unemployment, 28; and propensity to consume, 29; and liquidity preference, 123–124, 140
Monopolistic competition, 17
Monopoly, 5, and inflation, 64–65, 228
Moulton, H. G., 38 n., 75 n., 80, 81
Multiple commodity reserve plan, 173–175

Multiplier, the, and deficit financing, 138–140; negative, 140–141
Musgrave, R. A., 132 n.
Myers, M. G., 87 n, 116 n., 162 n., 190 n.

National debt, burden of, 131–149; avoiding interest on, 183–196; repayment of, 184
"National Discount," and Social Credit, 165–167
"National Dividend," 168, and redistribution, 168–169; and socialist state, 206
Net hoarding, distinguished from hoards, 100, 104; taxes on, 105; and Downey plan, 105–109
New Deal, the, 38 n, 139; and New Dealers, 140
New England, 71, 72
New York, state of, 73, 144
New Zealand, 169
"Nonoperating" factors, defined, 12; difficulty of transferring, 16; output of in stationary economy, 20; transfer of in secular stagnation, 40, 158; chronic overexpansion of, 32, 33

Obsolescence, and replacement, 13–15
"Operating" factors, 12, defined, 13; possible shortage of, 20, 146

Pareto, V, 41
Pedersen, J., 121 n, 154 n, 184, 190 n
Pennsylvania, state of, 70, 72, 73
Pigou, A. C, 29 n., 31, 40 n., 41, 47, 143 n; effects of interest on consumption, 29 n.; on wage cuts, 48–50
Planning, and purchasing power stabilization, 230
Political problems, in purchasing power injection, 123, 206–209; of public works administration, 160–162; and "pressure group" inflation, 225–226
Population, reduction of increase in, 26; age distribution of and Townsend Plan, 116
Price reduction, frictions of, 5; inadequacy of, 6–7, 33–34, 229–230; and full employment, 28; after war crisis, 211–212
Price stabilization, difficulties of, 20 n.; conflict with "progress," 39–40; and wage changes, 45–46; and inflation, 66, 70, 194; and "shortage" of purchasing power, 122
Prices and idle hoards, 112
Production, factors of, 12; dangers of transfer in slump, 34; structure of, distortion in cyclical economy, 33, 68 n, 127; and increases in M, 127; and planning public works, 157; distortions maintained by public works, 203
Profit, and investment, 31 n.; and taxes for redistribution, 43–44; misapplication of idea of "reasonable" profit, 44; Social Credit and unwanted production, 167–168
Public works, distributive and political difficulties, 157–102; and distortion of the structure of production, 167–168, 203
Purchasing power, defined, 3–4; three main methods of creating, 10; injection of, 122–175

Ramon, G, 190 n
Raymond, A, 172 n, 173 n.
Redistribution of wealth, and purchasing power, 10; as a cyclical remedy, 38–40, 158; as a remedy for secular stagnation, 40–45, 158, 177; slow effect on propensity to consume, 38, 177; need for new investment in, 43, 177; and taxes and investment, 44; and money wage level, 45–58; and velocity, 104; relation to increases in money, 196–206; and absolute share of wealthy, 202. *See also* Distribution of wealth
Replacement waves, 30–32
Replacing factors, 12, defined, 13
Rist, C., 73 n.
Robertson, D. H., 16 n., 21 n., 35 n.,

48, 63 n., 66, 101, 102 n., 104 n., 143 n., 158 n., 163, 171, 180, 199; and discontinuities in investment, 30; and disadvantages of stabilization, 40; and defects of "day" technique, 141
Robinson, J., Mrs., 24
Rogers, J. H., 190 n.
Röpke, W., 229 n.

Samuelson, P. A., 29 n., 139 n.
Savings, changes in rate of, 22; adjustment to investment, 22–29; effect of increase in on consumers' goods industries, 24; forced, 39, 64; irregularities of flow of, 84
Say, J. B., 4
Say's law, 3, and the barter approach, 4; inadequacies of, 4–7; and cyclical shortage, 33; and Ezekiel's plan, 95
Schacht, H., 138
Schumpeter, J. A., 27, 100 n., 163; and three cycle schema, 224–225
Simons, H., 85 n.
Slichter, S. H., 47 n., 52 n.
Smith, A., 70 n., 73 n.
Social Credit, 162–170, 195
Social Security, 161–162
Soddy, F., 164 n.
South Carolina, state of, 72
Spahr, W., 8 n., 69 n., 70 n., 73, 85 n., 87 n., 99
Sparks, J., 72 n.
Sprague, O. M. W., 75 n.
Staehle, H., 46 n.
Stagnation, secular, and war, invention and population change, 42; difficulty of predicting, 42, 177, 224; four possible ways of overcoming, 205
Stuart, A. W., 131 n.
Subsidies to producers, and negative interest rates, 89–98, 180; and capital goods industries, 93; and economic adjustment, 160
"Supplanting factors," 12; defined, 14–15; and profit, 17
Sweezy, M. Y., 131 n.
Sweezy, P. M., 131 n.

Tarnowsky, I., 116 n.
Tarshis, L., 131 n.
Taxes, and marginal efficiency of capital, 43–44, 177–178, 200–202; on hoarding, 100; on "net" hoarding, 105–109; on hoards, 109–114, 180; and stamped money, 115; and Townsend Plan, 117–120; and sudden dishoarding, 125; and real burden of government debt, 134–135, 147–148, and tax friction, 135, 136–137, 143, 144–145, 148, 149, 183; and relation to money income, 136; postponement during slump, 178; avoiding by increasing quantity of M, 184–185; and purchasing power injection plans, 200–206
Technocracy, 172–173
Temporary National Economic Committee, 78 n., 138 n.
"Time-elasticity of supply," defined, 62–63; definition of inflation, 67, 69; and price rise, 194
Time preference, changes in, 177
Townsend, F., 116 n.
Townsend Plan, 106, 116–120

United States, 42 n., 78, 169, 212, 213, 223

Veblen, T., 53 n., 230
Velocity, 99, meaning of, 99–104; and release of idle hoards, 113; different periods of, 143
Velocity stimulation plans, 10, 99–121, 180
Villard, H. H., 43 n.
Viner, J., 47, 48

Wage increases, and employment, 51–58
Wage reduction, and full employment, 28; as a recovery measure, 47–51

Wages, and redistribution, 45–54; general level of, 45; three views as to, 47; increases in and prices, 54; and inflation, 226–227
Walker, G. R., 109 n., 113 n.
War, and secular stagnation, 42; and inflation, 74, 210; finance, 209–213
Warburton, C., 38 n.
Whitney, C., 76
Whittlesey, C. R., 86
Wilson, J. D., 131 n.
Wright, D. McC., 31 n.

Young, A., 95 n.