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The DYNAMICS of CAPITALISM

The DYNAMICS of CAPITALISM

Correctives Toward Continuous Growth

BY JULIUS T. WENDZEL



HARPER & BROTHERS PUBLISHERS NEW YORK

THE DYNAMICS OF CAPITALISM

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FIRST EDITION G-F

Library of Congress catalog card number: 56-9083

Contents

PREFACE	ix
PART I. INTRODUCTION AND SETTING	
I. THE APPROACH	3
Emphasis on Understanding	
Focus on Finance	
II. THE SETTING AND ECONOMIC OBJECTIVES	9
Man's Increasing Wants	
Releasing Nature's Powers	
Increasing Wants and Economic Systems	
Economic Effectiveness and Dynamic Growth	
PART II. THE STRUCTURE AND GROWTH POWER OF CAPITALISM	
INTRODUCTION	23
III. FUNCTIONS, FREEDOMS, AND PRODUCTIVITY	24
Functions and Freedoms	
Functions and Controls	
The Broad Arena	
IV. THE ENTERPRISER AND ECONOMIC PROGRESS	29
The Function of the Enterpriser	
The Enterpriser: Key to Progress	
New Enterprisers and Firms	
V. THE ROLE OF THE CAPITALIST	37
The Nature of Capital and Capitalism	
The Capitalist Function	
Functions and Incomes	

VI. THE FINANCIAL LINKAGE OF CAPITAL AND ENTERPRISE	43
The Importance of Transmission	
Finance and Economic Growth	
Bank Credit and Economic Growth	
 PART III. FINANCIAL OBSTACLES TO STABILIZED GROWTH	
INTRODUCTION	57
VII. INTEREST DIFFERENCES AND ECONOMIC RETARDATION	59
High Rates for New, Young, and Capital-Deficit	
Enterprisers	
The Impact of Rate Differences	
Possible Increases in Interest Rates	
VIII. INSTITUTIONAL FOUNDATIONS OF INTEREST RATE	
DIFFERENCES	75
Financial Centralization versus New Enterprise Scatter	
Impact on Rates and Access	
Lessening Interest Rate Differences	
IX. CREDIT, MONEY, AND CYCLICAL BREAKDOWN	90
Growth and Cycles	
Credit and Cyclical Breakdown	
Money and Cyclical Breakdown	
War Expansions, Finance, and Postwar Breakdown	
Summary	
 PART IV. IMPLICATIONS AND SUGGESTIONS FOR POLICY	
X. REFLECTIONS AND PERSPECTIVE	115
Reflections	
Strategic Spheres for Policy	
XI. POLICY FOR CREDIT AND ENTERPRISE	120
Increasing the Size and Strength of New and Young	
Enterprise	
Rechanneling the Supply of Capital	
Stabilizing Commercial Bank Credit	
Developing Supplier Attitudes	
The Wise Use of Governmental Powers	

CONTENTS

vii

XII. GOVERNMENTAL MONETARY AND FISCAL POLICIES	144
Policy for Money	
Governmental Fiscal Policy	
Perspective on Government	
XIII. CAPITALISM AND PROGRESS	162
Related Spheres	
Beyond Economic Systems	
Focal Necessities	
Beyond our Borders	
INDEX	171

Preface

Economists have long recognized that classical economics was essentially static and inadequate for explaining economic growth and fluctuations in a changing economy and for providing a guide to policy in such an economy.

Keynesian economics has helped to overcome some of this inadequacy. The theories developed by Keynes and his followers have laid a basis for policies to help in achieving economic stabilization, particularly for countering tendencies toward unemployment and for overcoming unemployment once it has become widespread. However, the economics of Keynes and the policies that have followed are still fundamentally static and short-run.

There is need now to give more emphasis to the foundations of changes "in the state of the arts" and to the long-run impacts of attitudes, control institutions, and economic policies affecting economic growth. I believe that a picture of the essential dynamics of our economy—the forces that make for rapid and continuous growth as well as those that tend to hamper such progress—must become thoroughly familiar to economic leaders, both private and public, if men of this generation and of future ones are to develop economic institutions and policies that will assure continuous, rapid growth and continuously rising living standards.

A partial foundation for the development of a dynamic economics was laid some years ago in the writings and teaching of the late Professor Joseph Schumpeter, and others have done considerable thinking in this direction. The principles of economic dynamics have yet to become an integral part of economic thought and policy, however. I hope in this book to contribute toward a better understanding of economic dynamics under capitalism. In addition to some theoretical reinterpretation and development along this line, I shall indicate illustratively the nature of changes in private and public attitudes,

institutions, and policies that I believe would contribute to continuous, rapid growth in the United States and possibly beyond her borders.

I am deeply indebted to Professor Schumpeter under whom I prepared my doctoral dissertation at Harvard some years ago, for the background of the thought that is embodied in this book concerning the dynamics of capitalist growth. I wish to acknowledge this debt to Professor Schumpeter even though parts of his analysis remain subject to verification, and even though he left for others the task—of which he himself despaired—of developing democratic government in a manner that makes it possible to project the best of the capitalistic system into the future.

I am also indebted to many others at Harvard where I served as an instructor while pursuing graduate studies, and at Tufts College where I studied earlier under a Braker Teaching Fellowship in Commerce and Finance. The underlying theoretical foundation of this book was developed in those early years of study and teaching. Although specific ideas cannot be traced to specific individuals, I feel indebted to my students for their stimulating questions and to my associates for many hours of discussion as well as to my professors for guidance and encouragement.

I am indebted to a large number of persons with whom I worked in various agencies of the federal government on problems of agricultural adjustment, resource planning, social security, and fiscal policy during a period of retarded economic development followed by war-related expansion. The need for moving far beyond classical economics and even beyond Keynes in developing a stronger theoretical foundation for both private and public economic policy became evident during those years. The approach to correctives for continuous growth suggested in Part IV of this book was developed considerably through criticism and discussion with many persons in the federal government who were concerned with the problems of growth and stability in a free economy.

A list of all of those from whom I have learned would cover pages, and even such a list could not give full credit to many who would be included. May I merely express my sincere thanks to all. Each will know how much it is deserved. I am similarly indebted to a large number of writers to whom I have made no special reference in the

book. A book written briefly and with a minimum of footnotes may be more extensively read by busy decision-makers who may or may not be in the economics profession. I trust that the unnamed writers will share with me the desire that their ideas reach such readers as well as professional economists.

A number of individuals contributed directly to the preparation of the book. Dr. John F. Adams, Director of the Bureau of Economic and Business Research, Temple University, and a colleague during several years of government service, has served as a general counselor at all stages. Dr. E. M. Winslow, of the staff of the United States Tariff Commission, and one of my inspiring professors many years ago, also served as a general counselor at all stages. Professor John R. Greenman, Department of Agricultural Economics, University of Florida, and a close associate for many years, contributed much in the way of both encouragement and suggestions. Professor Elton Ham, Head, Department of Political Science and Dr. Harold T. Smith, Vice-president, Kalamazoo College, being near at hand, contributed much through discussion as well as through written suggestions. Dr. Ingrid Hahne, Assistant Professor of Economics, Temple University, was especially helpful in refining final drafts. Although I have often disregarded the advice of these counselors, such merit as the book may have is considerably due to their patient efforts. For such shortcoming as may characterize the book in spite of their efforts, I must accept the responsibility.

I owe a special debt to the W. E. Upjohn Institute for Community Research, an activity of the W. E. Upjohn Unemployment Trustee Corporation, which was established "for research into the causes and effects of unemployment and measures for the alleviation of unemployment." Under this charter I was given an opportunity to systematize my thought concerning the dynamics of capitalism and to consider correctives for achieving continuous growth and continuously high level employment in our economy. For this opportunity I am deeply grateful. Among my colleagues at the Institute, Dr. Harold Taylor, Director of the Institute, helped in translating technical concepts into relatively nontechnical language and in developing clarity of statement. Eugene C. McKean also contributed in these respects as well as in the presentation of statistics, and Henry C. Thole made stimulating suggestions pertaining to the economics of change.

Finally I wish to express my gratitude to all Institute staff members and secretaries who suffered patiently with my impatiences as I struggled with this book and, most of all, to my wife to whom this book is dedicated.

JULIUS T. WENDZEL

PART I. Introduction and Setting

I. The Approach

IT WOULD serve men in the United States, if not those beyond her borders, to develop perspective, understanding, and policies that would lead to the more effective utilization in our economy of the dynamic powers for production and growth that inhere in a system of democratic capitalism. The primary purpose of writing this book is to contribute toward this end—toward increasing the effectiveness of our economy.

The United States and, in fact, the world, faces a huge and rapidly increasing production task in the years and decades ahead. World population doubled in the two centuries 1650 to 1850, and doubled again in the single century 1850 to 1950. The population of the United States doubled in the fifty-year period 1900 to 1950, and may well double again in the fifty-year period 1950 to 2000. With the spread of knowledge concerning possible living standards, a worldwide surge of desire for rapidly increasing living standards appears also to be ahead. These combined biological and psychological trends place before men and modern economies a tremendous task—that of providing a rapidly increasing per capita production for a rapidly increasing population.

The capacity to accomplish this task depends fundamentally on the rate of increase of human knowledge and on dynamic development toward the release and use of the apparently boundless energies of nature. The economic systems under which men are organized and operate have a significant bearing on men's effectiveness in such development, however; men throughout the world are searching for those principles and patterns of economic organization that will be of greatest aid in meeting these ever-increasing needs and desires.

At the present time the United States is riding a wave of unprece-

dented prosperity and, as always occurs during such surges of growth, optimism concerning the future runs high. The optimism is buoyed by the fact that government has in recent years developed policies that could help to stave off depression. But along with the prevalent optimism, the fears of sudden breakdown, if not of secular decline, that reached intense heights in the 1930's are not far beneath the surface. Few have lost the notion that depressions are the natural follow-up of an economic boom. Many economic transactions continue to be geared to this assumption, as do some of our governmental economic policies. Such fears of cyclical breakdown not only contribute to the likelihood of such breakdown but often lead people to advocate or condone (especially if accompanied by fears of secular decline in our economy) governmental action that could lead gradually to a loss of that freedom of the individual—capitalist, enterpriser, and worker—which we believe is an essential source of dynamic growth in a capitalistic economy.

There is danger to the nation, both in the optimism that leads some to believe that continued record-breaking prosperity is a certainty, and in the pessimism that leads others to believe that depression and breakdown are the inevitable aftermath of good times. An excessive optimism can contribute to instability and breakdown by encouraging careless investment and expansion and thus unhealthy booms; and excessive confidence in the capacity of government to sustain perpetual prosperity can lull us into a state of tranquillity which keeps us from taking steps to overcome critical sources of breakdown that lie deep in the private economy and beyond the reach of governmental stabilization policies. The greater threat to the achievement of full potential in our economy, however, lies in attitudes, fears, and policies based on the assumption that booms and depressions are unavoidable in a free capitalistic economy.

Let us now state our position on these matters. Our United States economy, operating under the general principles of democratic capitalism—a system characterized by private property, private enterprise, and a high degree of freedom—has on an average experienced a rapidly increasing rate of growth and productivity. On the strength of this record, and for reasons which will become evident in our analysis, the writer believes that this system has outstanding potentials for aiding mankind in achieving the rapidly increasing effectiveness

of production necessary to provide higher living standards for increasing numbers.

The author shares the belief that prospects for continued, high-level economic activity in the near future are good. As far as the long run is concerned, he believes that with increased perspective among leaders of society, both private and public, it is possible (barring disastrous war) for the average aggregate product of our economy to increase beyond all precedent; and that, if population increase is not extreme, we can achieve an increasing standard of living even for our rapidly growing numbers.

Yet there are several factors that compel us to strive not only for continued but for greatly increased effectiveness in our economic system. For one thing, the task facing us is far greater than many have yet recognized. Moreover, despite a gratifying average performance of which we are justly proud, our economy has been characterized by severe cyclical breakdowns and by considerable periods of retarded economic development. Such breakdown and retardation have put the economy's average product over time well below potential.

It is our thesis that booms and deep depressions (in contrast to surges and plateaus of growth which we consider normal under capitalism) are neither normal nor necessary in our type of economy; and that the critical sources of retardation and breakdown are artificial and surmountable. These sources, however, have not been entirely removed from our economic environment, and they must be overcome if our economy is to provide the rapidly increasing standard of living that is possible under this system. They must, indeed, be overcome if it is to survive in its essentially democratic and dynamic form.

EMPHASIS ON UNDERSTANDING

The prime road to increasing effectiveness under capitalism is increased economic understanding. It is particularly important to develop perspective and understanding among our decision-makers and leaders. In a private, capitalistic economy many great decisions affecting economic life are made by such leaders in business, finance, labor, and government. Many of the changes in attitudes and policies necessary for achieving full potential in our economy are likely to

occur only if these decision-makers acquire a full appreciation of the benefits to them and to society of making such changes. Accordingly, we are here addressing not only economists and educators, but also leaders of thought and action in all segments of economic life, as we discuss the several spheres in which increased understanding is especially important.

Let us enumerate these spheres. It is important, for example, that there be perspective concerning the production task that lies ahead, in order that leaders of society may sense the urgency of striving energetically toward achieving increased economic effectiveness in our economy. In Chapter II we shall attempt to develop such perspective and to establish focus concerning objectives for American capitalism.

It is important also to develop understanding concerning the nature of democratic capitalism, concerning its unique powers for growth and productivity, and concerning the key sources of such growth, in order to foster the factors necessary for increasing economic effectiveness. Such understanding can also contribute to confidence in the potentials of democratic capitalism; and such confidence is in itself an important requisite for achieving maximum effectiveness in our economy. In Part II we shall discuss the structure and key sources of dynamism and growth under democratic capitalism.

It is necessary, moreover, to develop understanding concerning both the factors that place a drag on the natural dynamism of a capitalistic economy and those that tend toward excessive fluctuations and breakdowns. It is fundamental that capitalists, enterprisers, and decision-makers in general recognize the nature of these factors and recognize that they are surmountable, in order that they may move effectively and with confidence toward overcoming them. In Part III we shall discuss the key factors that tend to limit dynamic development and those that tend toward abnormal breakdown.

Our analysis both of the structure and growth factors and of the retardation and breakdown factors in our system suggests directions for change which would be conducive to the achievement of the large potentials of our economy. We present briefly in Part IV suggestions for change that, we believe, would counteract the retarding and breakdown factors and, giving full rein to the inherent strength of democratic capitalism, would contribute to the achievement of full potential in our economy.

FOCUS ON FINANCE

As we describe the system of democratic capitalism, set forth its sources of strength, and consider its problems, one sphere emerges as of primary significance. This is the general sphere of finance. It may help the reader to have at the outset a short preview of the development of this theme.

The central figure who brings dynamic growth to the American economy is the business enterpriser. He is the man with ideas, with leadership capacity, and with courage, who thrusts new methods, products, and services into the stream of production.

Many men with capacity for enterprise own much less capital than they can effectively use in establishing and developing enterprise, however. Often the talent of enterprisers can be embodied in the production stream only because we have a procedure by which they can make use of capital which is owned by others. Much more than has been generally recognized, rapid progress under capitalism hinges on the unique financial linkage between capitalists and enterprisers. The transfer of "control over capital" through credit in either loan or equity form is a vital element in rapid economic growth. Thus, we single out credit as the institution which brings leadership talent to bear on our ever-increasing productivity.

But there is another side to the picture. Our analysis shows that both retardation and major cyclical breakdown or deep depression stem heavily from difficulties in the financing of business enterprise. There is a considerable drag on growth because of the relatively high interest rates faced by capital-deficit enterprisers, including many new and growing enterprisers. Booms and depressions stem heavily from stickiness and instability in the supply schedule of credit. Thus, the factors limiting full productivity and contributing most to cyclical breakdown or deep depression lie in the very financial linkage which, if working in full harmony with principle, is a primary source of dynamic growth in our economy.

The tendency for normal growth surges and plateaus to be replaced by booms and depressions in our economy, while originating from the sphere of credit, is sharply reinforced by associated variations in the volume of money. The supply of credit and of money, though each affects levels and fluctuations in economic activity

differently, often combine in relentless drives toward boom and depression.

In making suggestions for change, we emphasize not only policies pertaining to the financial linkage between capitalist and enterpriser and to money but also those pertaining to governmental finance and fiscal policy. Although governmental finance (except in war-related periods) is not viewed as a source of instability, it can play a considerable role in a larger program for achieving stabilized growth.

While all three of these areas must play a part in a coordinated program, the greatest need is for the modification of attitudes, institutions, and policies pertaining to the financing of business enterprise—in the financial linkage of capitalist and enterpriser. Without substantial private and public redevelopment in this sphere, it is doubtful that fully dynamic growth can be achieved and deep depression avoided.

Of course, thought and action toward improvement in the general area of finance are not all that is necessary to bring about maximum economic growth and welfare. However, thought and action toward improvement in the sphere of finance, particularly in the financing of business enterprise, are a prime necessity if our economy is to achieve full potential; improvement in the three spheres of finance can contribute much toward this goal.

II. The Setting and Economic Objectives

MAN'S INCREASING WANTS

WE ARE part of a world in which the need and desire for economic goods and services are increasing rapidly. This growing need sets the stage of modern economic life and poses a tremendous production task that must be faced in the years ahead.

The increase in the need for economic goods comes from two main forces: a continuous increase in world population, and a continuous increase in the needs or desires per person. If our levels of living are not to suffer, more must be done with given natural resources than increasing productivity per person for a given population. Productivity must increase per person for a rapidly increasing population.

It is not our purpose to discuss in detail what population policy should be. True perspective concerning the task before our modern economies, however, requires recognition and understanding of the fact that the aggregate of human wants (needs and desires) in our country and throughout the world is growing.

Population growth and welfare

There is widespread confusion concerning the relationship of population growth to economic welfare. Almost universally, in popular discussion, a rapidly increasing population is considered as a factor contributing to general prosperity. There is a limited, short-run sense in which this is true; in basic, long-run terms it is the reverse of the truth.

The elementary but fundamental fact is that any increase in population represents an increase in the need for economic goods and services. Once the ratio of population to resources has reached the level that prevails in most countries today, an increase in population

is a net liability because it tends to add wants faster than it adds productive capacity. The law of diminishing return tells us clearly that with given resources an increase in population, unless offset by increased productive capacity, leads to a decrease in the product available per capita.

This is not to say that even a fairly rapid increase in population in the future will actually lead to a lower product per capita in our country or even in the world. Increasing knowledge and economic effectiveness can, in the future as in the past, enable man to increase his product per capita even though population increase places pressure on his resource base. It should, however, be clear that population increase adds needs more rapidly than it adds means of supplying these needs, and tends, in the long run, to be a negative rather than a positive factor in "prosperity."

The underlying downward pressure of population increase on living standards in modern economies is easily overlooked precisely because it often takes place during periods of increasing knowledge and productivity. Increasing productivity per person permits an increase in product per capita and in living standards in spite of and not because of the general down-pressure of such population increase. It is important for perspective to note this fact.

The popular tendency to associate prosperity with rapid population increase is undoubtedly stimulated by the fact that the immediate result of this is an increase in markets for those producers who are in business at the time when it is taking place. This tendency is perhaps stimulated also by the usual procedure in business forecasting of counting population increase as a positive factor in aggregate demand.

What forecasters really do is tacitly to recognize that, at this stage in history in this country, productivity is increasing rapidly and, it can safely be assumed, will continue to do so for a considerable period. This assumption becomes less and less safe, however, as we move a bit further into the future, and the ratio of population to productive resources becomes high. For much of the world in which this ratio is already high and in which productivity increase is slow, a population increase means a lower level of living. Universally, a rapid increase in population puts growing pressure on man's resources and challenges his production ingenuities, but it must be recognized, in appraising

the task before our economies in the decades ahead, that this is a definite alternative in men's minds to a higher level of consumption per person. Many persons will prefer a larger family to more comforts per person in the family. The reproduction of his kind and the pleasures of family life are basic desires of man. It is difficult to say that one attitude is socially more desirable than the other. It is evident, nevertheless, that those desires represent very real alternatives, and that there is generally a powerful tendency for population to increase throughout the world and throughout time.

Population growth rates

The extent to which population increase continues to put pressure on man's resources and ingenuities in the modern world is not commonly recognized. World population doubled in the two centuries 1650 to 1850 and doubled again in the single century 1850 to 1950.

During every 50-year period since 1650, world population has increased at an accelerating rate. This striking fact is brought out in Table 1, which shows population increase in absolute and percentage terms for the world as a whole and for the United States. The data in column 3 indicate a continuous increase in the rate of world population increase—from 14 per cent for the period 1650-1700 to about 50 per cent for the period 1900-50. Since each 50-year period starts with a larger base, the absolute increase in numbers is even more striking. During the half-century ending in 1950, the 50 per cent increase in world population represents an absolute increase of 800 million persons—over 10 times the number of persons (76.1 millions) in the United States at the beginning of that period. It is as though, in 50 years, or in less than one lifetime, we added 10 countries with populations equivalent to that of the United States in 1900 to the consuming world.

The rate of population increase in the United States has been, and continues to be, faster than that for the world as a whole, although the percentage rate of increase is decreasing. In the period 1900-50, the population of the United States doubled, while world population was increasing by only one-half.

Again and again reputable scholars have predicted that the population of the world and the United States would "soon" level off. Lead-

ing forecasters are again predicting that the percentage rate of increase will lessen during the next half-century. Woytinsky and Woytinsky have, for example, predicted a 35 per cent increase in world population for 1950 to 2000 as compared with the near 50 per cent increase for the period 1900-50.¹ Even a 35 per cent increase from a base that

TABLE 1. UNITED STATES AND WORLD POPULATION INCREASE, 1650-1950

Year	World		United States	
	Population (Millions)	Percentage Increase	Population* (Millions)	Percentage Increase
(1)	(2)	(3)	(4)	(5)
1650	545	—	NA	—
1700	623	14	0.3	—
1750	728	17	1.2	300
1800	906	24	5.3	342
1850	1,171	29	23.3	340
1900	1,608	37	76.1	227
1950	2,400	49	151.7	99

NA means not available.

* Data after 1750 represent estimates as of July 1; 1950 entry includes Armed Forces overseas.

SOURCE: Column 2: W. S. and E. S. Woytinsky, *World Population and Production: Trends and Outlook* (New York: The Twentieth Century Fund, 1953), Table 14, p. 34.

Column 4: U. S. Bureau of the Census. 1700-1900: *Historical Statistics of the United States, 1789-1945* (Washington: Government Printing Office, 1949), Series B12 and B31, pp. 25 and 26. 1950: *Statistical Abstract of the United States, 1952* (Washington: Government Printing Office, 1952), Table 9, p. 10.

has now reached 2.4 billion represents a tremendous increase in population pressure—an additional 850 million persons as compared with an increase of 800 million in the half-century just past.

If, furthermore, one notes in column 3 of Table 1 that during the last 300 years the rate of population growth has never failed to increase for succeeding 50-year periods, and that it virtually reached a 50

¹ W. S. Woytinsky and E. S. Woytinsky, *World Population and Production: Trends and Outlook* (New York: The Twentieth Century Fund, 1953), p. 259. The Woytinsky estimates reflect a revision of a projection made originally by Frank W. Notestein.

per cent rate for 1900-50, one wonders if a sudden reversal to an increase of only 35 per cent is probable. It would seem wise to be prepared for a percentage increase in world population during the current half-century at least equal to that of the one just past.

Likewise, Bureau of the Census projections of United States population through 1975 suggest the possibility of a 50 per cent increase over 1950 levels by that time.² Thus it would seem wise to be prepared for the possibility that the nation's population might again double itself during the current half-century period.

At any rate, there can be no doubt that population will continue to put severe pressure on man's resources, ingenuities, and economic systems in the years immediately ahead and for many decades to come. For perspective, in appraising the task before modern economies, we cannot overlook the powerful tendency of population to increase, even though we do not accept the Malthusian conclusion that such an increase necessarily leads to a lower level of living.

Increasing wants per person

As we have noted, the pressure of human needs and desires on man's resources and economic ingenuity comes not only from the increasing population but also from the growing desire for better living standards which characterize an ever-widening portion of the modern world. There can be little doubt that the spread of knowledge among low-income peoples everywhere will lead to persistent demands for a higher level of living.

In our own country, knowledge of the high living standards enjoyed by upper-income groups has created in the mass of our people a strong desire for a better level of living for themselves also. The low-income family has long been dissatisfied with its current level of consumption. It has wanted, and has succeeded in obtaining, better food, clothing, and housing. From its government it wants more and better schools and highways as well as more public services and benefits. Its demands are for an ever-higher level of consumption per person.

Through recent improvements in communication and transportation, knowledge of the generally high standards of living in the United

² U. S. Bureau of the Census, *Current Population Reports, Population Estimates* (Series P-25, No. 123, October 20, 1955), Table A, p. 2.

States and other prosperous countries has become widespread among the great masses of low-income people throughout the world. Dissatisfaction with their own relatively meager levels of living is spurring them to strive for more goods and services for themselves. Leaders in these countries are aware of these aspirations and are seeking ways to provide their people with more goods and services.

One may note that, to the degree that attempts to increase consumption levels per capita everywhere are successful, the problem is compounded. Rapid progress in achieving higher levels of living serves as an impetus toward a still higher standard for men. More begets a desire for more.

If we in the United States were not part of an increasingly interdependent world, we might face the rapid increase in world population and in desires for better living with some equanimity, even though our population is itself increasing rapidly. Fundamentally, the increase in population and in needs to which we contribute is part of a tremendous composite pressure on our resources and ingenuities as well as on those of the rest of the world. In modern times we cannot live unto ourselves alone.

Increasing population, together with a desire for an increasing level of consumption per person, sets and, in a general way, quantifies the composite future physical demand of mankind; and, by the same token, sets and quantifies the magnitude of the job that lies ahead for man as producer and for the economic systems under which he operates.

RELEASING NATURE'S POWERS

Nature has given man a mighty resource base. But resources, as given to man, are in the raw. It takes human effort—intelligent, courageous, driving effort—to develop these resources and to derive, from the combination of human effort and resources, a high level of goods and services for the satisfaction of human needs and desires. Original resources are multiplied many times in their usefulness to man by the application of creative effort and intelligence. Human labor—physical, mental, and creative—must turn the key if nature's original powers are to be progressively released and channeled toward the satisfaction of human wants.

The basic elements of production are men and natural resources and, fundamentally, all increases in the capacity to produce stem from them. Men have, however, made machines, power plants, and other producers' goods which we now think of as a third, though intermediate, element of production. In the economic world of today, we have these three broad physical pillars of production—men, natural resources, and man-made producers' goods.

In appraising the production task ahead for modern economies, it is well to bear in mind that a large share of the world's resource base is relatively fixed. The stock of natural, nonhuman resources is more or less given to man. He can deplete it but can do little to increase it. The great potential lies in learning to release the apparently tremendous powers embodied there. An understanding of this relative fixity of nature's original resources brings the focus once again on the fact that, as population increases and as the desire for high living standards tends to spread, we must greatly expand our production capacity.

Fundamentally, this increase in the capacity of man to produce can come about only through an increase in his own knowledge and through effective application of that knowledge in releasing and utilizing nature's powers—including his own. Only through an increase in knowledge could water power, electricity, and atomic energy be discovered and harnessed in field and factory. Creative thought, imaginative study, and courageous experiment by men of education, science, and business offer the great hope for the future—the hope that mankind can develop sufficient productive capacity to meet his ever-increasing needs and desires.

INCREASING WANTS AND ECONOMIC SYSTEMS

Full realization of the potential benefits from human effort and nature's resources and, at any given time, from the existing stock of producers' goods requires systematic cooperation among men. Effective economic activity by large numbers of men requires economic organization or system to enable men as consumers to express their desires for goods and services, to enable men as workers to express their work desires, and to permit co-ordination of work efforts among men working together and with natural resources and man-made goods. There must be organization to guide the use and allocation of resources in production, to provide a means for men to distribute

among themselves the joint product and, in general, to enable men to co-ordinate their economic efforts toward efficient production and distribution.

We may think of an economic system as that large group of institutions and controls under which men are organized to work together on or with natural and man-made resources toward the satisfaction of human wants. An economic system provides the legal and social framework within which men co-operate in utilizing the original elements for production and in developing these elements for more effective production.

The nature of the economic system under which men operate has a strong bearing on the effectiveness of their economic activity and, in turn, on the degree to which they are able to satisfy their economic needs. A system of economic institutions and policies that gives a high degree of initiative and freedom to individuals in undertaking and conducting economic activity will have a different impact on the capacity to produce from one which tends to restrict the initiative and freedom of individuals. Some institutions and systems tend to encourage experimentation while others tend to restrict it. All systems tend to facilitate production; but not all will facilitate production sufficiently to permit an increasing level of living in spite of a rapidly increasing world population.

Men throughout the world are engaged in a soul-searching struggle to determine for themselves those principles and patterns of economic organization that will best serve in achieving the satisfaction of such needs and desires. A large share of the world's population lives under economic systems in which private property, private enterprise, and the freedom of individuals in various economic capacities are hardly outstanding characteristics; and great bodies of humanity stand on the brink of choice between these basic principles of democratic capitalism and those of various collectivistic systems of economic life.

In this book, we do not propose to make a point-for-point comparison of democratic capitalism with other economic systems. However it is clear that, under capitalism as found in the United States, we have experienced a generally rapid increase in productivity, both per person and for the economy as a whole. Historical evidence and a study of the structure of democratic capitalism suggest strongly that this type of system can serve man more effectively than any other

yet evolved, provided that those who operate under this system achieve the understanding, perspective, and attitudes necessary to realize its full potentials. A system characterized fundamentally by freedom of individual action, a wide range of decentralized decision, and a minimum of centralized control appears to have tremendous potential for spontaneous and dynamic development and for meeting the rapidly increasing wants that lie ahead.

ECONOMIC EFFECTIVENESS AND DYNAMIC GROWTH

The ultimate objective of economic activity is to provide human satisfaction. We achieve such satisfaction indirectly by the production of goods and services. To meet the challenge of an increasing population, plus the desire for increasing living standards, requires the production of not only an increasing aggregate volume of goods and services, and not only an increasing product per capita for a static population, but an ever-increasing product per capita for an ever-increasing population. This requires dynamic economic development.

Employment and production objectives

Under different economic systems men strive to achieve their basic or ultimate economic objectives in different ways; and under each system there are special problems which stand in the way of full success.

Because our economy has been plagued by unemployment from time to time, it is natural that full employment should be emphasized as a major objective of economic policy. Surely no economy can achieve its full potential if any large number of persons is periodically unemployed. The elimination of substantial unemployment, chronic and cyclical, is necessary if our capitalistic economy is to meet the challenge of increasing human wants.

It is important, however, to place the objective of full employment in perspective. We need to relate it to the broader objective of an increasing product per person for an increasing population, and to consider its achievement in relation to the special problems of our economy. We need to recognize that full employment, though important, is only part of our employment objective under capitalism. Any rounded employment objective must give large weight to the efficiency or effectiveness of employment.

In the United States, effectiveness, in the sense of product per person employed per unit of employment, is very high, and, on the surface, we may feel it unnecessary to emphasize greater effectiveness of employment as an objective. However, in light of the tremendous challenge that faces all economies in the years ahead, we must press toward greater and greater effectiveness of employment. The increased total product that can be achieved by increasing the quantity of labor is considerable when viewed from the despair of depression, but it rapidly reaches the limit set by man's desire for leisure. The achievement of full employment is important, but full employment without rapid increase in effectiveness of employment, in the United States and throughout the world, would fall far short of the economic challenge faced by mankind.

A rounded employment objective must include effectiveness per unit of labor employed (quality) as well as fullness of employment (quantity). If our economic system is to move firmly toward full potential it must succeed in achieving both.

It is necessary, finally, to relate this broader employment objective to both men and resources. The achievement of a maximum product for the economy as a whole involves not only full and effective employment of the human agent but also full and effective use of nature's resources and man-made capital. Continuous high-level employment of both men and nonhuman resources, as well as their increasingly effective utilization, is necessary for achieving a maximum rate of increase in production.

Dynamic growth without breakdown

The achievement of a maximum rate of increase in production requires, basically, a rapid expansion of dynamic enterprise—enterprise that embodies new ideas and involves new techniques. The rapid expansion of dynamic, new-idea enterprise is the prime necessity for increasing the system's effectiveness of employment and production. Only through such enterprise can we achieve these goals.

A democratic capitalist system, as we shall see, tends strongly toward such dynamic development and growth. We have already noted that the United States has experienced a generally rapid increase in productivity. However, there have been severe fluctuations in economic activity and employment; and, following the crash in

1929, there was a long period of low-level economic activity and employment until we were "rescued" by defense preparations in the early forties.

Periods of low-level employment of men and resources and periods of depression are fundamentally chronic or precipitous interruptions to the normal capitalist growth process. The fact remains that such periods of retardation and breakdown cannot be assumed to have disappeared. Although much has been done by Government toward lessening the possibility and severity of depressions, analysis will show that critical sources of retardation and cyclical breakdown, while artificial and surmountable, are still with us.

To achieve rapidly increasing effectiveness of production, we must, through strong democratic government, maintain the freedom structure and give full sway to the principles that impart dynamism to democratic capitalism. We must also remove the artificial drags on dynamic growth and the artificial sources of cyclical breakdown.

In summary, our economy faces the task of producing a rapidly increasing product per capita for a rapidly increasing population, and this requires the dynamic development and expansion of enterprise. A rapid increase in our system's effectiveness of production requires full and expanding employment and use of resources. But it requires more. It requires dynamic, efficiency-increasing expansion of enterprise and it requires that obstacles and interruptions to such expansion be overcome. It requires dynamic growth without breakdown.

PART II. The Structure and Growth Power of Capitalism

Introduction

To move effectively in maintaining expansion without breakdown in a capitalistic economy requires, first of all, a thorough understanding of the basic factors in such a process, so that these key factors may be strengthened and any hindrances to their free functioning may be recognized and removed.

Progress under the capitalist form of economic organization is closely associated with economic freedom, dynamic enterprise, and a financing process that enables those with ideas and a talent for leadership to acquire control over capital and thus become leaders of production and development. Understanding the freedom structure of capitalism, the enterpriser's function, and the distinctly different function of the capitalist under this system—this is our present concern. It is vital to understand the nature of these functions and their differences, to understand how the financial system permits a division of labor between these two, and to understand how the capitalistic system, if functioning according to principle, facilitates enterprise and progress.

The special significance of new enterprise and of the flow of capital to such enterprise is of central importance here. A fuller understanding of the power of free men to generate enterprise and of the finesse with which a well organized financial structure, together with wise financing policies, can select leadership talent under capitalism should also serve to establish or re-establish confidence in the potentials of this type of economy.

III. Functions, Freedoms, and Productivity

A BASIC characteristic of capitalism at its democratic best is the high degree of freedom enjoyed by all within the economy. The emphasis on freedom is important because it satisfies an intense human desire directly (this is sufficient of itself to justify the maintenance of such an atmosphere) and because such freedom, wisely organized, contributes markedly to efficiency in production and thus, through a larger and more desirable product, to human satisfaction.

FUNCTIONS AND FREEDOMS

The structure of functions under capitalism may be viewed also as one of democratic freedoms. Such a system is governed under a widely dispersed set of powers stemming from all the people through their general government and shared in by individuals filling a variety of niches in the economy. In general, rights and powers are granted to individuals who choose to perform various economic functions or services in the economy.

For our purpose we may distinguish four broad groups of individuals operating more or less freely relative to general government on the one hand, and to one another within and among groups on the other. These groups are consumers, workers, property owners, and enterprisers. Most individuals fall into at least two of these groups, and many fall into more. All are consumers; and many a man is both laborer and enterpriser, owner and enterpriser, owner and laborer; some are all three.

Through choice and bargaining relatively free of restraint or direction by general government, consumers, property owners, laborers, and enterprisers co-operate in running this type of economic system. Through bargaining there is determined what to produce; what re-

sources to use, how, and how fast; what values are to be placed on various commodities; and what values are to be placed on services performed by those participating in production. But behind all this activity, and infusing it constantly, is the price mechanism—the great system of cost-price relationships which sets the bounds within which people choose, bargain, and perform their services. Through this mechanism goods and services are compared and valued. Short-cuts in our observations about such matters may not always mention this basic process but it is always there.

Within certain broad rules of property and contract, and rules of justice among individuals and groups, individuals performing their function have a wide range of independence, choice, and control. Each governs his own life within broad limits set by the economic “system” under general government. Each performs his function without detailed control and direction from general government. The legal right of the individual to govern himself with only distant control by general government is an important aspect of what we mean by “economic freedom.”

The general government performs certain broad functions that facilitate the co-operative efforts of those performing the specific economic functions, such as providing a medium of exchange and establishing rules of the game and means of enforcing such rules. These activities are, in a sense, “over” those of individuals and groups in performing various private functions. The institutions and policies of government are, in general, designed to facilitate the efforts of private individuals and sub-groups in working toward their own economic good and toward maximum satisfaction for all.

Two basic principles of democratic capitalism are: government must remain heroically general relative to private economic activity even though in times of war and economic stress governmental activities tend to increase both in magnitude and in the extent of detailed control; the general government under which economic activity operates derives its ultimate power from the governed. It is important to understand this type of economic system in considering the possibilities for improving the institutions and policies that are more or less effective in moving economic activity toward increasing effectiveness, maximum satisfaction, and progress for the people.

In a democracy, the people establish their own degree of general

economic freedom—for consumers, for workers, for property owners, for enterprisers—for all. In a sense, also, they establish, through general government, the rights, powers, and obligations of each of the several groups relative to one another. In our economy, the extent of over-all control by general government is still limited, and the degree of freedom of individuals and economic groups is still high as compared to that in countries under socialism or communism.

The high degree of individual freedom that characterizes democratic capitalism is a primary source of economic progress. Every individual is free to choose his line of work and to utilize his talents in accordance with his own lights and desires. He is free to compete with others and to strive for a maximum reward for his own service. This type of freedom fosters a spontaneity and an intensity of competition highly conducive to a dynamic rather than a passive or merely repetitive type of economic activity. This tends toward high and increasing productivity.

It is not necessary to assume that competition is among business units of equal competitive power. Industrial giants operate side by side with many small and medium-sized enterprises. This is not basically contrary to equality of opportunity among enterprisers, for in a well-functioning capitalistic economy two enterprisers of equal capacity may obtain about equal reward even though one is in a large firm and the other in a small one. There is, further, equal incentive for these two enterprisers to strive for "bigger" jobs and higher rewards. This equality of opportunity for enterprisers in a framework of freedom is a characteristic of democratic capitalism; and a key to its unusual productivity and growth power.

There exist in our economy institutional obstacles—ranging from minor to serious ones—to full freedom of opportunity for enterprisers to enter the production stream and there compete on terms equal to those under which enterprisers already well established operate. In Parts III and IV, where such obstacles are recognized as a serious problem, attention is focused on the sources of these obstacles, and possibilities are suggested for overcoming them. Here, however, we can proceed on the principle that a democratic capitalistic system can provide equal opportunity for all men of leadership capacity to enter the production stream and to compete on a relatively

equal basis with the spontaneity and vigor characteristic of such a system.

FUNCTIONS AND CONTROLS

The control or governing powers delegated by the people through the democratic process are closely geared to sets of economic functions. Those who perform basic functions in the capitalist economy are also given certain control powers; it is through the exercise of those control powers, and the performance of the physical functions, that the powers and energies of men and resources are galvanized into production units, turning out goods and services in accordance with consumer desires.

Three basic control groups may be distinguished in the capitalistic economy that correspond to groups of individuals performing three basic production functions. These are represented by (1) the owners of capital, both natural and man-made; (2) the owners of labor (workers); and (3) the enterprisers. These three private production groups control the direction of production under an over-all control by men as consumers. Everyone, as consumer, exercising free choice, has a voice in controlling the economy. The private controls of the three production groups determine what is done in the way of production and (subject to consumer desires) who is to receive how much of the product. All of these controls are subject, of course, to ultimate control by all men (in their social as well as economic capacity) through general government.

Among the three private control groups, there are differences both as to the physical factors controlled and as to the type of control used. In a democratic capitalist economy owners of physical resources, natural and man-made, have a high degree of control over the extent to which, and the conditions under which, such resources are to be offered to society for use. In this economy workers are legally free to work as much or as little as they wish, at what they wish, when and where they wish, and to ask as much as they believe they can command for their services—subject to the rules of government. In the sense of private legal control over the use of physical resources, the owners of property and the owners of labor have ultimate private power among the three production-income groups in our private-property, free-labor economy. The third, or enterpriser group, has a

function and a control that are quite unique. The enterpriser is subject to the will and power of property owners and laborers as well as to the will and power of consumers. Operating within these controls, however, the free enterpriser is, as we shall presently see, the key functionary and source of progress in the American economy.

THE BROAD ARENA

The functions of our three groups in the growth of the economy are performed in a broad arena of "natural" factors which it is well to consider at this point as background for taking up a more detailed account of the functions themselves. The capacity of man to produce goods and to achieve economic satisfaction is heavily dependent on certain underlying "natural" factors and conditions which, for purposes of studying the impact of key functions and activities under capitalism, we accept as given. The level and rate of growth in population, the volume and quality of original natural resources, and the biological and psychological propensities to consume and save and to work and play, are powerful underlying factors that bear heavily on what can be done toward achieving a high level of product per capita and toward achieving human satisfaction under any set of economic institutions.

IV. The Enterpriser and Economic Progress

THE ACHIEVEMENT of an ever-larger product per unit of human labor requires leadership by those who can visualize ways and means to bring people together in effective production. Under free-enterprise capitalism, the required leadership is provided by the business enterpriser.

THE FUNCTION OF THE ENTERPRISER

The enterpriser is both the leader and the focalizing agent of the economic process under capitalism. The enterpriser is the key man who must sense the wants of consumers, visualize the stock of resources available for producing goods and services to satisfy these wants, visualize possible production methods and units for producing such goods and services, note the terms and conditions under which the owners of resources—human and non-human, natural and man-made—are willing to permit their use, bargain with owners of resources to determine a price for their use, initiate and establish business and production units for producing specific goods and services, lead men and organize men and resources in the production process, and finally, deal with consumers in establishing the prices of the commodities and services produced. The enterpriser is, indeed, the leader and focalizing agent in the arena of economic life. It is for this leadership that economic society allows him to receive profits.

The enterpriser under capitalism has a high degree of freedom and a large measure of control over both men and property. Under the broad rules of our economy any man is legally free to establish for himself a business enterprise. Through a process of free bargaining with the owners of property and labor, he can obtain control over the use of the services of these physical resources. Once having obtained such control, the enterpriser can produce what he likes in the

manner he likes, and he can offer the product to consumers at whatever price he likes—although ultimately at the price competitive forces will tolerate. Through his strategic but limited sphere, the enterpriser has the initiative in our economy. Though subject to the attitudes and desires of consumers and to the attitudes and desires of owners and workers, he leads the nation's economic activity.

A leading worker

In a broad and very significant sense, all who participate in production are workers. It is common to think of the term "workers" as referring to those who do manual labor or to those who work for another. These connotations represent useful distinctions for understanding certain types of economic activity and relationships. It is equally necessary, however, to note that all human effort for economic purposes is labor; and that, fundamentally, the welfare of man depends on the energy and ingenuity set forth by all men in releasing the powers of nature and in turning those powers to the satisfaction of human wants. The enterpriser is simply a special, leading type of worker. Through his labor there is created in the economy an efficiency and productivity far beyond that which would be possible without such leadership.

Not a capitalist

A most important fact and one difficult to portray is that the enterpriser, as such, does not own capital. He is not a capitalist. The vast majority of men that we view as enterprisers do own property; but the ownership of property is not essential to the enterpriser as enterpriser. Under capitalism men without property can and do become leaders of economic activity. Indeed, the fact that men without or with very little property can become such leaders goes far to explain the rapidity of progress under the free enterprise system.

A glance at the scope of activities of the enterpriser, as indicated earlier in this chapter, will reveal that all of those activities could be performed by one who owns no capital. Many businessmen living today became enterprisers without actually owning any significant amount of capital to begin with. They did this by borrowing the capital they needed. They were able to become enterprisers because, under the capitalist system, a mechanism exists by which men without

capital can gain temporary control over capital and can establish themselves in productive activity.

Enterprisers do, of course, usually own property. In fact, the ownership of some property or capital is often a requisite for gaining access to enough additional capital to carry on a business enterprise, to become an enterpriser, or to exercise the enterprise function effectively.

It is important to note that the new and venturesome enterpriser relies heavily on outside capital; and, as we shall see, it is on this new enterpriser that much of our economic progress depends. The access to capital by free enterprisers goes a long way toward explaining the dynamic growth of the American economy. The widespread experience of rags-to-riches by individuals in our country, with its high stimulation for men at all levels to "try for the stars," rests heavily on the combination of freedom of enterprise in a general atmosphere of freedom and freedom of access to capital by men without it.

The true relationship of the capitalist and enterprise functions can be seen if we visualize the capitalist function and the enterprise function as strictly separated—if we assume that no man is both an enterpriser and a capitalist. This would mean that all capital is owned by one group, the capitalists, and that enterprisers have no capital whatsoever. It would then be immediately clear that enterprisers can only undertake production if they are permitted to use the natural and man-made capital owned by capitalists. Although most enterprisers are both enterprisers and capitalists, the true relationship is indicated by our fiction. The enterpriser must gain access to capital owned by capitalists (even though he may also be that capitalist) if he is to produce.

THE ENTERPRISER: KEY TO PROGRESS

The enterpriser is the spearhead of economic progress as well as the leader of production along established lines. Increasing capacity to produce with given manpower and resources requires fundamentally an increase in human knowledge. Economic progress has as its essence the ever-greater release of powers inherent in the human mind and body, and, through the release of such powers, the release of the tremendous powers latent in nature's resources. The increase in human knowledge is not in itself sufficient for economic progress, however.

There must be an embodiment of such knowledge in the economic process. New knowledge must be translated into new methods, machines, and products. There must be a shifting of men and resources from old processes and employments to new ones. There must be economic innovation. It is the enterpriser who embodies the new in the capitalist economic process.

Men of enterprise play a leading role even in lines of production that are well established. Business units must constantly be visualized and established, men and capital must be combined effectively in production, and men must always be organized and directed in production.

In a world of rapidly changing wants and increasing knowledge of ways to supply them, there are few spheres of enterprise in which a considerable degree of vision is not required. The hypothetical "static" or "circular" flow of economic activity often assumed by economists for purposes of exposition is largely a fiction; it does not characterize the real economic world. The farmer who raises wheat today has a set of market conditions, manpower requirements, equipment problems, and economic problems in general which are quite different from those faced by the farmer raising wheat a few decades ago. The demand for one commodity such as wool or phonographs changes rapidly relative to demands for other commodities such as rayon or radios; and methods of production and competitive demands for men and resources change with great rapidity. Every enterpriser must, in some degree, visualize change and be alert to the possibilities of improved methods of production and more effective lines through which to meet consumer wants more effectively and profitably. No going concern can continue simply to go on and on in its old established ways. If it does—if exercise of the enterprise function falls merely to this low ebb—the business fails.

The highest quality of enterprise is required for "breaking new ground." To achieve dynamic, efficiency-increasing expansion requires the introduction of new ideas, products, and methods into the economy; and this requires dynamic enterprise. The capitalist growth process is more than just gradual expansion along with population. It is expansion that stems from a desire to increase the satisfaction of human needs and desires; and it is expansion that is basically associated with new methods, new products, and increasing effectiveness.

It is in connection with the adventure into new ideas and new fields that the freedom allowed to men of enterprise under our economic system is of greatest significance. Freedom may be viewed not only as releasing but as generating power. Assimilation and introduction of the new are always beset with uncertainty. There are few charted paths to tell the man of enterprise how consumers will respond to new products, how machines using new sources of power can be most economically developed, and which new combinations of men and resources will prove most profitable. Only those who are free to experiment and to proceed in accordance with their own visions can be expected to make the most of new knowledge. The enterpriser with liberty to try in new ways to produce more efficiently is the true seed of economic progress.

NEW ENTERPRISERS AND FIRMS

A large and constant flow of men of ideas into the economic stream is an important source of economic progress under capitalism. New ideas, creative power, and leadership talent are not confined to any particular economic group. New ideas often originate with, and their development is spearheaded by, executives who already represent the enterprise function in going concerns. Men whose regular function is co-ordination or direction of production along established lines often see opportunities for developing new methods and new products.

Ideas for more effective methods and for products that meet consumer desires more effectively spring up also among the large body of workers, capitalists, and others who are not currently participating in the enterprise function. Most enterprisers were once ordinary laborers; and they became enterprisers because they had ideas and drive and leadership talent. The ability of capitalism to grow rests heavily on the relatively high degree to which this system permits men to rise from the ranks of labor to leadership positions.

If there is to be rapid economic progress—if mankind is to meet the challenge of the increasing composite real demand—man cannot adapt slowly and passively to his natural environment. Capitalism or any economic system, to be assured of continued and rapid economic progress, must facilitate both the exercise of creativeness by all and the abundant flow of creative ideas into the stream of economic life.

The open road for enterprisers depends considerably on the possibility of establishing and expanding new business firms. Men of

leadership capacity can, it is true, often find outlets for their talents within existing firms, either in those for which they work or in others. The full flow of leadership talent and of new ideas and products would, however, be significantly limited if there were no possibility of establishing and developing new business firms. Much research and much development of new products and methods are done by existing firms; but the new firm and the young firm are often the best and at times the only feasible channel through which a prospective young enterpriser with capacity and ideas can move effectively into the production stream. The new firm is thus a prime channel of growth in our type of economy.

New knowledge in the fields of mechanics, chemistry, and electricity was carried into our economy by new firms and in association with the rise to leadership of new men. The automobile was introduced and, in its essentials, developed by new enterprisers in new firms. The giants of the automobile industry of today were new firms only a few decades ago. The rise of the television industry has been accompanied by the rise of many new enterprisers and many new firms as well as by new entrepreneurial activity which has found its outlet in existing firms. Rapid developments based on atomic energy will again require new enterprisers and, to a considerable extent, new firms.¹

The surge of economic development that follows the introduction into the economy of a major new idea, product, or process not only takes the form of developments based on it, but also involves a variety and number of associated new activities stimulated by the original central development. New firms play an especially large role in this associated development. The internal combustion engine, and the automobile powered thereby, resulted not only in the huge automobile industry but also in gasoline stations, tire companies, auto parts companies, etc. It took thousands and thousands of new enterprisers and new firms to develop the wide composite of economic activities that stemmed from the development of the internal combustion engine and its application for transportation to the automobile. Without such

¹ For a thorough discussion of the large extent to which major innovations are introduced into the economy through new firms, and of the even larger extent to which such innovations are associated with the rise of new leaders, see Joseph Schumpeter, *Business Cycles, A Theoretical, Historical, and Statistical Analysis of the Capitalist Process* (New York: McGraw-Hill Book Co., Inc., 1939), Vol. I, pp. 94-7.

absorption of ideas and reinforcing and reciprocating action by new enterprisers and new firms, the evolution of even great ideas and their translation into productive efficiency and increased product would be much less rapid.

Capitalist expansion, if viewed over a substantial period of years, appears as one in which progress for the economy as a whole takes place through the constant introduction and development of new enterprisers and new firms and a constant decline and demise of enterprisers and firms that no longer have the best to offer. "Even in the world of giant firms, new ones rise and others fall into the background."² Many companies that carry the same name for generations go through such basic changes in leadership and activity that they may well be viewed from time to time as new firms. If, as a matter of fact, existing firms do not become essentially rejuvenated by new ideas and new blood, they normally recede into the background and eventually die. In the capitalist growth process, the succession of new men, methods, products, and firms is fundamental.

Smallness and newness

Many business leaders and economists have emphasized the importance of small business in our economy. In general, such emphasis is healthy. Small enterprise provides a broad base of opportunity for prospective new leaders in production and contributes to healthy competition and to dispersal of economic power.

The prime significance of small business is not smallness as such, however. In fact, while there cannot perhaps be too much emphasis on new business, there can easily be too much emphasis on excessively small business. Many firms start on such a small scale that they never have a reasonable chance of success. Enterprisers who establish tiny firms with a capital base far below that necessary for reasonable efficiency are of little service either to themselves or to the economy. Often such firms can neither provide effective employment for men and resources nor serve effectively to carry new ideas into the economy. Most such firms fail within a relatively short period. To serve effectively as carriers of new ideas, methods, and products, firms must start at least large enough in scale to avoid failure under good management.

For some lines of business, firms that are small in terms of capital

² Schumpeter, *op. cit.*, p. 97.

use and number of employees are nevertheless of sufficient scale to be technically efficient. Such efficient small firms also help to maintain a healthy dispersal of economic and competitive power, although the significance of this feature can also be over-emphasized. A considerable number of tiny firms may be too small for efficiency and a small number of giant firms may be so large as to threaten the decentralization and balance of competitive power necessary to the effective functioning of a capitalist economy. Within these broad limits, business units that are widely different in size contribute effectively to economic progress.

Small business of sufficient scale to be efficient plays a vital part in promoting economic progress by facilitating the flow of new ideas and new enterprisers into the economy. As already noted, large and established firms contribute much to the development of new methods and products, but new firms are basically necessary for the full flow of new enterprisers and new ideas into the production stream. A few new firms start on a substantial scale, but the vast majority must start on a small scale and remain relatively small through their early years. It is, however, the newness and not the smallness of these firms that is of prime significance for economic progress.

The capitalist growth process hinges significantly on new ideas and new enterprisers, whether these get into the economy through new firms or old and whether they get in through large firms or small. But the fact that many new ideas and enterprisers must start and evolve through the stage of smallness gives to business that is small but of sufficient size to be efficient an important role in the capitalist growth process.

In summary, the enterpriser is the leader of production activity in a capitalistic economy; and free, creative enterprisers are the prime source of progress in such an economy. It is dynamic enterprisers who introduce and develop the new. We emphasize the importance of new enterprisers and new firms in the dynamic growth process because we believe these play a more vital role in this process than is commonly recognized. We emphasize small business, in turn, because efficient small business is an essential vehicle for carrying new ideas into the production stream and through the early stages of their development.

V. The Role of the Capitalist

THE UNIQUE FREEDOM and facility with which men with capital are able to finance men with enterprise capacity play a large role in facilitating economic growth and effectiveness in a capitalistic economy.

THE NATURE OF CAPITAL AND CAPITALISM

For purposes of understanding capitalism and the capitalist's function, it is helpful and conducive to understanding the problem before us to view capital as all physical resources, natural and man-made, available to man for use in production. This includes all physical wealth not needed for current consumption.

A distinction is often made between land, by which is meant natural resources, and man-made producers' goods. Those making this distinction apply the term "capital" only to the latter. The essential fact is that, in a capitalist economy, both "land" and man-made goods—viewed as two different types of capital physically—are owned by private individuals; and the capitalist function pertains to the allocation and control of capital in this broad sense. It is the fact of ownership and not the physical difference that is important. As individuals we often think of our wealth or capital as consisting of "paper" such as bonds and notes. It is evident, however, that the capital which the enterpriser uses in production consists of the physical resources and not of the paper claims to them.

The term "capitalism" refers not to any special physical technique of production, but to a particular institutional arrangement for the ownership and control of capital. Physical resources can be and are built into machines and used in roundabout production techniques, whether such resources are owned collectively or individually, publicly or privately. In the technical sense of production by machine methods,

production of steel in the Soviet Union is essentially no different from the production of steel in this country. Capital is used in production whether owned privately or by government. Capitalism is distinguished not by its technical use of capital but by the private ownership of capital.

The central significance of the private ownership of capital is the widespread dispersal of power over its use. This dispersal of power is a basic aspect of an economic system in which individual freedom in economic action is paramount. Widely dispersed private ownership of capital is conducive to efficiency because of the closeness with which owners can watch over their holdings and because of the facility with which privately owned capital can be made available to private enterprise in response to enterpriser initiative.

To be effective, capitalism must, of course, be democratic; owners must have a wide range of freedom and independence, because only thus can they transfer capital freely to enterprisers for use in production. When we hold that a capitalistic, free enterprise economy embodies the principles for rapidly increasing economic effectiveness, we have in mind a democratic capitalism.

THE CAPITALIST FUNCTION

The government of capital

The function of the capitalist, "the owner of capital," is the husbanding and channeling of capital into enterprise and production. He is the governor of the capital which he owns, subject to the general government of the state. Capitalists have the responsibility of guiding, in a general manner, the use of the nation's resources and man-made capital. Basically it is for this governing and guiding function that the capitalist receives a return. These private owners have a high degree of freedom in the allocation and channeling of capital to various enterprisers and uses and in the setting of terms and conditions under which they permit it to be used.

The owner of capital stands at the head of the hierarchy of power in the capitalist economy. And, in general, the stream of power runs from the capitalist to the enterpriser to the worker. The private capitalist has a high degree of freedom in the exercise of this power; but, in principle, he also has a tremendous responsibility in a capitalistic

economy as husbandman of the capital which society has already accumulated. With the privilege of private ownership goes the responsibility for seeing that this stock of capital is wisely channeled to enterprisers and into productive activity.

Fundamentally, the capitalist function involves broad general but powerful control over the use of capital by enterprisers. This lies in the capitalist's right to make or not to make a commitment of capital for the purpose proposed by the enterpriser. Once capital is committed to an enterprise, the capitalist has strong general control over its use either through the right of nonrenewal as in the case of loans or through substantial control over current use as in the case of corporate equities.

Not an enterpriser

It follows from our earlier discussion that the capitalist, as capitalist, is not an enterpriser. It is true, of course, that many owners of capital are also enterprisers. The owner of capital has normally had to have a significant degree of capacity in order to accumulate capital. Even those who acquire it by inheritance often have the benefit of the knowledge and experience of the original money-makers. The mere fact that one has capital gives him ready access to more if he has an inclination to become an enterpriser. Basically, however, the fact that one owns capital does not make him an enterpriser.

Business forms and functions

The legal and business structures under which capitalists, enterprisers, and workers are organized vary greatly; and, in connection with a specific firm or business operation, it is often difficult to determine who performs the capitalist function and who performs the enterprise and labor functions. We have noted that the same person may perform several functions. Similarly, any given business arrangement, or the contract between capitalist and enterpriser that is explicitly or implicitly involved, may call for varying degrees of performance by the person who provides the capital on the one hand and by the user on the other. The person who lends may make only those decisions and carry only those responsibilities that correspond to the pure capitalist function, or he may agree to undertake

a rather large degree of responsibility that runs well into the enterprise function.

One way to determine the extent to which capitalist and enterpriser functions, respectively, are being performed by the persons involved in a specific contractual or business arrangement is to note the degree of passivity and initiative involved. The purely capitalist function is relatively passive and general. The active use and direction and combination of capital in production fall under the enterprise function. The man who merely owns a farm and passively rents it to an operator, who must actively combine the land (natural capital) with labor (his own or others), is a capitalist. He does little more than the man who places his funds in a savings account. If, as many landowners do, the owner takes some responsibility for the conduct of the farm, he is, to that extent, also an enterpriser.

There has been much discussion concerning the abdication of control by owners in the modern corporation. Most small stockholders in large corporations exercise very little control over the use of their capital beyond the original decision to place funds in a specific sphere. It does not follow, however, that stockholders in general have abdicated the ownership sphere of control—the general sphere—to managers or enterprisers. It often happens that a few large stockholders exercise the ownership type of control over much more capital than they own. In general, the stockholders, represented by the large stockholders, have a high degree of control power in corporations. There has been no lessening of ownership power, only a concentration.

The true leadership in the corporation, the responsibility and power of men to make basic decisions in the enterprise sphere, clearly is not in proportion to the amount of capital owned by such men. Decisions on such basic matters as production volumes, prices, wage rates, new methods, and new products are made by those who exercise the enterprise function both in the corporation and in the private proprietorship; and these men may contribute much of the capital or little.

Fundamentally, the form of business organization does not alter the basic difference between the function of capitalists and that of enterprisers. Speaking functionally, men without capital are permitted by men with capital to take the lead in establishing enterprise and in directing its course once established, regardless of the form of business organization. The essential relationship under all forms is that

men of leadership capacity, ideas, and courage, who visualize human wants and methods for producing goods to satisfy human wants, propose lines of enterprise to owners of capital or to the financial institutions acting as their representatives. If the proposed activity appears promising to the capitalists involved, and if the terms and conditions under which capitalists propose to furnish the enterprisers with capital are satisfactory, control over capital in varying degrees and for various periods is transferred to the enterprisers who actively direct its use in production.

FUNCTIONS AND INCOMES

Associated with the performance of the enterprise function is a return we call profits; and associated with the performance of the capitalist function is a return we call interest. It is important to understand that these incomes accrue to essentially different functions, and to be fully aware that the rate of profit has a vitally different impact on growth and effectiveness in a capitalistic economy than has the rate of interest.

There has long been a tendency in economic literature to confuse both the two functions and the returns associated therewith. The failure to recognize the sharp difference between these functions has blinded many people to the dynamic significance of enterprise in the capitalist economy, and has done much to limit understanding of the relationship of different levels of interest and different levels of profit to economic growth and effectiveness.

Recognition of the vital part played by business enterprise in our economy suggests that it is desirable for existing and prospective enterprisers to have prospects of high profits. Recognition of the function performed by the capitalist leaves no doubt that, though his function is of a more passive nature, his income cannot be reduced to zero without eliminating an important source of effectiveness under capitalism. The private owners of capital perform a general governing and guiding function that must be performed under any economic system; with the freedom and spontaneity of dispersed control, they are in a position to do it with a high degree of effectiveness.

The effects of different levels of interest and profit on enterprise and progress will be discussed in a later chapter. It should be noted at this point, however, that interest is a cost to the enterpriser and

that the rate of interest through its impact on net profits has a strong bearing on the levels of enterprise and thus on the rate of progress in a capitalist economy. Recognition of the difference in the two functions and of the correct association of interest and profit with these functions is necessary as a foundation for understanding the prime significance of profit for achieving progress in our type of economy and for understanding the impact of different interest rates on economic effectiveness.

VI. The Financial Linkage of Capital and Enterprise

THE IMPORTANCE OF TRANSMISSION

THE RAPID GROWTH and increasing effectiveness of the American economy are in no small part due to the financial mechanism through which control over capital is transmitted by its owners to enterprisers. As already emphasized, enterprisers under capitalism perform a function that is quite distinct from that of owners, and enterprisers must obtain, from capitalists or owners, access to capital in order to establish and operate a production organization. To a very large extent, however, those who perform the enterprise function also own some capital. What is financed from "outside"—by others than the enterpriser—is a "deficit" equal to the difference between the amount of capital which the enterpriser owns and the amount which he needs in order to exploit effectively his ideas and talents.

It is helpful in this connection to recognize three different personal situations. First is the personal situation which corresponds to the functional; namely, that the enterpriser has no capital whatsoever. He has nothing but an idea and courage and willingness to try, and he must operate entirely on capital owned by others. He must obtain from someone else all capital for use in establishing and operating a production unit. This case is more prevalent for prospective enterprisers who develop ideas for enterprise than is usually recognized. A second situation—at the other extreme—is one in which the enterpriser owns all the capital for his enterprise. In this case a single individual is both owner and enterpriser. In logic, he transfers control of his property from one hand—his ownership hand—to the other—his enterprise hand.

The third situation is that in which the enterpriser owns some capital but not all that he needs. This is the most common. There are, of course, many variants of the third situation. Some enterprisers own such a large share of what they need that they are to all intents in the position of the man who owns all he needs. It is easy for enterprisers in this position to obtain such additional capital as they may need. A large share of all enterprisers, however, own considerably less capital than they use or could use effectively in production. This group may be designated as "capital-deficit enterprisers." Most prospective, new, and "young" enterprisers (enterprisers, young or old in years of life, who lead an enterprise that is in an early stage of development) fall in this capital-deficit class. New enterprisers and young enterprisers normally own a small quantity of capital relative to the amount they can effectively use and they are thus heavily dependent on outside or deficit capital. In serving capital-deficit enterprisers generally, and particularly in serving prospective, new, and young enterprisers, our capitalistic economy can contribute markedly to economic growth and effectiveness.

Although the situations differ widely among individuals and by types of business organization, the process by which the control over capital is transmitted from owner to enterpriser is a crucial link in the capitalist economic process. This linkage through which enterprise is financed by capitalists is, in a sense, the lifeline of enterprise and employment under capitalism. The effectiveness of our system in giving enterprisers access to capital is an important determinant of the rate of economic progress.

FINANCE AND ECONOMIC GROWTH

If we recognize that, through lending and equity participation, owners of capital transmit control to those who are especially capable of leadership in enterprise, we have grasped the fundamental contribution that finance makes to economic progress. It is this extension of "credit" in loan or equity form that enables the capitalist economy to select and implement the men best suited as leaders of economic activity.¹

¹ It may seem strange to the reader to see the term "credit" used to cover both lending and equity participation. This usage helps to convey the very important fact that in both cases there is a partial or temporary transfer of control over capital by its owners even though such owners make the transfer under quite different contractual arrangements.

The contribution of the capitalist to economic growth can be visualized by noting the process by which the enterpriser gets into the economic stream and adds to the flow. Let us assume that he has no capital of his own. How and where will he get access to the land, buildings, equipment, and raw materials that he may need? He proceeds by approaching either individuals or intermediary financial institutions for the necessary capital requirements. If his idea has sufficient promise, someone or some institution will finance him through either a loan or an equity. Thus the owners of capital transfer control over capital to this man without property so that he can become a leader of productive activity. If the arrangement is on a loan basis, the enterpriser must, of course, agree to repay the loan at some time in the future and to pay a fixed rate of interest. If the arrangement is on an equity basis, the enterpriser obtains "permanent" control over capital; and he agrees to reward the capitalist to an extent contingent upon the success of the enterprise.

The over-all significance of these financing transactions is that they bring about a different use of the means of production than existed before the transaction took place. However infinitesimally, the whole economic process will be different now from what it would have been without this shift in productive resources. Men and resources will be differently employed, and the economy's aggregate product will be different.

But it also means more than this. It means that the economy's product will be larger. If men and resources were not fully employed previous to this transaction, some of these previously idle resources will now be employed and thus the nation's product will be enlarged. Under an economy of fully employed resources, the product will also be larger since presumably the transfer of control over capital would not have been made unless there was in the mind of both the owner and the enterpriser a prospect of greater profit than if the transfer were not made; and such greater profit can occur only through a more efficient use of existing resources. Such a transfer of capital means a *shift of resources and a shift to more effective uses*.²

In this transfer of control over the means of production, we see an essential working principle of capitalist development. Through finance,

² It is possible, of course, that the nation's product will not actually be larger. The new activity may simply result in the same product with less effort. But this is also progress.

men without capital or without sufficient capital to undertake and develop the enterprise they visualize are given access to capital by the owners thereof; and through this financial process there evolves economic progress. Capital is often in the hands of owners who do not use it effectively in production. They wish to exercise the ownership function only. If such capital is not rapidly transferred to enterprise, it is not likely to be either fully or effectively used.

The following statement by Professor Kenneth E. Boulding serves well to indicate how our financial system contributes to economic effectiveness.

If there were no financial system, no system of debt, credit and securities, . . . every person would have to administer the real assets which he owned, no matter how incapable he might be at such a task. The financial system has grown up because the *personal ownership* of real assets is a result of a long process of historic accident, through individual saving and inheritance, the structure of which need bear no relationship to the structure of administrative abilities or economic needs. A farm, for instance, may by inheritance come into the possession of an elderly spinster, quite physically incapable of operating it. In the absence of any financial system, however, she would either have to operate it herself or not operate it at all.⁸

The facilitating of the shifting of capital from idleness (zero use) or less efficient uses to more efficient uses is the prime contribution of finance to economic progress. When there is full and effective transfer of control over capital in response to the ideas and initiative of enterprisers, we tend toward such progress. Toward this the financial system plays a major role.

Money in the financial linkage

Although basically the capitalist transfers control over physical resources to the enterpriser, the process is facilitated by the existence of a money mechanism and by the use of money. It is commonly recognized that money (which is furnished to the economic system by our government directly or through the commercial banking system) contributes significantly to the effectiveness of our modern economy. It does this by serving as a standard of value and as a means of payment. We wish here to emphasize especially that money plays an

⁸ Kenneth E. Boulding, *A Reconstruction of Economics* (New York: John Wiley & Sons, Inc., 1950), p. 276.

important role in facilitating the transfer of control over capital from capitalist to enterpriser.

The credit process does not necessarily involve the actual use of money. Assume that John owns a farm and has a brother who wishes to become a farmer—a farm enterpriser—but who owns no capital. If John rents the farm to his brother, John has, in essence, extended credit in an amount equal to the value of the farm, but he has done so without the use of money. Similarly, if the brother wishes to buy the farm, John can “sell” him the farm without a down payment and take a credit instrument (say a land contract) equal to the agreed-upon sales price. John, the capitalist, has extended credit to his brother, the enterpriser, without the use of money. Logically, then, the extension of credit—transferring control over capital—need not involve the use of money.

The modern credit process is, however, closely dependent upon the existence of a money system. The very expression of the value of John’s farm and the face of the credit instrument assume the existence of a monetary unit to serve as a standard for comparison and measurement of values. Presumably also the credit instrument calls for repayment in terms of money units or dollars.

To a considerable extent the enterpriser is simply given credit in the form of money with which he can then obtain capital of whatever type he needs in production. Through the intermediate money transaction the enterpriser is given a degree of freedom and flexibility which would clearly not be possible in a barter economy or even if capitalists extended credit only in relation to specific physical assets. The enterpriser is given temporary control over a certain “money’s worth” of capital. The capitalist can govern the amount and, by granting or refusing to grant credit, he can guide the general flow of capital to an enterpriser. Under a money system, however, the capitalist cannot control the specific use of capital by the enterpriser.

The chips we call money serve as a medium for transactions that involve no credit as well as for transactions that do involve credit; and credit transactions can be achieved without the use of money. We wish to emphasize, however, that money plays a fundamental role in the transfer (exchange) of control over capital between capitalist and enterpriser. It is thus a prime facilitator of economic progress under capitalism.

As individuals or individual financial institutions we often refer to

a fund of money (and of claims on wealth) which we may own as a part of our "capital." Such usage of the term is helpful in understanding some of the financial aspects of economic activity. It is, however, basic for understanding the economic process to recognize that this is a special use of the term capital. When we use the term in this special sense, its meaning must always be kept in mind. It should be clear, of course, that neither an increase in the volume of credit nor an increase in the quantity of money constitutes an increase in the volume of capital.

Types of credit and financial intermediaries

The linkage of capital and enterprise in the capitalist economy involves a large web of financial arrangements, instruments, and institutions. Through these, there is provided a fluidity without which the production and efficiency of modern capitalism would be quite impossible. The effective personal separation of the capitalist and enterprise functions is made possible only by such a system of financial arrangements and institutions.

There are two general types of arrangements for transferring control over capital from owner to enterpriser: loan arrangements and equity arrangements. Both may be viewed as credit arrangements. There are important differences between loan arrangements and equity arrangements in terms of their respective impacts on business enterprise, but it is important to bear in mind that, under both, owners of capital transfer control over capital to enterprisers who require more than they own. From a broad viewpoint stockholders and bondholders are simply owners, but owners who have a different arrangement with enterprisers.

Noncorporate enterprise, which includes a large share of all new and small enterprise, must rely exclusively on loan credit for capital other than that owned by the enterpriser. Through loan credit arrangements, the enterpriser can obtain temporary control over capital on condition that he repay the principal plus a stipulated additional fee we call interest on a stipulated time schedule. The time period can vary, as can the schedule of repayments, the rates of interest, associated rights of recovery for failure to pay, etc. In general, however, the important facts concerning loan credit are: (1) a fixed time period—the transfer is temporary, and (2) a rate of return to the lender that is

fixed and unrelated to the success of the enterprise, except in the case of failure or fraud.

Through the modern corporation, enterprisers can obtain control over capital on both an equity and a loan basis. The corporation enables enterprisers not only to assemble large quantities of capital much more effectively, but also to obtain control over capital under arrangements that lessen chances of failure as compared to even most long-term business loans.⁴ The privilege of flexible dividend payment and the ability of enterprisers to hold control over capital under stress give to those who can, through equities, obtain control over capital an ability to face temporary difficulties which is highly advantageous in a rapidly changing world. The corporation, through its ability to obtain capital for business enterprise on a relatively permanent basis and without requiring a fixed periodic return to the capitalist, has contributed greatly to the growth and economic progress of our economy.

To a considerable extent, arrangements between owner and enterpriser are reached more or less directly. A considerable amount of capital is loaned directly to enterprisers by individuals, there often being no purely financial intermediary such as a bank or insurance company which operates as a middleman between the owner and the enterpriser. To an increasing degree, however, control over capital is transmitted to enterprisers through financial intermediaries. Insurance companies, savings banks, and investment companies, play a major role in providing capital for enterprise on a long-term basis, and through this they contribute significantly to economic progress.

There is one type of loan credit that has a special impact on growth and effectiveness in our economy. This is what is usually referred to by economists as "created credit." Created credit is provided through our commercial banking system. Let us now consider the significance of created credit in the financing of business enterprise and in relation to economic progress.

BANK CREDIT AND ECONOMIC GROWTH

Commercial banks not only serve as middlemen between capitalists and enterprisers, as do a number of other financial institutions, but they also modify the availability and fluidity of capital by the creation

⁴ In assembling capital, the "nonfinancial" business corporation is itself something of a financial institution.

of credit. The commercial banking system thus contributes considerably to growth and development in our economy.

Acceleration through created credit

Financial institutions, other than commercial banks, that assemble funds representing capital can lend only an amount equal to the value of the existing physical capital represented by such funds. Commercial banks as a system can, on the other hand, lend considerably more than the quantity of funds turned over to the banks by owners of capital. From a credit standpoint, this possibility of increasing the quantity of credit and therefore the control over capital available to enterprisers is the foundation of the additional impetus which bank-created credit gives to our modern economy.

However, the commercial banking system is limited in the extent to which it can extend credit relative to any original capital base—in the extent to which it can create credit. The government sets limits by requiring that banks hold minimum reserves. In general, the legal limit to the expansion of a given capital base is equal to the reciprocal of the minimum reserve which the government requires the banking system to hold. If, for example, the reserve required is 20 per cent of deposits, the maximum expansion or credit creation multiple is 5. If the reserve is 25 per cent, the multiple is 4. The banking system does not actually create the full amount of credit permitted by the legal limits and only approaches this amount in periods of high credit demand. Any amount of credit beyond the quantity of capital which owners originally place with the banking system may, however, be viewed as created by the banking system.

The banking system does not, it should be carefully noted, increase the volume of capital in existence by creating credit. It does increase the share of an existing supply of capital that is available for enterprise; and it thus increases the quantity of capital over which business enterprisers who own less than they require can gain control. Thus, through the facilities of the commercial banking system, an opportunity is given to many more enterprisers to gain control over capital than would be possible if only loans of saved capital could be made by individuals or other credit institutions.

Although the creation of credit does not expand the stock of capital immediately, such credit creation enables enterprisers to expand

capital in succeeding periods. The lending of created credit is, in a sense, lending future capital. Such lending permits production and capital formation that would not otherwise take place. If the banks should lend \$300,000 on the basis of \$100,000 of saved capital placed with the banking system, the \$200,000 of created credit would tend later to result in new and additional physical capital. Thus, the created credit is a ticket to future capital expansion and greater production capacity, and tends definitely and markedly to stimulate economic progress.

Enterprisers are more dependent on bank-created credit than is usually realized. We are accustomed to think of bank credit as typically short-term and, therefore, hardly the basis of financing the long-term needs of business enterprise. This is true in a certain significant sense. In fact, as we shall emphasize later, enterprisers often depend on shorter-term bank credit when it would be wiser for them, if possible, to rely on long-term funds.

Even so, much of the credit for the creation of new enterprise and for the expansion of existing enterprise stems from credit created by commercial banks even though the credit is immediately extended to enterprisers by individuals or other financial institutions. To understand this we must recognize a substitution process by which owners of capital with strong credit standing serve as intermediaries between the commercial banks and the new enterprisers.

Owners of capital and various financial institutions that lend to enterprisers for capital purposes are often borrowers of created credit from commercial banks. The owner of land, for example, can borrow against such land from a bank and can lend to a new enterprise on terms that the bank cannot offer. Credit created by banks can thus provide funds for lending to business enterprise. Much of the lending for new, small, and risky enterprise can be done only by individuals and institutions not restricted by law against such lending. Owners of capital can, by borrowing from commercial banks, finance new enterprisers under longer-term and more risky contracts. Similarly, created credit enables owners of capital, large and small, to purchase stock and to finance risky enterprise by participation.

In summary, the sharp impact of created credit on economic expansion results from two related facts. First, credit creation increases the total quantity of credit potentially available to enterprisers. Second,

directly and indirectly, created credit permits a larger flow of capital to new enterprisers. Through the financing of new enterprise and innovation, even though indirectly by the substitution process through men with good credit standing, commercial banks contribute markedly to economic growth.

It is important to note that economic expansion does not originate with the creation of credit and its extension to enterprisers. The foundation of the expansion is the existence of enterprisers with ideas, standing ready to use capital more effectively if permitted by created credit to do so. In a broad sense, owners of capital, or the financial system, through creating credit, permit and enable enterprisers to expand the economy considerably and dynamically, provided that enterprisers visualize the possibilities.

Bank money and growth

The commercial banking system also contributes to the growth process by creating money as it creates credit. The creation of credit results in bank deposits which also serve as money. The money impact is separate from the credit impact of the bank activity that creates both the credit and the money; but both the resulting change in the volume of credit and the resulting change in the volume of money contribute to economic growth.

We have already noted that the existence of a money system contributes to the effectiveness and progress of the economy by providing a standard of value and a means of payment. It is basic for progress, however, that the value of the monetary unit remain relatively constant. Wide changes in the value of the monetary unit introduce serious inequities and uncertainties into the economy. As the economy expands, along with the expansion of credit, some increase in the volume of money is necessary if there is not to be a decline in the price level; and any significant decrease in the price level is likely to have a damping effect on enterprisers and enterprise. It means incurring debt and establishing capital facilities at a high price level and selling products at a lower price level. Insofar as banks create money along with credit, therefore, they avoid this damping effect and encourage enterprisers to move ahead. Accordingly, the commercial banking system, by filling the need for an increasing supply of money as credit expands, facilitates expansion via money creation as well as

via credit creation. The bank credit process of expanding the supply of money is particularly useful in achieving rapid expansion of the money supply when such rapid expansion is needed during the early, healthy phase of increasing economic activity.

In Part II we have been focusing on the sources of dynamism and growth in our economy. We emphasize that, in this connection, both credit creation and money creation contribute significantly, though through quite different channels, toward dynamic growth. We recognize, however, that both the creation of credit and the creation of money through the commercial banking system have also contributed to instability in our economy. The extent of credit creation has often differed from that necessary for maximum growth without breakdown, and the variation in the volume of money associated with credit creation has not always been conducive to this end.

Accordingly, in Chapter IX we shall discuss more fully the relationship of credit creation and money creation to one another and to the problem of achieving dynamic growth without breakdown. We must not, however, let the existence of problems associated with credit creation and money creation blind us to the marked contribution to growth that our commercial banking system now makes through this process.

PART III. Financial Obstacles to Stabilized Growth

Introduction

We have seen that our capitalistic economy is characterized by dynamic growth and rapidly increasing productivity. This stems strongly from a structure which makes it possible for free men who have talent as enterprisers to become leaders in economic activity. The history of progress under capitalism is closely associated with the ready flow of capital to men of ideas and leadership talent who have relied heavily on outside capital to introduce new ideas and new enterprise into our economy.

We have noted, however, that our economy has experienced both periods of retardation and periods of severe breakdown. If we are to achieve the full potential of a democratic capitalism, we must study the sources of retardation and breakdown in order that we may move energetically toward their removal at the same time that we foster the factors that make for rapid growth and increased effectiveness. Such study will reveal that the sources of retardation and breakdown under capitalism lie heavily in precisely the finance-enterprise orbit from which we found the unusual growth power of capitalism to arise. Retardation and cyclical breakdown can be largely explained by the failure of our finance-enterprise structure and mechanism to function fully and at all times in harmony with principle.

Tendencies toward retardation—drags on dynamic growth—are not inherent in our economy. They are closely associated with limitations in the availability of capital for a wide range of capital-deficit enterprisers and with the relatively high cost of obtaining capital which such enterprisers face.

Severe cyclical breakdown, again not normal under capitalism, is strongly associated with stickiness in the supply of capital and especially with a high degree of volatility in the supply. There is a tendency for the supply of capital available for enterprise to contract

sharply with fears of breakdown, and this contraction leads to the failure of a wide range of essentially sound enterprise. The tendency toward unnecessary cyclical breakdown, originating with precipitous contraction in the supply of credit, is supplemented by a similarly sudden and unnecessary contraction in the supply of money.

In Part III we shall consider the factors underlying retardation and cyclical breakdown. This analysis of obstacles to dynamic and stabilized growth, along with our study of growth factors noted in Part II, will provide a basis for policy suggestions to be made in Part IV.

VII. Interest Differences and Economic Retardation

A WIDE RANGE of enterprisers, particularly new and young enterprisers and in general those who are heavily dependent on outside capital, face gross interest rates far above those faced by large and established enterprisers. Associated with such rate differences is a significant limitation in the flow of capital to these enterprisers. These high costs of capital and the associated limited access to capital represent a marked threat to continued dynamic growth in our capitalistic economy.

Let us first note the differences in interest rates paid by various groups of enterprisers and then consider the impact of such differences on the capacity of enterprisers to obtain control over capital and to achieve success in the establishment and conduct of dynamic enterprise in our economy.

Before proceeding to discuss these matters in more detail, may we recall that, for convenience as well to reflect underlying relationships of functions and incomes, we use the terms "credit" and "interest" in a broad sense. The term "credit" is used to cover all arrangements—lease and equity as well as loan arrangements—by which owners commit their capital to enterprisers and permit enterprisers to exercise varying degrees of control over such capital. The term "interest" is used to cover the payment for control, whether that payment is made in the form of rents or dividends or as a conventional interest payment on loans.

It should be clear that interest is paid not for title to capital but for control over capital, and that the rate of interest is the rate paid for control over capital for a given period of time. A rate of 5 per cent per annum means that for 5 cents the borrower can use a dollar's

worth of capital for one year. The borrower must return that dollar to the lender at some future time—as well as 5 cents in interest per year.

We also distinguish between “gross” and “net” interest rates. Net interest is the return to the capitalist for the function of governing capital after deduction of expenses and premium necessary to cover loss of principal. Gross interest includes such expenses and risk premium as well as the net payment to the capitalist; this gross interest represents the cost to the enterpriser of credit or control over capital.

We must also keep in mind that the rates paid for credit or control over capital must be appraised in relation to the degree of control obtained by the enterpriser. A specific rate of interest may, under different arrangements for transfer of control, represent quite a different cost per unit of control over capital. For example, a thirty-day loan at 5 per cent per annum, being subject to nonrenewal, gives an enterpriser less control over capital relative to cost than a five-year loan at 5 per cent which need not be paid until the end of that time but which may be paid sooner if the borrower desires. The enterpriser under the five-year arrangement can be reasonably certain that he will have capital available for five years; whereas, under thirty-day arrangements, his control over capital may be quickly shut off should he have temporary difficulties or should an unfavorable outlook for the economy cause suppliers to lessen their willingness to lend.

HIGH RATES FOR NEW, YOUNG, AND CAPITAL-DEFICIT ENTERPRISERS

Many recognize that small enterprisers face difficulties in obtaining capital, even though the special difficulties of new and young enterprisers are not fully understood. The problem is often discussed in terms of difficulties in obtaining equity capital or risk capital for small business. The interest in new financial institutions, such as the capital banks suggested by A. A. Berle some years ago and more recently endorsed in principle by the Committee for Economic Development, is evidence that limited access to capital on the part of small enterprise is recognized. The movement for development credit corporations and for various other investment and development corporations is further evidence of this recognition. It is less generally recognized, but clear from the data, that the cost of control over capital is relatively high for new and small enterprise in our economy and that “the

shortage of risk capital" is closely associated with these relatively high costs. It is even less clearly recognized that these relatively high interest rates play a large role in limiting dynamic growth.

The primary problem is not that all enterprisers face high interest rates. The average level of interest rates paid by enterprisers is quite low compared to that of the past—and especially to that of the 1920's—and the rates paid by large and established enterprisers are very low.¹ The primary problem lies in the wide differences in rates faced by different groups even though the average level of rates is low.

Generally speaking, enterprisers who own a relatively small amount of capital compared to the total amount they could use effectively—capital-deficit enterprisers—tend to face higher rates than those who own a relatively large share of their capital needs. Among the large group of capital-deficit enterprisers facing high rates is a significant and ever-changing group of prospective, new, and young businessmen. High rates for them are a serious obstacle to progress in our economy.

Differences in loan rates

The wide differences in gross interest rates paid by different groups of enterprisers are indicated by data on interest rates charged by commercial banks on business loans. Much of the outside capital for new and small business comes directly or indirectly from commercial banks, and bank rates are fairly representative of rates from other sources for loans of a given quality and degree of control. A Federal Reserve Board survey of member bank loans outstanding in November of 1946 showed a considerable range, according to asset size of the borrowing unit, in average interest rates charged businesses, as shown in the following data:²

Size of Borrower (Total assets in thousands of dollars)	Average Interest Rate (Per cent per annum)
Under 50	5.2
50-250	4.2
250-750	3.5
750-5,000	2.8
5,000 and over	1.9

¹ For data on and brief discussion of the general levels of interest rates over time, see section *Possible Increases in Interest Rates*, starting on page. 70.

² Richard Youngdahl, "The Structure of Interest Rates on Business Loans at Member Banks," *Federal Reserve Bulletin*, July 1947, Table 3, p. 807.

It will be observed that the average rate charged small-asset borrowers was 5.2 per cent, whereas the average rate charged businesses with assets of \$5 million and over was 1.9 per cent—a ratio of almost 3 to 1.

The rates paid by enterprisers who are heavily dependent on outside capital are often higher than even the 5.2 per cent rate. Such enterprisers must often obtain a larger amount of outside capital relative to that which they own than commercial banks dare to lend, and interest rates tend to move up rapidly as the ratio of loan value to owned-capital increases. A loan based on real estate, for example, that can be had at a rate of 4 to 5 per cent if the loan does not exceed 50 per cent of the appraised value, would tend to carry a rate of 6 to 7 per cent as the loan approaches 60 or 70 per cent of appraised value. Not only are rates higher as the ratio of loan to assets increases, but the conditions of use and repayment imposed on the capital-needy enterpriser become more stringent. Thus, as the ratio of the loan to assets increases, the cost relative to the degree of control over capital increases even more rapidly than the stated rate.

To get sufficient outside capital, these enterprisers often rely on sources of funds which result in a much higher cost per unit of capital control than the usual bank or mortgage rates. For short-term capital, many new and small companies rely heavily on installment loans from commercial banks, commercial credit companies, sales-finance companies, factors, trade credit, and similar sources.

Interest on bank installment loans "may range from an effective rate of 6 per cent to as much as 20 per cent per annum with 12 to 16 per cent rates being most common."³ The cost of trade credit, which is extensively used, is far above usual bank rates. For example, the not uncommon terms of "2%/10-net 30" can result in paying 2 per cent for using money 20 days or the equivalent of 36 per cent per year. The effective rate charged by commercial finance companies is said to range from 9 to 20 per cent per annum.⁴ Interest rates for various other high-cost sources of credit could be cited. The above, however, should be sufficient to leave no doubt that enterprisers who

³ James C. Dockeray, *The Small Businessman and Sources of Loans*, Department of Commerce (Washington: Government Printing Office, 1950), p. 10.

⁴ Carl A. Dauten, *Business Finance* (New York: Prentice-Hall, Inc., 1948), p. 362.

utilize such sources of capital are subject to charges for the degree of control over capital they obtain that run well above the rates which even small, established businesses must pay for conservative mortgage loans or regular bank loans.

There are, unfortunately, no comprehensive data which show directly the cost of credit for new and young enterprisers. New enterprisers normally start small and most new enterprises would be so classified under any usual definition during the years of their youth. However, the above data on bank rates paid by small and large borrowers, respectively, provide a starting block for developing understanding concerning the rates paid by new and young enterprisers.

Data leave no doubt that the majority of new firms start not only small but tiny. A survey by the Department of Commerce covering new trade firms starting in the years 1945 through 1947, and new manufacturing firms starting in the years 1946 through 1948, indicates clearly that the average initial investment, including borrowed funds, for new retail, wholesale, and manufacturing firms is well below \$50,000.⁵ Not all new firms are tiny, of course, but only a minute percentage of new firms would start with assets of over \$250,000 which is commonly considered small in the discussions of small business.⁶

There can be little doubt also that many new and young enterprisers must borrow a large amount of capital relative to that which they own and that often they rely on relatively high-cost sources. It appears evident then that many new and young enterprisers are among those who face high costs of control over capital in our economy.

The rates shown above are those paid on loan credit. Enterprisers who wish to establish a business or undertake an expansion requiring much more capital than they own can sometimes obtain control over enough additional capital by incorporating and selling stock to "outsiders." There are some distinct advantages for enterprisers in striving to obtain control over outside capital by means of incorporation, not the least of which is a greater ability to retain control over capital so obtained. Except for those few enterprisers that start on a substantial

⁵ See Lawrence Bridge and Lois E. Holmes, "Capital Requirements of New Manufacturing Firms," *Survey of Current Business*, April 1950, p. 11.

⁶ See Neil H. Jacoby and Raymond J. Saulnier, *Business Finance and Banking* (New York: National Bureau of Economic Research, 1947), pp. 25-26.

scale this means of obtaining control over capital is not feasible, however.

The original cost of floating a public issue of stock of less than \$500,000 is high even for established corporations, and the cost for small or new firms tends to be prohibitive. The Securities and Exchange Commission, in a study of flotations by listed corporations in the period 1945-47, found that the cost was nearly 22 per cent of proceeds for flotations smaller than \$500,000 and only slightly over 1 per cent for flotations over \$50 million.⁷

We are not at this point questioning the fairness or soundness of rates paid by various groups of enterprisers. In the next chapter, we shall discuss the reasons why rates are what they are as well as the possibilities and implications of modifying such rates. Before doing this, however, let us in the balance of this chapter consider the several impacts of the wide differences in gross rates that exist.

THE IMPACT OF RATE DIFFERENCES

It is crucial that all who are sincerely interested in raising living standards for an ever-increasing population come to understand the threat to sustained economic growth that lies in the high interest rates faced by new, young, and growing enterprisers. Unless they can obtain control over capital at rates and on terms more nearly equal to those enjoyed by large and established firms, the hope of a better living for more people, basically strong under capitalism, may, nevertheless, fade and die.

To understand the strongly retarding impact of large differences in interest rates and of relatively high rates for new businesses, we need to recognize three points. First, interest encroaches on profits. Second, enterprisers facing relatively high interest rates are either substantially limited in their access to capital or particularly subject to failure. Third, since the limitation on access to capital and its contribution to business failure impinges heavily on new and young enterprise, differentially high interest rates contribute significantly to retardation in the economy as a whole.

Interest versus profit

Interest is a cost to the enterpriser and must be deducted from the earnings of economic activity in order to arrive at the net return.

⁷ Cited in *Review of Small Business*, 82nd Cong., 2nd Sess., House Report 2513 (Washington: Government Printing Office, 1952), Table 8, p. 61.

Functionally, the enterpriser pays interest to the capitalist. As interest rates rise, they rapidly encroach on a rate of profit sufficient to attract men into business enterprise or at least on a rate of profit sufficient to enable them to survive. When interest rates reach 6 or 8 per cent or more—rates two to three times those paid by large established firms—interest eats sharply into the prospects of net profits for many potential new enterprises and expansions. For many types of business a rate of 6 or 8 per cent tends to absorb such a large share of earnings as to mitigate strongly against success, whereas a rate of 3 per cent might well offer a possibility of success with reasonable profit. Earnings of business simply are not high enough on an average to enable even efficient enterprisers to pay rates that are far above average for any long period of time, especially on substantial ratios of outside to owned capital.

The dynamism and growth of a private enterprise economy are fundamentally dependent on the prospect of substantial net profits for enterprisers. This follows directly from the fact that they are the leaders of production and development in our economy. Increasing economic effectiveness and rapid economic development require that enterprisers have prospects of profits commensurate with the high caliber of economic effort and leadership which entrepreneurship requires.

It is not required that every enterpriser have assurance of a profit. Our system of voluntary undertaking and experimentation is certain to result in a relatively large number of cases in which the enterpriser makes little or no profit. The voluntary undertaking system is, in a sense, a device for sifting the weak from the strong, the unproductive enterpriser from the productive. This sifting is an important function of a vitalized free enterprise system.

Dynamic growth requires, however, that men with talent for enterprise have profit prospects essentially in proportion to their leadership capacity and contribution. If, through paying significantly higher interest rates, some enterprisers, and particularly new and young ones, face limited prospects of net profit, such interest rates must be viewed with considerable concern.

Interest and the access to capital

To get perspective concerning the impact of wide differences in interest rates on the capacity of enterprisers facing such rates to

obtain control over capital, it is necessary to give full weight to the fact that the differences are both simultaneous and large—that some enterprisers face high rates at the same time that others face low rates. Usually when economists are considering the effect of interest differences on enterprisers' demand for control over capital—the interest-elasticity of demand—they have in mind relatively small differences or changes in interest rates for all enterprisers, and opinions differ concerning the impact of small changes in the general level of interest rates on enterpriser demand for capital.

However, even relatively small differences in rates, as when the Federal Reserve Board changes the rediscount rate, have a significant inverse effect on the enterprise demand for control over capital, providing there are not unusual offsetting circumstances. There would seem to be no reasonable doubt that the much higher rates faced by some enterprisers at the same time that other enterprisers face lower rates tend to limit sharply the capacity of the enterprisers facing the high rates to obtain control over capital. When both those paying high rates and those paying low rates face the same general economic outlook, the limitations on enterpriser access to capital for those facing high rates must be great.⁸

It is difficult to imagine how anyone visualizing existing interest rate differences in true perspective could hold that enterprisers facing interest rates of 6 to 10 per cent, while others pay 2 to 3 per cent, would not use much less capital than if they could obtain it at a rate of 3 per cent. The impact of interest on the use of capital would have to be small indeed if such simultaneous differences in interest rates as exist were not to have a marked effect on the willingness and ability of enterprisers to obtain control over capital.

Interest, new enterprise, and business failures

The retarding impact of differentially high interest rates on capital use and economic growth falls particularly hard on new and young enterprise. The new and young enterpriser usually owns a

⁸ Unless we guard ourselves against a trick of the mind the true magnitude of the differences in rates previously noted is likely to elude us. It is easy to slip into a tendency to think of a rate of 6 per cent as being only 3 per cent greater than one of 3 per cent, whereas a 6 per cent rate is clearly twice as great as a rate of 3 per cent. Interest rates of 3 and 6 per cent, respectively, differ in the same degree as prices for oranges of \$1 and \$2 per dozen.

relatively small portion of the total capital necessary for establishing production units of sufficient size to permit efficiency. Thus he must pay relatively high rates on a large share of his total capital needs.

This impact of interest rates on new and young enterprise could work in three ways. (1) Prospective new enterprisers who study profit prospects and prospective interest costs could decide not to obtain capital and not to undertake business enterprise. (2) New enterprisers, facing such high rates and owning little capital, could decide to obtain sufficient outside capital to establish production units of sufficient size for efficiency even though facing high interest rates. (3) New enterprisers could establish business firms on an extremely small scale.

If the first course is followed, new enterprise talent is simply shut out of the economy in the beginning. If the second course is followed, the interest burden tends to be so great that the young enterpriser is strongly subject to failure even though he has established an efficient production unit and even though he operates this production unit efficiently. If the third course is followed, many new and young enterprises are apt to be too small for efficiency and are also subject to failure.

New enterprisers, however efficient as production managers, who choose to pay the high rates they face, and to pay such rates on a large share of their total capital needs, are at a marked disadvantage compared to their older and larger competitors. To fasten this fact indelibly in our minds, we need only visualize the not uncommon case of a new enterpriser borrowing 60 per cent of the capital necessary for efficiency and paying 7 per cent (or more) in competition with an established enterpriser who needs to obtain only 10 or 20 per cent of his total capital requirements from outside and who needs to pay only 3 per cent. Surely, if these two enterprisers are of equal managerial efficiency, the new, capital-deficit enterpriser is at a severe competitive disadvantage.

Although some new and young firms, due to exceptional profits, can borrow large amounts at high rates and remain in business and grow, such high rates on a large share of capital used will cause many capable men, efficient firms, and good ideas to fall by the wayside. This is a waste of creative manpower and resources in our economy.

One of the most shocking aspects of our economy is the ex-

tremely high rate of failure among new enterprises. During the period 1946-51, 5½ million new enterprises were started in the United States—over one and one-half times the total number in existence at the end of 1945. Data on survival patterns indicate, however, that approximately one-half of the firms started during this period discontinued operations within two years.⁹ Some of the concerns undoubtedly dropped out voluntarily but there can be little doubt that, to a large extent, such discontinuances were not from choice but must be realistically viewed as failures. Undoubtedly, many of these failures resulted from causes other than the difficulties in obtaining control over capital at rates and on terms comparable to those of their older and larger competitors. An analysis of the data suggests, however, that the proportion of failures due to high financing costs and unfavorable financing arrangements may be much larger than is often recognized.

To a large extent, new enterprisers appear to follow the third course indicated above in response to high interest rates—that of starting new enterprises but with small amounts of capital. Although a great many new enterprises were established during the postwar period, the large majority of these firms started with small amounts of capital and with little outside capital. The survey by the Department of Commerce covering new business firms started in the years following World War II shows an average initial investment, including both owned and borrowed funds, of \$9500 for new retail firms, \$22,000 for new wholesalers, and \$12,000 for new manufacturing firms.¹⁰

The small average size of new businesses is undoubtedly associated, in part, with the small total amount of capital (owned and borrowed) with which they often feel compelled to start. The fact that many firms start excessively small and that many of these firms must borrow from high cost sources and on rigid repayment terms in order to have even this small total amount of capital appears to be a major reason for the high rate of failure among new and young business firms. The Department of Commerce survey showed that "The average investment of the unsuccessful firms in the sample was about 55 per cent of that of the sample's surviving firms."¹¹

It is often held that business failures are primarily due to poor

⁹ Betty C. Churchill, "Survival Patterns of the Postwar Business Population," *Survey of Current Business*, December 1952, p. 12.

¹⁰ Bridge and Holmes, *loc. cit.*

¹¹ Bridge and Holmes, *op. cit.*, p. 16.

management. Undoubtedly the rate of failure could be lessened substantially by better management. Education of new enterprisers for better management, including information leading to better organization for obtaining capital, is a prime road to lessening business failure and to increasing the contribution of new enterprise to economic growth. It is easy to overlook the possibility, however, that the high cost of obtaining capital is a powerful factor underlying what might superficially be viewed as poor management. It can, of course, be considered poor management for new and young enterprisers to pay high rates and depend heavily on outside capital. If the alternative is to do these things or stay out of business, however, and if an enterpriser does them, can we simply write off such action as poor management?

Certainly the high rate of failure of new and young enterprise, which would seem unbelievable were there no data to show it, must be taken into consideration when we attempt to visualize the impact of interest rates and credit arrangements on capital use and expansion by new and young enterprise. New enterprisers apparently wish to use capital to establish enterprise and to expand and apparently they try to do so in spite of high rates. Their capacity to continue to use capital and to expand their enterprises in spite of such rates appears, however, to be sharply limited. To remedy this unhealthy situation it is necessary to provide opportunity for all to obtain capital at such rates and under such conditions as give promise of success under efficient management. Although this is not the only need, it is basic if new enterprises that start are to succeed and thus spark the country's economic progress.

Impact through new enterprise

To visualize the full retarding sweep of high interest rates on economic progress, we need now recall that economic progress in the economy as a whole depends significantly on new and young enterprisers and enterprises.

We noted in Part II that the growth power of capitalism is closely associated with the provision that it makes for the entry of men with new ideas into the production stream and for the rise of men of talent into positions of economic leadership. We noted also that new and young enterprisers and new and young firms play a large role in the dynamics of growth. It is evident that this group, if we include

those who might start if capital were available at profit promising rates, those who do start and succeed, and those who start and fail, represents a significant share of all enterprisers in our economy at all times. We have just seen that over 5½ million new firms were started in the period 1946 through 1951 and we may note that "of the 4 million firms in operation at the end of 1951, half were younger than 4 years and 4 months."¹² There can thus be no doubt that the new enterpriser and the new firm are a substantial part of our economy even in terms of statistics.

The further vital point, however, is that this ever-coming, ever-changing body of new firms has a leavening action on economic growth that defies statistical measurement. Economic progress depends basically on the introduction of new ideas, which contribute an indispensable element to dynamic growth.

We have emphasized the economic value of the new man bringing the new idea into the economic stream. A truly effective freedom of entry to the business world has a social and political value also; and this may well be as important as the economic impacts which we have been describing. This nation is widely regarded by its citizens as the "land of opportunity." It is so regarded not only because there has been a legal freedom for every man to "get ahead" but because conditions have been such that vast numbers of men have actually done so. To ensure that such an atmosphere will prevail in the future must be a vital concern of every friend of freedom and progress.

It is doubtful that a capitalistic economy can retain its natural dynamism in the absence of widespread opportunities for men with leadership talent but with relatively limited means of obtaining control over capital on rates and terms that give promise of success for those who are efficient. It is such opportunities that give to all a great hope and a great possibility of economic contribution, self-expression, and economic success. It is such opportunities that give men enthusiasm for democratic capitalism.

POSSIBLE INCREASES IN INTEREST RATES

We have indicated that the general level of interest rates is not an immediate problem in our economy. Except insofar as the average

¹² Churchill, *op. cit.*, p. 16.

of rates may be somewhat higher than necessary because of relatively high rates for new, young, and growing enterprisers, the general level of rates appears to have reached close to an economic minimum in the period following World War II.

The average of interest rates paid by enterprisers, and particularly the rates paid by enterprisers with strong credit standing, have fallen markedly since the early 1920's. As indicated in Table 2, yields on high-grade corporate bonds which averaged around 6 per cent in 1920-21 fell below 3 per cent in 1940 and remained between 2 and 3 per cent through 1952. Similarly, bank rates on business loans which averaged above 6 per cent in 1920-21 fell below 3 per cent in 1935 and remained between 2 and 3 per cent through 1950. Interest rates on mortgage loans also fell significantly from near 6 per cent during the 1920's to around 4 per cent in the 1940's. It may be noted, however, that rates on mortgage loans fell considerably less than rates on high-grade corporate bonds.

The general level of interest rates has, in recent years, been especially low compared with the apparent profit prospects, and this situation, according to our analysis, is highly conducive to economic activity and growth. It is, in fact, tempting to suggest that the tremendous forward surge of economic activity during the 1940's was in part made possible by the fact that interest rates did not rise greatly from prewar levels even though profit prospects increased rapidly.

We must not, however, overlook the possibility of a considerable increase in the average of interest rates in the years and decades ahead. Table 2 shows that both the rates on bank loans to business and corporate bond yields have increased since their low points in 1946-47. By 1953, average bank rates had risen to 3.7 per cent and corporate bond yields to 3.2 per cent. Since some rates were perhaps artificially low in the period immediately following World War II, the recent rise should be no cause for alarm. There is no reason to believe that interest rates for large and established enterprises and, therefore, on an average are likely to reach uneconomically high levels in the near future. Nor is there reason to believe that a rise to such levels is inevitable.

It is possible, however, that over the time forces and factors that led to the high rates in the 1920's could again push average rates

TABLE 2. AVERAGE INTEREST RATES, BY TYPE OF LOAN, 1920-54

Year	Bank Rates on Short-term Loans to Business ^a	Yields on High-grade Corporate Bonds ^b	Rates on Mortgage Loans (Income-producing Properties) ^c
(1)	(2)	(3)	(4)
1920	6.58	6.12	5.8
1921	6.68	5.97	6.5
1922	5.53	5.10	5.9
1923	5.52	5.12	5.7
1924	5.10	5.00	5.8
1925	4.98	4.88	5.4
1926	5.08	4.73	5.6
1927	4.96	4.57	5.5
1928	5.17	4.55	5.3
1929	5.83	4.73	5.7
1930	4.85	4.55	5.9
1931	4.30	4.58	5.4
1932	4.71	5.01	5.3
1933	4.27	4.49	^d
1934	3.45	4.00	4.5
1935	2.93	3.60	5.3
1936	2.68	3.24	4.6
1937	2.59	3.26	5.1
1938	2.53	3.19	4.7
1939	2.10	3.01	4.6
1940	2.10	2.84	4.4
1941	2.00	2.77	4.3
1942	2.20	2.83	4.5
1943	2.60	2.73	4.2
1944	2.40	2.72	3.9
1945	2.20	2.62	4.2
1946	2.10	2.53	4.2
1947	2.10	2.61	4.0
1948	2.57	2.82	—
1949	2.68	2.66	—
1950	2.69	2.62	—
1951	3.11	2.86	—
1952	3.49	2.96	—
1953	3.69	3.20	—
1954	3.61	2.90	—

to high levels. The high rates of the early 1920's culminated a long rise that began in the late 1890's. For example, railroad bond yields, which averaged slightly over 3 per cent in 1899, moved up gradually until they reached their peak of over 5 per cent in 1920.¹³ Though not an immediate problem, the possibility of another gradual rise in interest rates to a level that becomes excessive relative to profit opportunities—such as apparently was reached in the 1920's—must, nevertheless, be borne in mind.

It is fundamental to note that any considerable rise in the average level of interest rates is likely to impinge severely on new, young, and capital-deficit enterprisers. We noted earlier that the rates paid by new and young enterprisers were relatively high even in 1946 when the average level of rates was at a long-time low. If the level of rates should be forced significantly higher, many more enterprisers would be subject to relatively high rates. Those enterprisers who own all or most of the capital that they wish to use are affected but slightly or not at all if the general level of rates rises. The enterprisers who are heavily

¹³ Frederick R. Macaulay, *The Movements of Interest Rates, Bond Yields and Stock Prices in the United States Since 1856* (New York: National Bureau of Economic Research, 1938), pp. A-152-57, col. 5.

* Data are not comparable throughout because of differences in coverage and methodology. Data for 1920-27 "represent averages of prevailing rates reported monthly by banks in a varying number of leading cities on commercial loans and time and demand security loans." Data for 1928-38 "are averages of prevailing rates reported monthly by banks in 19 principal cities on commercial loans only." Data for 1939 to date, which also cover 19 cities, "are a revised series of interest rates adjusted for changes in the size composition of loans."

^b Covers average yield of Moody's Aaa domestic corporate bonds.

^c Based on average contract interest rates from a sample of straight urban mortgage loans made by 24 leading life insurance companies for the period 1920-47. Data based on a 1 per cent sample of all loans made. Properties covered include apartments (larger than 4-family units), stores, and other income property.

^d No loans made.

SOURCE: Column 2. For 1920-38, *Historical Statistics of the United States, 1789-1945*, Series N 188 and N 192, p. 279. For 1939-54, *Business Statistics, A Supplement to the Survey of Current Business, 1955 Biennial Edition*, p. 82. Compiling agency: Board of Governors of the Federal Reserve System.

Column 3. 1955 *Historical and Descriptive Supplement to Economic Indicators*, Joint Committee on the Economic Report (Washington: Government Printing Office, 1955), p. 63. Compiling agency: Moody's Investors Service.

Column 4. R. J. Saulnier, *Urban Mortgage Lending by Life Insurance Companies* (New York: National Bureau of Economic Research, 1950), Appendix Table B5, p. 132.

dependent on outside capital, however, are at an increasing disadvantage as the general level of rates rises. The wide differences in rates are a problem when the average of rates is low. They are more of a problem when the average is higher.

In view of the probability that prospective, new, and growing enterprisers are among those whose ratio of owned capital to that which they might effectively use is especially low, it becomes evident that a rise in the general level of interest rates—using the term “interest rates” broadly—could, if large, represent an increasingly serious obstacle to sustained economic growth.

Inasmuch as the differences in rates are now large whereas the level of rates is now relatively low, an important contribution to underlying strength in our economy could be made through emphasis at this time on lessening rates for and on increasing the access to capital for new, young, and growing enterprisers even as we develop a gentle resistance to any large increase in interest rates generally.

VIII. Institutional Foundations of Interest Rate Differences

OUR ANALYSIS thus far indicates that lower rates for new and capital-deficit enterprisers would facilitate capital use and successful expansion for them individually and for the economy as a whole. A vital question now arises. Are the interest rates paid by these enterprisers higher than necessary and can they be lessened? This leads into a study of the nature of the factors underlying the wide differences in rates already noted. To the extent that such an analysis reveals the existence of reducible elements in the high rates paid by new and capital-deficit enterprisers, it will provide an insight into the possibility of lessening these rates.

In a competitive, free enterprise economy, simultaneous differences in gross rates of interest paid for any specific degree of control over capital must result basically from (1) differences in the cost of distributing credit or in the risk of capital loss, or (2) differences in competitive power or in its use.

The costs and risks and competitive powers impinging on interest rates and differences are closely associated with the institutional structure of finance and enterprise in our economy. Let us, therefore, study the capital-supplying structure and the enterprise—capital-using—structure and consider the implications of these structures for costs, risks, and competitive power.

FINANCIAL CENTRALIZATION VERSUS NEW ENTERPRISE SCATTER

The credit-supplying structure in our economy is characterized by a considerable concentration in the ownership of capital and by a considerable centralization in the flow of capital through financial

channels. The enterpriser demand structure, in contrast, consists of a large number of new, small, and widely scattered enterprisers, plus a small number of large and powerful enterprisers. In general, these institutional differences in concentration and scatter go far to explain the high interest rates and limited access to capital faced by the group under discussion.

The situation of a wide scatter of new and capital-deficit enterprisers facing a centralized capital supply structure results, first, in artificially high costs and risks in the furnishing of capital to such enterprisers. Second, such a situation results in sharp differences in competitive power between new, young, and small enterprisers on the one hand, and the suppliers of capital on the other. This tends toward additional unnecessary elements in the rates paid by such enterprisers.

The concentration of capital

A study of the available data shows that a large share of the nation's wealth, especially of that portion available as capital for enterprise, is in a small number of hands. Data on personal distribution of wealth are limited, but in a recent study an attempt was made to estimate "the wealth of individuals whose estates, properly reported, would be subject to the federal estate tax if they died at a certain time."¹ It was estimated, for the year 1944, that 908,000 individuals living in 1944 and subject to estate tax reporting owned wealth equal to \$170 billion.² This means that those subject to estate tax reporting had, on an average, wealth valued at \$187,000 at 1944 prices.

Total wealth in the United States in 1944 was estimated to equal \$499.1 billion, of which \$97.8 billion would be classified as public wealth and \$401.3 billion as private wealth.³ From these data it would appear that 908,000 individuals, or two-thirds of 1 per cent of the

¹ Horst Mendershausen and Raymond W. Goldsmith, "Measuring Estate Tax Wealth," *Studies in Income and Wealth*, XIV (New York: National Bureau of Economic Research, 1952), pp. 125-42. The quotation is from page 127.

² *Ibid.*, pp. 139-40.

³ Raymond W. Goldsmith, "A Perpetual Inventory of National Wealth," *ibid.*, Table 1, pp. 18-19. It should be noted that these wealth estimates are expressed in terms of the 1944 price level. Goldsmith's estimate of total national wealth for 1948—the latest year for which he presents estimates—is \$797 billion, reflecting largely the advance in the price level since 1944.

population (138.4 million persons) for that year, owned 42 per cent of the nation's private wealth in 1944.⁴

It is evident, although there are no specific data to show it, that much more than 42 per cent of the wealth available as capital for enterprise was in the hands of the top wealth group in 1944. A large share of the 58 per cent of the private wealth owned by approximately 99 per cent of the population must have been embodied in homes and other consumers durables. Wealth thus embodied can, of course, be converted. However, the per capita wealth of the 99 per cent of the people not in the estate tax group appears to have been about \$1700 (\$231.3 billion divided by 137.5 million persons). A large share of this group would have no surplus beyond their needs for homes, automobiles, etc., to offer as capital for enterprise.

Commenting on the distribution of wealth, Mendershausen and Goldsmith write, ". . . this upper section of the wealth pyramid is often of great importance. It includes most of the privately held stock in business corporations, a large part of the equity in unincorporated business enterprises, and most of the privately held corporate and state and municipal bonds, mortgages, and nonresidential real estate."⁵

No one would claim a high degree of precision for the estimates of economic wealth and its distribution. If, however, these estimates provide anywhere near a correct impression, there can be little doubt that, of the wealth in use as capital for enterprise, a large share tends to be owned by a small number of individuals. Recognition of this high concentration in the ownership and ultimate control over the capital of the country is of marked significance for understanding the wide differences in interest rates and in the access to capital.

Centralization of financial channels

To a considerable and increasing extent, the capital of those of even relatively modest wealth, as well as much of the capital of those of large wealth, is assembled by and flows through financial inter-

⁴ It is recognized that an indeterminate amount of error is involved in relating the data on wealth of individuals (estate tax wealth) to data on total private wealth. The two series differ with respect to composition, methods of valuation, etc. However, it is believed that the data can be safely combined to provide a rough measure of the degree of the concentration of wealth (and capital).

⁵ Mendershausen and Goldsmith, *op. cit.*, p. 127.

mediaries that tend, because of legal necessity, economic necessity, or custom, to channel such capital to large and established enterprisers.

Table 3 reveals clearly the large and increasing proportion of all long-term loan credit that is channeled through financial institutions. The percentage of long-term debt, private and public, held by financial intermediaries, reaching 49 per cent of a modest \$85 billion in 1920, moved up to 72 per cent of the total, now increased to \$414 billion, in 1950.

The increased importance of financial institutions in the capital-supplying structure has necessarily been reflected in a decline in the relative importance of other traditional sources of capital. Thus, the last line of Table 3 indicates that during the same thirty-year period (1920-50) the proportion of long-term debt held by nonfinancial corporations and by individuals was almost halved, declining from 51 to 28 per cent.

An outstanding example of the growth of large financial institutions is that of life insurance companies. The growth of these companies, which invest their funds to a large extent in the private capital market, has been phenomenal in recent decades. The total assets of American life insurance companies increased from \$7.3 billion in 1920 to \$84.5 billion in 1954.⁶ The greatly increased importance of life insurance companies as a source of credit for business is reflected in data which relate the assets of life insurance companies to net long-term private debt. In 1916, life insurance assets were equal to only 13 per cent of such debt; by 1950, the percentage had risen to 54.⁷

Not only has an increasing proportion of all long-term loan credit come to be available through financial institutions, but there also tends to be considerable concentration of lending power even among such institutions. In the field of life insurance, there were 15 companies in 1952 with assets of over one billion dollars; the combined assets of these 15 leading companies (\$55.4 billions) accounted for 72 per cent of the assets of the 522 American and Canadian companies covered by the analysis. Thus, in the case of these 522 life insurance com-

⁶ *Life Insurance Fact Book*, 1955 (New York: Institute of Life Insurance, 1955), p. 59.

⁷ Houghton Bell and Harold G. Fraine, "Legal Framework, Trends, and Developments in Investment Practices of Life Insurance Companies," *Law and Contemporary Problems*, Winter, 1952, Table 2, p. 52.

TABLE 3. OWNERSHIP OF PUBLIC AND LONG-TERM PRIVATE DEBT, 1920-50

Item	Amount (Billions)				Per Cent			
	1920	1930	1940	1950	1920	1930	1940	1950
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Public and long-term private debt, total ^a	\$ 85	\$126	\$150	\$414	100	100	100	100
Type of debt:								
Public	30	32	72	289	35	25	48	70
Private	55	93	78	125	65	74	52	30
Ownership of debt:								
Financial institutions ^b	42	75	106	300	49	60	71	72
Nonfinancial corporations, individual, and other ^c	43	51	44	114	51	40	29	28

Note: Detail may not add to totals because of rounding.

^a Public debt comprises gross direct and guaranteed obligations of the federal government and its agencies and long-term state and local government debt exclusive of that held in sinking funds; private debt comprises net long-term corporate debt and real estate mortgages.

^b Comprised of insurance carriers, savings depositories, the commercial banking system, public pension and trust funds, private pension and trust funds, and trust departments of commercial banks.

^c Other comprised of unincorporated businesses, foundations and endowments, foreign holdings, security dealers, etc.

SOURCE: Charles H. Schmidt and Eleanor J. Stockwell, "The Changing Importance of Institutional Investors in the American Capital Market," *Law and Contemporary Problems*, Winter, 1952. Adapted from Table 1, p. 5. For more detailed breakdown of data, definition of items, and sources of data, see source table.

panies, 3 per cent of the companies accounted for 72 per cent of the assets.⁸

The concentration in commercial banking is also marked. At the close of 1954, 6630 Federal Reserve member banks held assets of \$172 billion. Assets of almost \$111 billion were held by 220 of these banks. Thus, a little over 3 per cent of the banks held almost two-thirds of the total assets of member banks.⁹

⁸ Information in this paragraph based on *Best's Insurance News, Life Edition*, June 1953, pp. 8-9, supplemented by additional information kindly provided by the publisher in a communication to the Institute.

⁹ "Member Bank Earnings, 1954—All Member Banks, By Size of Bank," *Federal Reserve Bulletin*, May 1955, p. 568.

The above data on financial centralization show clearly that the flow of credit is increasingly through financial institutions and that it is strongly dominated by large financial institutions.

The scatter of new and young enterprise

The smallness and scatter of new enterprises are in sharp contrast to the bigness and concentration in the supply structure of capital. As noted earlier, new firms start with an extremely small amount of capital. Obviously the majority of new enterprises in the United States are very small compared to the size of the financial institutions that own or control the flow of most of the nation's capital. Furthermore, the number of new and young (and mostly small) enterprises is very large. For the period 1944 through 1951, the number of new firms started during each year was, on an average, 25 per cent of the number in existence at the beginning of that year.¹⁰ Because of numerous failures and discontinuances, these many starts do not result in large net additions to the total number of firms in existence. There does result, however, a definite accent on business scatter, newness, and youth. In 1951 there were four million enterprises in existence and, of these, three-fifths had been established since World War II. Over one-half of all firms in existence in 1951 were less than four and one-half years of age.¹¹ There can be little doubt that the enterprise demand structure is characterized by a large number of new and small enterprisers.

Standing beside these in the enterprise demand schedule, we find a relatively small number of large and established firms. Such firms, while bargaining with owners of capital and with financial institutions for control over capital at modest rates, also compete laterally with the new and small enterprisers for the existing capital.

To a considerable extent also, large and established nonfinancial firms are their own suppliers of capital. They function both on the supply side and on the demand side. Through retaining earnings and using depreciation reserves, established enterprisers deal with themselves as owners of capital. Retained earnings and depreciation reserves

¹⁰ Calculated from data appearing in Table 1 of an article by Betty C. Churchill, "Survival Patterns of the Postwar Business Population," *Survey of Current Business*, December 1952, pp. 12-19.

¹¹ Churchill, *op. cit.*, p. 12.

represent a large share of the capital available for new investment, and this part of the capital supply is largely beyond the reach of new and capital-deficit enterprisers.

The existence of large and established enterprisers on the enterprise demand side may well serve to keep the average rate of interest from becoming excessive but it compounds the difficulties of the new enterprisers in obtaining control over sufficient capital at profit-promising rates and in desirable form.

IMPACT ON RATES AND ACCESS

The fact has now been established that much of the ownership of capital for enterprise is in relatively few hands and that the capital of both small and large owners tends increasingly to be lodged in centralized financial institutions. This supply structure has been contrasted with a demand structure consisting of many new and small enterprisers and a relatively few large and established firms. This institutional structure, as already indicated, goes far to explain the relatively high cost of control over capital and the limited access to capital faced by new and small enterprise.

We may now consider briefly the reasoning that leads to this conclusion: first, how this institutional structure leads to high costs of distributing capital and to high risk elements in furnishing capital to new and small enterprisers; second, how this institutional structure tends toward additional excesses in rates paid by such enterprisers because of differences in competitive power.

High costs and risks

It is a long distance between the many new, young, and small enterprisers in need of risk capital and the supply stations from which control over capital might be obtained. With a large share of the nation's capital flowing through a small number of financial institutions, it is simply a difficult task for those who own and must invest large amounts of capital to get it out to the many prospective, new, and young enterprisers. It is costly to channel credit far and wide and in small amounts. It is difficult for large owners and suppliers of credit to find and appraise the many new and small enterprisers; and it is difficult for new and small enterprisers to approach the large owners and suppliers.

There is, in a sense, an extra risk to the large lender simply because the capacity and potential of the new and small borrower are not known. This is true even though the capacity and potential of the new enterpriser may be great and even though by normal standards he may be a good risk. The great distance between large supplier and small user creates an artificial risk; and this results necessarily in an artificially high asking price for credit to such enterprisers or perhaps in no offer of credit at all.

The large and established enterprisers contribute to the problems of new and young enterprisers in obtaining credit at modest rates. It is clearly less costly for big lenders to make large loans to big borrowers than for such big lenders to make small loans to small borrowers. It is natural, therefore, for large financial institutions to channel capital toward large borrowers and to offer it at lower rates.

The fact that a large share of the capital available for expansion is in the hands of owners of established nonfinancial firms tends also to channel the flow of capital to those same firms rather than to new and young enterprisers. Owners whose capital is embodied in established firms can see the possibility of gain from using earnings in their own firms, whereas it is more difficult for them to visualize the potentials of a new enterprise.

With wealth relatively concentrated and with financial channels centralized, even those large enterprisers who need substantially more capital than they own become subject to a certain sluggishness in the flow of capital from its customary use and from large financial institutions; but the new, young, and small enterpriser is subject to double jeopardy. He suffers from being far away from and little known to "big finance." The costs and risks of serving him are high relative to the costs and risks of serving the large, established firm. In many cases, because the costs and rates would be too high, large suppliers simply do not offer, and new enterprisers do not seek, the credit that could place such enterprisers in profitable business. This underlies much of the "shortage of capital" for new, young, and small business.

In considering how the institutional structure leads to relatively high gross interest rates for new and young enterprisers, we must not overlook the fact, previously noted, that many such enterprisers start on an extremely small scale. This smallness stands side by side with

the pronounced centralization of finance in contributing to artificially high costs and risks.

Many new enterprises are started on a scale too small for efficiency even under good management; and, in such cases, the management often tends to be of poor quality. Excessive smallness of new enterprise thus contributes to the probability of failure and to the risks faced by suppliers of capital. The tendency to start extremely small also increases the number and the scatter of new enterprisers to be supplied with capital. This raises the costs of distributing capital and increases the difficulties of appraising true risk for new and young enterprise above those that would be involved if new enterprises were started only on a scale conducive to success with good management.

Our free enterprise system gives men the right to undertake enterprise in accordance with their own desires and judgments; and, to preserve the dynamism of our system, this right must be held inviolate. However, the tendency to exercise this right to the extent of starting a business enterprise with a quantity of capital far below the level necessary for technical efficiency, and often with little training and know-how, results in risks for which owners of capital must clearly charge.

The costs of distributing capital and the risks of furnishing capital to new, young, and capital-deficit enterprisers would clearly be greater than for large and established enterprisers even if the supply structure were less centralized and even if new and young enterprisers were willing and able to start on a considerably larger scale. Such small differences in costs and associated small differences in rates would be no problem, however, and would not be considered as uneconomic or as unnecessarily great. New enterprise that is justified in terms of system effectiveness should be somewhat more profitable than existing enterprise, and should be able to pay somewhat higher rates. Otherwise, it has no right to draw capital out of existing uses. A somewhat higher gross rate of interest for new, young, and energetic enterprise is thus to be expected and is not necessarily an obstacle to economic development and progress.

The problem is that the cost and risk elements in rates paid by new and young enterprisers exceed those in rates paid by large and established firms by significantly more than they would if the supply

structure were less centralized and if the new enterprise structure were less scattered.

Competitive powers and surpluses

Under the present institutional structure of finance and enterprise, there can be no doubt that new, young, and capital-deficit enterprisers are in a weak position in bargaining for credit. Their position is often weak both relative to the sources of finance and relative to large and established enterprise. The many that start extremely small are in a particularly weak bargaining position. These differences in bargaining power could contribute significantly to the high interest rates faced by new, young, and capital-deficit enterprisers.

Although the existence of significant differences in bargaining power associated with institutional differences can hardly be doubted, the extent to which this leads to excessive rate differences is uncertain, since it depends on the extent to which such power is exercised. It is probable that many owners and suppliers of capital who understand the long-run benefits of modest rates for all enterprisers tend to keep their net asking rates to a minimum. Not all suppliers understand these benefits, however, and it is unlikely that even full understanding of the long-run benefits of lower rates would lead all suppliers to accept a minimum interest return in spite of the weak bargaining power of some borrowers. We thus have reason to believe that, in many cases, the gross rate paid by new and young enterprisers includes, over and above the rate paid by large and established enterprisers, an element that is due to differences in competitive power. This gross rate may be viewed as containing a "competitive surplus" corresponding to the competitive advantage which suppliers have over such enterprisers.

We are writing at a time when the general level of rates is low. From time to time, there develops a tightening in the supply of capital that results in intense competition for control over capital and in a higher level of interest rates. At such times new, young, and capital-deficit enterprisers are especially subject to superior bargaining power. Although it seems likely that competitive surpluses play a significant part in the make-up of high rates at all times, it is probable that such surpluses play a larger part when the general level of rates is high than when the general level is low. It is also possible that,

because of the strong competitive power of the capitalist in our type of economy, even large and established enterprisers pay competitive surpluses when the general level of interest rates reaches a high peak. Should this level increase in the years ahead, it would thus accentuate the problem of competitive surpluses.

In summary, our study of the institutional structures and attitudes underlying differences in interest rates suggests that these structures and attitudes lead to several elements in the rates paid by new, young, and capital-deficit enterprisers that are unnecessarily high. Let us visualize in a nutshell the several excess elements to which these structures and attitudes lead.

The gross rates paid by new, young, and capital-deficit enterprisers may be assumed to contain three basic elements, even as do gross rates paid by large and established enterprisers. These three elements are (1) an amount necessary to cover risk of capital loss, (2) an amount to cover expenses of distribution, and (3) a net return to the capitalist for his basic function of governing and of guiding generally the use of capital.

In the rates paid by new, young, and capital-deficit enterprisers each of these elements appears often to contain an excess factor. The cost element and the risk element are often greater than they would be if the capital supply structure were less centralized and if the new enterprise structure were less scattered. In addition, the gross rates paid by such enterprisers often contain a surplus element above the amount that would accrue if the competitive power of the new enterprisers were equal to that of their suppliers of capital. These three excesses, each relatively small in itself, add up to the wide differences between the rates paid by new, young, and small enterprisers and those paid by large and established enterprisers under existing institutions and attitudes.

LESSENING INTEREST RATE DIFFERENCES

Our study of the factors, institutions, and attitudes underlying the relatively high interest rates paid by new, young, and capital-deficit enterprisers and of the nature of the resulting excesses suggests the general direction that steps toward lessening the wide differences in interest rates must take. The task is essentially that of modifying institutions and attitudes within the economy in such a manner as to

lessen the excessive cost, risk, and surplus elements in the rates paid by new, young, and capital-deficit enterprisers. Fundamentally, this calls for both a lessening of centralization in the structure of finance and a lessening of scatter in the sphere of new and young enterprise. It calls for a lessening of the wide differences in competitive power and for fully enlightened use of such superior competitive power as may continue to exist.

However, such changes can only be brought about if leaders in finance, in enterprise, and in government visualize the true need for change and strive energetically to achieve it.

Impact on the supply of capital

If one does not note carefully the nature of the reductions called for by our problem, he might worry that reductions in rates for new, young, and capital-deficit enterprisers might have a retarding effect on saving and on the long-run supply of capital. Careful thought concerning the nature of the reductions required suggests that such concern is unwarranted.

It is important, first of all, to keep clearly in mind that a large share of the possible reductions would consist of reductions in cost and risk elements. Such reductions, while benefiting enterprisers, would not reduce the net return to the owners of capital.

Second, it is important to note that the required reductions in net rates are only reductions of such excesses as result from relatively weak bargaining power on the part of new and young enterprisers and are not reductions in interest rates that would be established among competitive equals.

Broadly speaking, the solution of the problem simply calls for rate reductions within the range lying above the rates now paid by large and established firms. Since average interest rates have been close to an all-time low in recent years, we may assume that the gross rates paid in these years by large and established firms are close to an economic minimum.¹² In view of the strong competitive power of such enter-

¹² There is, of course, no rigidly definable minimum net rate of return to capitalists. The minimum necessary is in part a matter of attitudes which capitalists have concerning the privileges that they enjoy and the responsibilities that they carry. There can be little doubt, however, that in an economy in which heavy responsibility is carried by private capitalists the net return for the capitalist function could not fall indefinitely without damping the efforts and energies of those performing this function.

prisers in dealing with the suppliers of capital, we may also assume that the net rates received from such large and established enterprisers represent roughly the net rates that would prevail among competitive equals.

It thus appears that the reductions in net rates to capitalists resulting from the removal of surpluses paid by new, young, and capital-deficit enterprisers could not be presumed to have a retarding effect on the rate of saving or on the provision of capital in our economy.

The last remnant of worry concerning the effects of reductions in net rates disappears if we recognize that, basically, reductions in net interest rates, within the range that would result from possible and desirable reductions in competitive surpluses for new and young enterprise, would tend to increase, rather than decrease, the volume of saving and the long-run supply of capital.

It is generally recognized that, within the probable range of changes in interest rates, such changes have relatively little direct effect on the proportion of income saved by individuals and business firms. The large share of all saving is done by business firms and individuals with incomes that are well above average. Such firms and individuals can hardly be assumed to determine the share of income they save by the differences in the rate of interest they might receive if they should invest such savings. By and large, it appears that saving takes place first, independently of interest rates, and then, having occurred, plays its role in determining the rates that owners of such savings will receive if and when such savings are invested.¹³

We have noted on the other hand that reductions in the rates paid by the new, young, and capital-deficit enterprisers would tend toward substantial increases in capital use, enterprise, and production. Such reductions in interest rates as are required would tend to increase substantially the volume of income produced in our economy. Thus it appears that the effect of lessening large differences in interest rates would be not only to increase the volume of production from the existing supply of capital, as we noted in Chapter VII, but also to increase the supply of capital in the long run.

¹³ It should be clear that interest is received by the owner of capital not for saving but for governing and allocating to productive use capital already saved or in existence. Much of the capital in existence was never saved. The capitalist receives no interest regardless of the quantity of capital he has saved and owns unless he makes such capital available to users. Merely saving it does not enable him to receive interest. A farm or factory or dollar bill that is idle yields no interest to its owner.

Modifying "supply and demand"

There are always those who will contend that the rates of return to capitalists, enterprisers, and laborers are simply determined by some inevitable supply and demand and that these rates cannot, therefore, be consciously modified. This contention is both erroneous and dangerous. It should now be clear that "supply and demand" are strongly conditioned by the institutional structure and by broad attitudes and powers. Costs and risks and competitive power are in considerable part a function of the institutional structure of finance and enterprise; and the extent to which competitive power is exercised is in part a matter of human attitudes.

We have noted that the task is to modify the institutional structure, powers, and attitudes underlying any unnecessary elements in interest rates. It is now fundamental to note that the particular institutional structure, and the attitudes and powers now underlying such elements in interest rates, are not inherent in our capitalistic economy.

Men interested in economic progress may find their greatest hope in the fact that these attitudes can be changed. The development of widespread sympathy and understanding among capitalists concerning the merits of new and young enterprise and the corresponding development of understanding and bargaining power for such enterprise could result in lower interest rates and greater control over capital for them. Some modification of institutions and powers by government could contribute further toward this end. Understanding and wise development of attitudes and institutions can modify "supply and demand."

To assume that interest rates and the flow of capital cannot be modified is a counsel of despair because it rests on the false assumption that the capitalistic type of economy does not have the flexibility and capacity to overcome temporary trends and developments that threaten its progress. If uneconomic interest rates and limitations on access to capital are not overcome, they may well become cumulative and, in the long run, dangerous to the survival of the capitalistic system.

In addition to the institutional obstacles to more equitable interest rates for new, young, and capital-deficit enterprisers, there is also another sphere of obstacles to the achievement of full potential and

maximum progress under capitalism; namely, those leading to excessive instability and to cyclical breakdown. To a considerable extent, these obstacles also stem from structures and attitudes that affect the flow of capital. Modifications of structures and attitudes pertaining to finance and enterprise must be made with the impact both on growth and on stability in mind. Let us, therefore, consider at this time the relationship of finance to business fluctuations. Then we can discuss directions of thought and action that could contribute both to the forces of dynamic expansion and to the avoidance of excessive fluctuation and breakdown in our economy.

IX. Credit, Money, and Cyclical Breakdown

OTHER than war—which carries its own special seeds of destruction—the most immediate threat to the survival of a free and dynamic capitalism is deep depression. Deep depression not only represents a severe breakdown of the economy and a sharp break in economic progress; it is the soil in which the seeds of despair and discontent with respect to democratic economic processes take root.

It is important, however, to distinguish between the nature of normal business cycles in a competitive capitalistic economy and the nature of economic breakdowns in such an economy. Three things need to be observed. First, that surges of growth followed by some slackening or mild recession are a normal aspect of the growth process under capitalism, while deep depressions such as that following 1929 are neither normal nor necessary, but represent a breakdown in the normal functioning of the economy. Second, that deep depressions are closely associated with unwise credit policies—particularly with excessive fluctuations and contractions in the availability of credit for business enterprise. Third, that the tendency toward abnormal fluctuations and breakdowns is sharply reinforced by instability in the volume of money.

GROWTH AND CYCLES

Let us first develop perspective concerning the general nature of the normal growth process and growth cycles in a capitalist economy. In Part II we saw why we tend to have rapid and dynamic growth under capitalism. Let us now see why such growth tends to come in surges and why such surges would tend normally to be followed by slight recessions or plateaus.

The origin and development of growth surges

Economic progress is basically the result of new ideas which in turn create new economic opportunities. New ideas pertaining to products, markets, techniques, etc., occur continuously, but the truly revolutionary ideas that we think of as innovations and that result in major surges of economic growth and development are much more widely spaced.

Innovation thus requires new ideas; but it requires more. The ideas must become embodied in the economic stream in such a manner as to increase economic effectiveness. It is the enterpriser who thrusts new ideas into the economic stream and translates them into a more effective mechanism for satisfying human wants, and new enterprisers are in the thick of this innovating process.

We need not for the moment debate whether innovations occur at regular intervals in time. Neither need we for the moment debate whether the ultimate origin of new ideas lies in natural phenomena outside the economic system.¹ We need only recognize, and history leaves no doubt, that great new ideas and innovations occur from time to time and that such occurrences tend to be spaced at substantial intervals of time. It is then necessary to recognize that whenever such innovations and economic opportunities occur they tend, under our capitalistic system, to develop rapidly into great surges of growth.

Rapid economic expansion in the economy following innovations is a natural consequence of the freedom of enterprisers to compete. The new ideas that become innovations because they are introduced into the stream of economic activity have the basic characteristic that they open up a wide variety of new economic opportunities. In a competitive economy, with every man free to strive for greater efficiency and profit, new ideas introduced by one enterpriser almost immediately become economic opportunities for many other enterprisers. This process has been designated as one of "clustering":

Whenever a new production function has been set up successfully and the trade beholds the new thing done and its major problems solved, it becomes much easier for other people to do the same thing and even to improve upon it. In fact, they are driven to copying it if they can, and

¹ Both the matter of periodicity and the problem of ultimate origins warrant further study, however.

some people will do so forthwith. It should be observed that it becomes easier not only to do the same thing, but also to do similar things in similar lines—either subsidiary or competitive ones—while certain innovations, such as the steam engine, directly affect a wide variety of industries. This seems to offer perfectly simple and realistic interpretations of two outstanding facts of observation: First, that innovations do not remain isolated events, and are not evenly distributed in time, but that on the contrary they tend to cluster, to come about in bunches, simply because first some, and then most, firms follow in the wake of successful innovation; second, that innovations are not at any time distributed over the whole economic system at random, but tend to concentrate in certain sectors and their surroundings.²

Illustrations of clustering are easy to find. Once the automobile became a part of the American scene it called not only for many to enter the parade of development and of improvement in the automotive line as such, but also for rapidly expanding roads, the gasoline industry, the tire industry, and a myriad of developments in steel, glass, housing, etc. Brief reflection concerning the clustering aftermath of the introduction of the railroad, the automobile, electricity, and modern chemistry points clearly to the conclusion that in a competitive economy, in which men of enterprise have freedom and incentive to act, economic growth is bound to take place in surges. There is, in fact, no way to avoid rapid surges of growth in a free competitive economy once great new ideas have been introduced and new economic opportunities opened up. Only by throttling new ideas, innovations, and new enterprise could surges of growth be prevented.

Credit and surges of growth

While the upsurges in economic growth and effectiveness are sparked by enterprisers of imagination and initiative, the full and rapid development of the new economic opportunity is dependent on the owners of capital who give enterprisers access to capital via credit. It is credit that permits the effective division of labor between enterpriser and capitalist, permits and facilitates innovations and clustering, and thus stimulates economic growth.

It is inconceivable that new ideas could be rapidly and extensively

² Joseph A. Schumpeter, *Business Cycles, A Theoretical, Historical, and Statistical Analysis of the Capitalist Process* (New York: McGraw-Hill Book Co., Inc., 1939), I, 100-1.

embodied in the economic mechanism if entrepreneurial activity were limited entirely to those who own all of the capital necessary for developing new methods, markets, products, and enterprises. On the other hand, it is easy to see that a competitive economy with an accelerating credit mechanism is bound to experience a groundswell of growth whenever a great new sphere of innovation is revealed. Under a well-financed capitalism, there will be great surges of growth as long as men discover great new ideas that can be translated into greater economic effectiveness. The "spinning wheel" groundswell of the eighteenth century, the "railroad" groundswell of the nineteenth century, and the great groundswell of the early 1900's based on electricity, chemistry, and gasoline-powered transportation, are examples of these surges. With air transport coming of age and nuclear power on the threshold, new seeds of rapid economic growth are upon us and may well be the foundation of another great surge of economic growth in our economy.

The rapidity and magnitude of the surges of growth are greatly dependent upon and increased by the financial mechanisms and instrumentalities that facilitate the transfer of control over capital from capitalist to enterpriser. We noted in Chapter VI that, through the corporate mechanism and various loan agencies dealing in saved capital, capitalists are able to provide enterprisers with credit to a far greater extent than would be possible if only direct transfers between capitalist and enterpriser were possible. Such financial intermediaries facilitate greatly the shifting of men and physical resources from old to new uses that is so vital for rapid surges of economic growth.

As also noted in Chapter VI, however, the shifting of men and resources and economic growth are especially accelerated by bank created credit, and this type of credit plays a strong role in facilitating the great surges of economic growth. Regardless of the ultimate origin of growth cycles and regardless of the regularity of their occurrence, the rapidly surging, wave-like growth in the capitalistic economy is heavily conditioned by the nature of our financial processes and is, indeed, accelerated by them.

Normal recessions and plateaus

After a new sphere of opportunities is introduced by way of innovation and the economy experiences an upsurge in economic activity, it

is to be expected that this increase will not continue indefinitely. The normal expectation would be a leveling off near the peak reached under the impetus of the originating innovation.

Because mistakes are sure to be made in the enthusiasm of expansion, some actual decline from the peak of economic activity would be normal unless offset by such things as increasing population. During the upsurge, which is the result of innovation and of increasing opportunity, enterprisers move rapidly into new undertakings. During this period, there is always, and it is to be expected, a considerable volume of error on the part of enterprise. There is always uncertainty in the new, and in the enthusiasm and fierce competition of developing the new there are bound to be some undertakings that would prove to be unprofitable even if there were no severe crash in the total economy later on. As the upsurge continues, and the good new opportunities resulting from the originating innovation are largely exploited, there is a period in which profit prospects, on the basis of immediate past and current profits, seem much better than they really are. At this stage, capital and manpower have already been extensively shifted to the new profit opportunities, but many enterprisers, still intrigued by the apparent profit prospects, continue to expand capital facilities.

It is natural that some such errors will be made in the enthusiasm of expansion, and the correction of these errors, especially those resulting from unwise capital formation, tends to involve some decline below the peak of activity previously reached. It is important to note, however, that such decline would be small and the succeeding plateau would normally be relatively high were there no mechanism to magnify and multiply the forces of decline. As far as the underlying forces of cyclical growth are concerned, there appears to be no reason for large decreases from the peak of production attained. Depression, especially deep depression such as occurred in the 1870's, the 1890's, and the 1930's, is an abnormality in the working of a capitalistic economy.

Professor Schumpeter, after describing at length the usual four phases of business cycles, writes:

We have seen that while recession and—if depression occurs—revival are necessary parts of the cyclical process of economic evolution, depression itself is not. We are able to make it understandable or plausible that from

the business situations which necessarily obtain in recession, depression may easily develop, but in all its essential aspects the cyclical process would be logically complete without it.⁸

In short, economic growth under capitalism should be mainly a series of upward swings followed by plateaus at or near the preceding peak. Each plateau is higher than the preceding one; and the latest plateau is the foundation from which, with further innovation, the next major cycle starts.

CREDIT AND CYCLICAL BREAKDOWN

Severe breakdowns in the economy are closely associated with unwise finance. In a general way major booms and depressions may be viewed as normal growth surges and recessions amplified, especially on the down side, by excessive variations in the supply and use of credit and amplified further by associated variations in the volume of money.

The volatility of credit

As economic opportunities evolve, suppliers provide and enterprisers use an increasing volume of credit. All forms of credit—equity and loan, short-term and long-term, saved and created—expand, but in different proportions. There is also expansion of credit for consumption as well as for production purposes; and, although we emphasize credit for production purposes, credit for consumers must be recognized as part of the larger credit whole that affects economic fluctuations.

The volume of credit tends to become excessive toward the top of growth surges; and this is particularly true of the volume of credit extended under shorter-term and generally more volatile arrangements. Excessive credit permits the volume of capital facilities to run temporarily ahead of economic opportunities at the end of a large growth surge, and many of the enterprisers who rely on credit to construct such facilities, as well as for other purposes, borrow extensively on terms and in forms that do not enable them to hold control over their capital during a period of adjustment. New, young, and capital-deficit enterprisers are particularly subject to quick-with-

⁸ Schumpeter, *op. cit.*, p. 150.

drawal terms in loan credit arrangements and can obtain little credit on an equity basis. The problem is thus not so much the large volume of credit as the fact that it is extended on volatile terms. As a result we find rapid contraction of credit and often failure for many enterprisers whose business is basically sound. With the embodiment of quick-withdrawal terms in a significant share of the loans made to enterprise during the period of expansion, there is needed only a spark of fear to set off a credit contraction that loosens the foundations of the normal high-level plateau of economic activity following the boom. If capital formation were financed through less volatile arrangements, and if credit once expanded were not subject to rapid contractions, even considerable excesses in capital formation could be carried without major distress and failure by enterprisers until new economic opportunities came to the rescue. With both expanded volume and volatile arrangements, not only for business capital formation but more generally, a normal adjustment period moves swiftly toward a period of depression as quick-withdrawal powers are exercised.

Two characteristics of loan credit arrangements contribute greatly to the volatility of credit: (1) nonrenewal, and (2) rigid requirements pertaining to payment of interest and repayment of principal. The right of nonrenewal is, of course, inherent in loan finance. Its importance becomes greater as the period of loans decreases, however; and whenever short-term loans become a relatively high proportion of total credit outstanding, the right of nonrenewal is a considerable threat to the steady flow of credit and thus to the stable functioning of the economy.

Unfortunately, many longer-term loans have a short-term character through the embodiment of rigid installment arrangements for repayment. The provision that the whole principal is due if a payment on principal or interest is missed is standard in land contracts and mortgage finance. The prevalence of this provision in the modern credit structure has increased with the development of "term loans." A loan that requires periodic payment on principal and that carries the right to call the whole principal if a payment on either principal or interest is missed is unfavorable to the stability and survival of enterprise.

The term loan has often been hailed as a liberal extension of credit on a longer-term basis. This is not without foundation, but the degree of liberalization can easily be overstated. It is true that under a five-

year term loan the lender cannot, if the borrower makes his payments, fail to renew after one month, three months, or a year, depending on the installment period, as would be possible if credit were extended on a one-month, three-month, or one-year basis. However, it is possible, under a longer-term installment loan, to shut off credit very quickly at the first signs of stress. If term loans are used to finance relatively permanent capital, they may actually have increased the volatility of the business credit structure.

Created bank credit adds considerably to the volatility of the credit structure. Because credit can be created in an amount equal to several times its underlying capital base, the creation of credit tends toward a larger total volume of credit in periods of expansion than would result if such creation of credit were not possible. This created portion of the credit supply tends to shrink rapidly when signs of leveling off appear. In addition, since commercial bank credit tends to be of a shorter-term and relatively liquid character, credit creation tends to increase the volatility of the now larger total volume of credit. Thus, although bank-created credit is a vital accelerator of growth, excessive reliance on such credit makes the total credit structure, and through this the economy, peculiarly subject to excessive fluctuations and contractions.

To a considerable extent the credit structure faced by enterprisers takes on a volatile character because of centralized power over the supply of credit. With a large share of all capital in the hands of a relatively small number of individuals and financial institutions, there tend to be simultaneous shifts among suppliers in attitudes toward the granting of credit; and this results in sudden generalized shifts in the availability of credit for enterprise. With signs of leveling off following the upswing of the growth cycle, such a shift in attitude can result in sudden, widespread, and substantial contraction of credit.

The problem of volatile arrangements is not exclusively attributable to the suppliers of credit. Enterprisers agree to these terms without duress. In a sense, we may even think of suppliers merely reacting to the demand pressure of enthusiastic enterprisers. But bargaining power tells in making credit arrangements. New and young enterprisers, and all who have large need and desire for capital beyond their own, must often agree to volatile terms as well as to high rates if they are to obtain the credit they desire. At critical times even

large and established firms find their usual sources of credit sharply restricted.

Regardless of the specific factors involved, it should be evident that the volume of such volatile credit tends to increase once periods of prosperity are well under way; and this sets the stage for precipitous contraction and economic breakdown. When a large share of the economy's credit outstanding is characterized by the power of non-renewal or quick withdrawal, such power tends to be exercised whenever signs of leveling off and fears of significant decline occur. This starts a spiral toward depression when only slight recession or a plateau would be in order.

Fear and the assumption of breakdown

There is perhaps no single attitude or practice that contributes more to economic breakdown than that of extending credit on the assumption that such breakdown is likely. The fear of depression is persistent even though it is hidden by expressions of optimism during good times, and this has much to do with the tendency to embody quick-withdrawal terms in loan contracts. This fear appears also to bear on the tendency to exercise such powers when signs of leveling off appear and on the tendency to tighten the availability of credit generally at such times.

Some of the pressure for liquidity by owners and financial institutions may, to be sure, be to permit them to withdraw and to transfer to better economic opportunities. To a large extent, however, the factor that seems to underlie the emphasis on terms and forms that give suppliers power to lessen the flow of credit rapidly when signs of leveling off appear, and that causes this power to be exercised, is an assumption that extensive economic decline from high levels is a normal expectation.

The extension of credit on short terms or on longer but rigid repayment terms and in an atmosphere of doubt concerning the future tends toward sudden tightening of credit as soon as signs of readjustment and possible decline appear. With some chance of failure and loss, loans are so made that the loss can be quickly shifted to the borrower; and there is a scampering to do this. As the exercise of this power of sudden withdrawal and nonrenewal becomes widespread, many new enterprisers who might offset the effect of losses resulting

from really unwise undertakings are shut out. In addition, many established enterprisers, fearing a general decline, voluntarily refrain from borrowing. Thus, fear of economic breakdown tends to bring about the very breakdown feared.

Such fear stems heavily from lack of understanding of the normal cyclical growth process which we have briefly described. If owners of capital and financial institutions come to recognize that recessions following growth surges are normal, need not degenerate into depression, and to a considerable extent are caused to degenerate into depression by the embodiment and exercise of quick-withdrawal terms and policies, such suppliers may become willing to commit capital on more stabilized loan terms and in equity forms. Such a shift could remove a strong source of deep depression.

Regaining perspective

Much has been said concerning excessive credit in relation to booms and depressions. A large volume of credit is not necessarily a serious difficulty, however. It could be simply a sign of effective transfer of control over capital to enterprisers. A high volume of credit, if extended under stabilized recall and flexible payment terms, might be conducive to dynamic growth and would not necessarily be a threat to stability.

Generally speaking, a healthy economy must be a high-credit economy. A high volume of credit is needed to enable all capable men of enterprise fully to develop potential economic opportunities. But such a volume of credit must be extended on bases that enable capable men of enterprise to anticipate a profit and that enable them to hold control over capital during temporary reverses and periods of stress.

It is doubtful that the volume of credit for business enterprise would ever become high enough to do serious harm if credit arrangements were largely of a long-term or equity nature and if they were of a nature that did not permit the flow of credit to be decreased suddenly and sharply. It is when the volume of credit becomes high and is also characterized by a high degree of volatility that the stage is set for sudden contraction. It is the excessive extension of volatile credit and the precipitous decline in the volume of credit resulting from volatile credit arrangements that is a prime source of economic breakdown.

Finally, it must be noted that volatile credit arrangements and rapid contraction of credit build on top of relatively high interest rates for new and young enterprisers and for capital-deficit enterprisers generally in bringing about abnormal breakdown when only normal recessions are in order. Relatively high rates for such enterprisers pair with quick-withdrawal credit arrangements in developing a vulnerability to breakdown in the economy as a whole. Any large rise in the general level of interest rates relative to profit opportunities would greatly increase this vulnerability.

Many new and young firms that obtain financing at rates that are high and on volatile terms can carry through as long as the general outlook is favorable; and many failures resulting from such rates and terms in good times are offset by other new starters. The weaknesses of enterprisers who finance at high rates come to light when the surge of new opportunities temporarily slackens and when suppliers of capital, directly or through action of the centralized credit authorities, tighten the flow of credit. At these times such enterprisers are vulnerable to failure or are forced to contract production and employment. By such failure and forced contraction is the breakdown in the economy more generally touched off.

MONEY AND CYCLICAL BREAKDOWN

We have observed that the tendency toward excessive decline in economic activity following periods of expansion is fundamentally associated with excessive variations and especially contractions in the supply schedule of credit, and we have indicated that bank-created credit plays a strong part in bringing about such variations and contractions. We must now note that this tendency toward depression when only a recession is in order is sharply reinforced by excessive variations and particularly contractions in the volume of money, and that such variations in the volume of money are closely associated with variations in the volume of created credit.

Not only is it true, as noted in Chapter VI, that money is created as our commercial banking system creates credit, but it is also true that the volume of money in our economy is basically dependent on the volume of bank credit. Bank deposits resulting from bank credit constitute the major share of the nation's money supply.

Both bank deposits and the total money supply (bank deposits plus

currency outside banks) have increased with growth in the economy over time, but there have been large variations around this movement. Bank deposits moved from \$7.5 billion in 1900 to \$52 billion in 1929, fell to \$37 billion in 1933, and rose to \$177 billion in 1954. The total money supply moved from \$9 billion in 1900 to \$55 billion in 1929, fell to \$42 billion in 1933, and rose to \$204 billion in 1954.⁴ Such extensive variations in the volume of money, stemming largely from extensive variations in credit creation, amplify substantially the breakdown pressures that stem originally from variations and contractions in the total volume of credit.

It is now important to recognize that, even though money is created when credit is created by our banking system, the money impacts on the economy are quite different from the credit impacts. Functionally, credit serves to transfer temporary control over capital (or, more broadly, wealth) from those who wish currently to use less than they own to those who wish to use more. Money serves as a medium for transactions that involve no credit as well as for transactions that do involve credit; and credit transactions can be achieved without the use of money. The total volume of credit, of which created credit is a part, is much larger than the total volume of money; hence any change in the volume of bank deposits that represent both credit and money results in a much larger *relative* change in the volume of money than in the total volume of credit.

When the banking system creates credit, it does two things that bear on economic activity and on economic fluctuations. By increasing the amount of capital over which control is transferred to enterprise, it tends toward economic expansion. By increasing the supply of money, it tends to increase the price level, unless this tendency is offset by increasing production. If, on the other hand, the volume of created credit decreases while other things remain unchanged, the credit result is to lessen the capital available to enterprisers and thus to reduce economic activity; and the money result is to lower prices.⁵

⁴ Data on bank deposits and on bank deposits plus currency outside banks for the period 1900 through 1945 appear in *Historical Statistics of the United States*, 1789-1945, Series N 172 and N 174, pp. 276-77; for 1946-51, in *Statistical Abstract of the United States*, 1952, Table 437, p. 387; and for 1952-54, in *Statistical Abstract of the United States*, 1955, Table 485, p. 428. Data are as of June 30.

⁵ It may be noted, incidentally, that the impact of credit creation on interest rates is basically via the credit impact and not via the money impact.

Unless the differences in the functions and impacts of credit creation and money creation are understood and kept in mind, it is difficult to distinguish the credit pressure from the money pressure toward economic breakdown. Unless these pressures are distinguished, policies designed to stem them are likely to be unsound and unsuccessful.

Variations in the volume of money tend toward instability and breakdown in the economy through resulting variations in the general level of prices. Large changes in the supply of money tend to change the general level of prices in the same direction though not necessarily in the same degree. If the volume of money rises rapidly, relative to production, there is a tendency toward price inflation. If the volume of money falls considerably, relative to the volume of production, there is a tendency toward price deflation. These tendencies hold in general even though they are somewhat modified by changes in the velocity of circulation.

The tendency toward price inflation as the volume of money expands with bank credit is ordinarily quite limited. It has been strong only in war-related periods. In contrast, the tendency toward price deflation is very strong when there occurs a rapid contraction in the money supply along with a contraction in bank credit.

The tendency toward inflation through the expansion of the money supply associated with an increase in bank credit is limited for two reasons. First, the continuous expansion of a growing economy tends to absorb relatively large increases in the volume of money without significant price increases. Second, credit creation for business purposes, while increasing the supply of money, tends also to increase the level of capital formation and production; and this additional economic activity tends to absorb a relatively large credit-induced increase in the supply of money without any large price increase.

There is a strong tendency toward price deflation when signs of leveling off appear. In part, this tendency is strong because the volume of money is closely dependent on the volume of created credit; and such credit, we have already seen, tends to contract rapidly toward its small saved-capital base at such times. In part, the tendency toward price deflation tends to be strong because the volume of money tends to contract while the economy is still expanding. The contraction of created credit gets under way while the volume of economic activity is still at the relatively high level at which it would

tend to remain if credit contraction generally did not occur. The contraction of created credit, accompanied by a similarly rapid decrease in the money supply, results in sharp downpressure on prices in the early part of what normally should be an economic plateau.

The original drop in prices sets in motion a downspiral of prices that amplifies considerably the pressure toward depression arising originally from the contraction of credit. As prices start falling they put a squeeze on enterprisers who have embodied capital in enterprise at the higher price level reached in the boom and with the expectation of continued high product prices in the future. In addition, the fall in prices paints an artificially pessimistic picture of long-range economic opportunities. Thus, contraction in the supply of money, stemming heavily from contractions in the volume of bank-created credit and operating on prices, reinforces the tendency of economic activity to fall far below the normal plateau level.

The credit effect of bank credit contraction impinges especially and directly on capital-deficit enterprisers, but the associated price effect, working on the general price level, impinges unfavorably on enterprisers generally.

It is important to recognize the close mechanical interplay of credit creation and the creation of money in our economy and to recognize that variations in the volume of money tend to reinforce and compound the pressure of excessive variations and contractions in credit toward somewhat excessive expansion and toward disastrously excessive contraction in economic activity. The fact that both credit and money are increased when the banking system creates credit, and that both credit and money are decreased when the volume of credit created by the banking system decreases, goes far to explain why credit creation plays such a powerful role in influencing the swings of economic activity in the economy. Contraction in created credit, accompanied by contraction of credit generally, would exert a strong downpressure even if the volume of money and the level of prices were not influenced thereby. By also influencing the volume of money and prices in the same direction, contractions in the volume of created credit can, if large, generate severe downspirals in economic activity.

Money needs and the money mechanism

Fundamentally, the achievement of maximum growth without breakdown in our capitalistic economy requires a money supply that

results in a relatively stable price level. There cannot be rapid changes in the value of the chips we use as money while the economic game is in progress without introducing serious inequities, uncertainties, and instabilities. The achievement of such a price level requires a supply of money that increases continuously in harmony with the potential growth trend in the economy, but which varies in its rate of increase in a manner that approximates the deviations from growth trends resulting from the growth cycles and plateaus that are normal in a dynamic capitalistic economy.

The natural forces of our economy press continuously toward expansion, though they do not move at the same rate at all times. Population expands continuously, although not always at the same rate. The dynamic, efficiency-increasing growth factors of our economy move toward a continuously increasing product per person, though not always at the same rate. We have seen also that the normal forces in a capitalistic economy move, not toward a sharp decline in efficiency-increasing economic activity following surges of rapid development, but toward a plateau. In short, in a normally functioning capitalistic economy, characterized by an increasing population, economic activity would tend to expand continuously; and, although the needed increase in the volume of money may be small in plateau periods, there is need for some increase in all periods.

There are times, as at the top of peacetime booms and especially during war-related booms, when the volume of money increases excessively relative to the basic growth of the economy. Once such excesses have occurred there might not be need for an increase in the money supply during the immediately succeeding period. If such excesses were avoided, however, there would be a need for some increase during all periods. An actual decline in the volume of money would never be consistent with the needs of a growing economy unless the money supply had risen to serious excess in a previous period. Any failure of the volume of money to increase with basic growth in the economy tends toward a dampening fall in the general price level, and actual decline in the volume of money in a growing economy tends toward precipitous declines in price levels and toward depression.

Many recognize that a continuously increasing supply of money is important for growth, although there are some differences of opinion concerning the desirable degree of increase and concerning whether

the rate of increase should be quite regular or should vary substantially over time. Leading thinkers in this sphere hold in general that the supply of money should increase along with such basic factors as population and the increase in product per capita, with possibly some allowance for various secondary factors.⁶ We have seen, however, that the volume of money not only does not increase continuously but actually decreases at times; and there is need to understand why. Such understanding is necessary if money policies and mechanisms are to be developed which result in a volume of money that is consistent with stabilized growth.

The money mechanism

In an important sense, the tendency of our money supplies to fluctuate at times above and at times below economic needs and thus to contribute to booms and depressions must be attributed to the nature of our money-providing mechanism. It is difficult, under a money system in which the supply of money is closely dependent upon bank credit creation, for the government to control the growth of and variation in the money supply in such a manner as to maintain a relatively stable price level in a growing economy.

The creation of credit by our banking system is subject to influences and objectives that differ considerably from those which would be involved in achieving an optimum supply of money and a relatively stable price level. In creating credit the objective of individual bankers is primarily that of facilitating the flow of capital to its best uses. Their primary objective is not (and we do not imply that it should be) to provide a volume of money that varies in such a manner as to result in a relatively stable price level in a growing economy. In the provision of money, however, the achievement of such a price level must be a primary objective, and this is basically a responsibility of government in our economy.

To a considerable extent the government, through various regulations and devices, can guide both the creation of credit by the banking system and the volume of money. The government's control over

⁶ See, for example, Clark Warburton, "How Much Variation in the Quantity of Money is Needed?" *The Southern Economic Journal*, April 1952, pp. 495-509; Raymond J. Saulnier, *Contemporary Monetary Theory* (New York: Columbia University Press, 1938); and John Philip Wernette, *Financing Full Employment* (Cambridge: Harvard University Press, 1945).

credit creation is, however (and we believe should be), relatively distant. In general, the federal government has power to limit the volume of created credit and by limiting such credit can keep the volume of money from becoming excessive during upsurges. During a downswing, however, the story is different. Once a move toward contraction of credit by private suppliers and toward lessened use by enterprisers is substantially under way, the government has little power under the present system to keep the volume of bank credit for private purposes and the associated volume of money from contracting sharply and extensively.

In short, the supply of money under present mechanisms and policies is substantially at the mercy of the objectives and the fears that bring about fluctuations and contractions in the provision and creation of private credit in our economy. The subjection of the money supply to private credit objectives, attitudes, and policies goes far to explain why it is difficult for the government under our money mechanism to bring about a supply of money that increases with needs and that does not contract precipitously from time to time.

Wise credit policies on the part of credit and monetary authorities can limit the undesirable variations in the volume of money and in prices. Even with wise policies on the part of such authorities the mechanism leaves the volume of money subject to private credit (non-monetary) objectives and influences beyond the government's control. Partly because great ingenuity is required to run it wisely and partly because it is considerably subject to nonmonetary objectives, even if run with a high degree of wisdom, our money mechanism, with its close dependence on our credit-creating mechanism, must be viewed as a contributory source of instability and breakdown in our economy.

Excessive variations in the volume of money and related variations in prices are not inevitable in a capitalistic economy, and in Part IV we shall consider possibilities for avoiding such variations. It should be evident, however, that there is room for thought pertaining to policies and mechanisms that would enable the government to guide the money supply in accordance with growth needs.

WAR EXPANSIONS, FINANCE, AND POSTWAR BREAKDOWN

In developing perspective concerning normal growth cycles and the financial factors that make for cyclical breakdown, we have said little

concerning war and the expansions and contractions associated with war. The expansion and breakdown factors associated with war and postwar activities differ somewhat from those associated with peacetime activities, and it may be well here to give brief attention to the former.

War tends toward surges of economic activity which superficially resemble those associated with innovation and new economic development. War results in increased economic activity which is profitable to enterprise and which involves extensive capital formation and employment. However, by contrast with normal economic development, such increased activity does not emanate from new economic ideas and it cannot be viewed as a foundation of sustained economic growth.

During war periods and to some extent during active defense periods, there is a strong market for war-type goods and services and there tends to be a rapid expansion of war-related production facilities extensively supported by credit. Immediately following active war activity there tends to be, and it is logical to expect, a temporary slump. A considerable share of the production facilities developed during the war period is relatively useless for peacetime purposes and the special governmental demand for goods and services disappears. During war periods there is, however, a necessity for postponement of normal capital formation and of the production of consumers' durables for peacetime purposes. There tends, therefore, to be a strong market for these capital facilities and consumers' durables for a considerable period after war activities cease and the temporary transition period is negotiated. This market may form the basis for a significant expansion. If the catching-up process happens to coincide with new development, an unusually strong upsurge can result. Once the postwar upsurge of either a lesser or greater magnitude has absorbed its original impetus the normal expectation, in the absence of excessive variations in credit, money, and prices, would be some slight decline followed by a normal plateau.

War tends, of course, toward the using-up or destruction of large volumes of basic resources and this can reduce greatly the long-run growth and production potential of an economy. War could lead to such severe destruction as to result in immediate postwar chaos. Fortunately, the wars experienced by the United States have not had such results. In the absence of great destruction, war activities need not be

followed by severe economic breakdown, either immediate or delayed, even though the average future product of the economy may have been impaired.

Unfortunately, the financial breakdown factors appear to have had considerable influence during periods of war and active defense. War-related expansion has been extensively financed by credit creation. During war periods the volume of government borrowing has been large and of a character that resulted in large increases in the volume of bank-created credit. In addition, such credit has played a large role in the financing of private business expansion. The extensive government borrowing is especially inflationary because, being largely of a consumption character, it does not (as we have noted that much private borrowing does) put a base under itself via increasing capital formation and production. The result has been excesses in the volume of money and inflationary price levels during periods of war and post-war reconstruction.

We noted earlier that the tendency toward inflation, as the result of the monetary expansion associated with credit creation for normal economic development, tends to be limited. Under the abnormal conditions associated with credit creation and monetary expansion to finance war and defense activities, however, there have been periods of considerable inflation. The United States experienced a high degree of inflation during the war and postwar periods 1813-15, 1864-66, 1917-20, and 1947 to the present time. The wholesale price level, relative to 1926 as 100, rose to over 160 in 1864-65 and in 1920, and reached an all-time peak of over 180 in 1951. The general price level did not increase extensively until after World War II. This was partly because of direct price controls, although it is interesting to note that inflations following previous wars did not reach their peaks until toward the end or after the end of hostilities.

Through the financing of war-related activities, high levels of created credit are built up, the volume of money is expanded, and prices are pushed up. In consequence, the economy becomes especially vulnerable to quick-withdrawal credit attitudes and policies and to rapid contraction of the credit supply. During the catching-up period and as long as the outlook appears favorable private suppliers do not tend to tighten the supply of credit greatly. If quick-withdrawal powers are exercised as the postwar expansion levels off, however, a severe

breakdown is almost inevitable. At such a time, significant contraction of credit itself exerts strong downpressure. With the money supply closely tied to created credit, the volume of money and the level of prices join credit contraction, in a manner now familiar, to project the economy toward deep depression.

The point was made earlier that the volume of money is caused to move out of harmony with that needed to maintain a relatively stable price level because, under our credit-money mechanism, the volume of money is subject to nonmonetary influences and objectives. The objective of private suppliers in providing credit is not that of adjusting the volume of money to a necessary level for such stabilization. We may now note that the volume of money is caused to move out of such harmony also because the primary objectives of the government in borrowing differ from those of maintaining a relatively stable price level. As a result of governmental borrowing in war and defense, both the volume of credit creation and the volume of money are substantially increased; and in borrowing for war and defense the government's objectives are overwhelmingly fiscal.

Breakdown is not inevitable following war periods and postwar expansion. Even with extensive creation of credit and of money during war-related periods, delayed depression need not follow if excessive contraction in credit generally and in the volume of money can be avoided. Such contraction is not inevitable.

It is important to recognize that a large share of the credit created by the banking system and of the associated increase in the volume of money during and following World War II was the result of governmental borrowing. The large holding of this government debt by the banking system keeps the impact of private credit decisions on the volume of money at this time far below that which it would be if all of the currently large volume of created credit were the result of private borrowing. This large debt to the banking system makes the money supply especially subject to fiscal objectives and to the decisions of governmental fiscal authorities. However, keeping in mind the impact of its fiscal policies on the volume of money, the government can avoid severe contraction of that part of the money supply that stems from its debt to the banking system.

Although the government can with wise policies avoid excessive monetary contraction and thus control a force that might otherwise

make for delayed postwar breakdown, there are some "money" problems associated with its large debt to the banking system. The money supply became large as a result of war-related fiscal objectives. In the postwar period fiscal procedures become subject to the need for maintaining a stabilized volume of money.

While there is a tendency toward excesses of credit and money creation during war-related periods, extensively "forced" by governmental borrowing, government has the power (with some sacrifices) to avoid sudden contraction of its debt to the banks and thus to mitigate the tendency toward over-all contractions in created credit, in the volume of money, and in prices. Thus there are special possibilities for limiting the tendency toward extensive contraction of created credit and of money that would normally follow extensive war-related expansions. The fact remains that inflationary financing of war by government leaves a residue of problems; and tendencies toward excessive contraction of credit by private suppliers when postwar expansions level off continue to exist. Hence, there is room for thought and policy that would lessen the tendency toward war-related inflations and delayed postwar breakdowns. In Part IV we shall make suggestions for achieving this objective.

SUMMARY

Surges of growth followed by slight recessions and plateaus are normal under capitalism, but cyclical breakdown or deep depression is abnormal and unnecessary.

Surges of growth stem fundamentally from the creation of new economic opportunities and from participation by enterprisers in their development; and credit, including created credit, plays an important role in making rapid economic development and growth surges possible.

Severe breakdowns, in contrast to normal recessions and plateaus, stem basically from difficulties which enterprisers face in obtaining and holding control over capital. Deep depressions stem strongly from the withdrawal of credit from enterprisers after such enterprisers have had ample and at times excessive credit available for expansion. This sharp contraction is the critical source of the spiral toward deep depression. It is the element without which precipitous breakdown would not occur in our economy.

Relatively high interest rates for capital-deficit enterprisers, especially for new and young enterprisers, establish some background of vulnerability to breakdown forces. Some excesses in credit expansion help lay a foundation for credit contraction. Even so, the quick-withdrawal attitudes and arrangements in providing credit and the quick withdrawal of credit when signs of leveling off appear are the factors that set off and propel the spiral of failure and contraction in enterprise that results in deep depression. Unless the supply of credit can be stabilized it is doubtful whether there are any measures consistent with democratic capitalism that can prevent abnormal breakdown from time to time.

The tendency toward excessive decline and deep depression is reinforced by fluctuations and contractions in the volume of money. Since the volume of money in our economy is extensively determined by the extent of credit creation, fluctuations in the volume of created credit result in fluctuations in the volume of money. These latter, working on prices, join with swings in created credit and credit generally to form a cumulative drive toward some excesses of expansion in the upswing and toward severe and abnormal contraction of economic activity on the downswing. Because our money supply is so closely dependent on the creation of credit and tends, therefore, to move with variations in credit creation rather than in a manner conducive to a stable price level, our money mechanism contributes, though not inevitably, to economic breakdown.

War activities and their finance lay the basis for expansions that superficially resemble those powered by innovation and associated new economic opportunities. After a period of transition, war activities tend to be followed by a catching-up period of expansion. War-related activities tend, however, to be extensively financed by created credit for both public and private purposes, and war expansions have tended to be accompanied by a high degree of inflation. Thus, war-related expansions have tended to develop a special vulnerability to credit contraction, monetary contraction, and economic breakdown once the postwar expansion period has leveled off.

Although the government, through the financing of its war activities, has contributed considerably to excessive expansions of bank credit and money, it can also help to stave off severe contraction of that portion of created credit and of the money supply that stems from its

war-financing activities. Thus, not even war and postwar booms need necessarily be followed by deep depressions in our economy, although there are special problems involved in avoiding delayed postwar breakdowns, especially for governmental finance.

Basically, neither the credit practices and policies that lead the economy toward periodic breakdown nor the money mechanisms and policies that amplify the credit pressure in this direction are inherent in our capitalistic economy. If perspective can be developed concerning the nature of the normal cyclical growth process in our economy and concerning the importance of providing credit for enterprise on a stabilized basis as well as at modest rates, the basic credit sources of abnormal breakdown can be overcome. The close tie-up of money creation with credit creation is fundamentally a matter of convenient mechanics. A clarification of objectives pertaining to credit and money, respectively, and a close alignment of public policy and action pertaining to credit, money, and governmental finance in peace and war could do much to overcome the monetary difficulties that contribute to economic breakdown.

Perspective concerning growth and cycles under democratic capitalism has developed considerably in recent years, and significant steps already have been taken to prevent mild recessions from degenerating into depressions. Such built-in stabilizers as unemployment insurance, public and private old-age pensions, and the progressive income tax are significant examples. We must not, however, assume that all steps necessary to avoid another depression have been taken. Critical instabilities of credit supplies and of money supplies are still with us. It is important to recognize that depressions can be avoided in our economy and to recognize at the same time that further steps are necessary if depressions are actually to be avoided. In Par IV we shall, without attempting to be exhaustive, indicate some steps that we believe would lessen the tendencies toward abnormal breakdown in our economy.

Part IV. Implications and Suggestions for Policy

X. Reflections and Perspective

REFLECTIONS

WE HAVE noted in Part I that men the world over face a tremendous challenge to their production ingenuities in the years ahead in the form of a rapidly increasing population coupled with a similarly increasing desire for higher living standards. This challenge urges upon men everywhere the objective not only of full employment but of increasingly effective employment and production—the objective of achieving a rapidly increasing aggregate product for mankind. We noted further that the nature of the economic organization under which men operate has a significant bearing on their capacity to achieve this objective and to meet this challenge. We then expressed our belief that, in principle, a democratic capitalistic system offers man an outstanding vehicle for moving toward these ends.

In Part II we discussed the nature of a democratic capitalistic system and considered the key factors that make for rapidly increasing effectiveness and growth. We found its effectiveness and growth power to stem first from its freedoms. The freedom of individuals, production groups, and consumers—inherent in the democratic nature of capitalism—contributes to growth and effectiveness in addition to being an end in itself. Given such freedom, we found the effectiveness of a capitalistic economy to stem focally from a unique reliance on individuals we call enterprisers to initiate and lead in production and a unique reliance on men we call capitalists to serve as private governors of the nation's capital. Via credit (broadly viewed), men of capital can allocate the nation's capital among enterprisers in close relationship to their talents for enterprise and quite out of proportion to the amount of capital that such enterprisers may personally own.

These delegations of function between capitalist and enterpriser,

and the credit process by which control over capital is transferred from capitalist to enterpriser, give to democratic capitalism its outstanding effectiveness and growth power. If maximum growth is to be achieved, it is necessary that the prospective return for enterprise (profit) be high and that enterprisers, including new and young enterprisers, have ready access to existing capital at modest interest rates and on terms that enable them to retain control over capital under stress. A large volume of successful new and young enterprisers appears to be a vital necessity for permanently dynamic development in a capitalistic economy; hence, it is particularly important that such enterprisers have ready access to capital at profit-promising rates and at all times.

Although our capitalistic economy is characterized by strong underlying powers of growth, there have developed attitudes, institutions, and policies, not inherent in capitalism, that are tending to limit somewhat the rate of growth and that have contributed to periods of retardation and severe breakdown in employment and production. In Part III we attempted to develop perspective concerning what appear to be the critical sources of retardation and breakdown in our United States economy.

We found that both retardation and major cyclical breakdown or deep depression stem heavily from persistent difficulties associated with the transfer of control over capital from capitalist to enterpriser—difficulties in precisely the sphere from which our type of economy normally receives its power. Fortunately, the drive toward growth from this sphere is inherent in the system whereas the difficulties are not.

Although the average level of interest rates remains relatively low, we found that a wide range of capital-deficit enterprisers, including most of the vital new and young enterprisers, are facing gross interest rates, relative to the degree of control they acquire, that are far above the rates faced by large and established firms. The relatively higher rates, the associated limited access to capital, and the instability of control over capital faced by capital-deficit enterprisers limit entry, expansion, and success among such enterprisers; and this places a persistent obstacle in the way of permanently dynamic development and growth in our economy.

We found that booms and major breakdowns, in contrast to surges and plateaus of growth, are abnormal under capitalism and that they

stem strongly from difficulties which enterprisers face in obtaining and retaining control over capital. They stem particularly from sharp contractions in credit following somewhat excessive credit expansion during periods of growth. Bank-created credit, though viewed as a prime accelerator of progress, was also found to contribute considerably to instability of the credit structure as a whole and thus to cyclical instability.

We found that the tendency for normal growth surges and plateaus to be replaced by booms and depressions in our economy, while stemming originally from the sphere of credit, is sharply reinforced by associated variations in the volume of money. The volume of money in our economy is closely dependent on the volume of credit created by our commercial banking system. Excessive variations and contractions in the supply of such credit tend to result in some excesses in money supplies, especially during wartime booms, and in severe contractions of the money supply following periods of expansion. Working on price levels, these variations in the volume of money reinforce the breakdown pressures that originate in the instability of credit.

During war-related periods governmental financing of war and defense activities, especially via commercial bank borrowing, has contributed to excesses of credit and money and to inflation. This establishes special vulnerability to postwar deflation and poses special problems of fiscal policy for avoiding delayed postwar breakdown. In general, however, government can contribute significantly to stability and progress in the economy as a whole through wise economic and fiscal policy at the same time that it serves its prime function of providing a freedom framework for private economic activity.

STRATEGIC SPHERES FOR POLICY

Our interpretation and reflections thereon lead to two basic conclusions: first, our United States economy has tremendous potentials for providing a permanently increasing level of living for the nation's people; second, in order to obtain the full advantage of this high potential, it is necessary to overcome certain existing but surmountable forces that place a drag on the dynamicity of growth and on certain existing but surmountable forces that lead to abnormal cyclical fluctuations and breakdowns.

Our primary purpose in undertaking the writing of this book was to contribute to the achievement of ever-greater effectiveness in our capitalistic economy by attempting to increase general understanding of these potentials and forces. This has been the aim of Parts I through III; and perhaps the major share of what this writer can contribute at this time is contained in these three parts. It may now be helpful, however, to note certain spheres in which our interpretation implies that changes in policy are particularly urgent and in which changes might be particularly helpful, and then to suggest some general directions and some specific steps for moving forward within these strategic spheres.

There are three spheres, one major and two minor, that are especially worthy of emphasis. The major focus of policy for overcoming both underlying retardations and precipitous breakdowns in our United States economy may well be on the development of attitudes, policies, and institutional structures affecting the transfer of control over capital from private owners and financial institutions to men of enterprise. Within this sphere there is a basic need, while we strive to keep the interest-profit ratio generally low, to lessen the differentially high gross costs of credit faced by a wide range of capital-deficit enterprisers, including especially prospective, new, and young enterprisers in our economy. Still within the capital-enterprise sphere, there is also a strong need for lessening the quick-withdrawal character of credit arrangements, for avoiding the excessive expansions of volatile credit, and especially for avoiding severe contractions of credit as signs of leveling off and fears of breakdown occur.

The development of attitudes, policies, and institutional alignments, both private and public, that would facilitate a ready flow of capital to all capable enterprisers, at modest rates, at all times, and without threat of sudden withdrawal as signs of leveling off and fears of breakdown occur, offers an outstanding possibility for moving toward permanently dynamic growth without breakdown in our economy.

A second important sphere for emphasis is that pertaining to the governmental function of providing the economy with money. Consideration may well be given to the development of monetary policies and mechanisms that would make the volume of money less subject to nonmonetary objectives, that would result in stabilized expansion

of the money supply in harmony with the needs of a cyclically growing economy, and that would tend toward a relatively stable price level. Such policies would tend to prevent monetary reinforcement of tendencies to cyclical breakdown originating with fluctuations and contractions in credit.

Our analysis also implies a need for some development of policies in a third sphere; namely, that of governmental economic and fiscal policies. Some modification of thought and policy is necessary in this sphere in order to achieve governmental economic and fiscal policies that are co-ordinated with governmental monetary and credit policies, that play an integral part in achieving economic growth without breakdown in the economy as a whole, and that, nevertheless, avoid encroachment on the basic initiative and freedom of private action which are vital to dynamic and permanent progress under capitalism.

In the chapters that follow we shall make a few suggestions for moving forward within these strategic spheres. We do not propose an exhaustive program. Our basic purpose is to stimulate thinking concerning the desirability of changes in attitudes, institutions, and policies in the strategic spheres, although we believe that the changes we shall suggest are worthy of careful consideration. Suggestions of certain specific developments and modifications can serve, by illustration, to increase perspective and understanding concerning possibilities for movement in desirable general directions as well as to stimulate positive thought toward better approaches. For exhaustive and detailed development of precise mechanisms, methods, and policies we must look to the best thought of many educators, economists, and statesmen.

After making suggestions for changes in thought and policy in the spheres we consider strategic, we shall, in a final chapter, look briefly at related spheres and at focal necessities and prospects for progress under capitalism.

XI. Policy for Credit and Enterprise

IN THIS chapter we discuss a number of movements which we believe would contribute both to full dynamism and to stabilization of economic growth. These are (1) increasing the size and strength of new and young enterprise, (2) rechanneling capital to new and young enterprise, (3) stabilizing commercial bank credit, (4) developing understanding and attitudes conducive to dynamic and stabilized growth, and (5) modifying governmental policies pertaining to new enterprise and credit.

INCREASING THE SIZE AND STRENGTH OF NEW AND YOUNG ENTERPRISE

We have emphasized the importance of new enterprise for dynamic growth in our economy, but we have distinguished sharply between newness and smallness. New enterprise can contribute markedly to growth, but only if it is organized and conducted on a scale that is sufficient to permit efficiency under good management. Much new and young enterprise is, as we have seen, simply too small to be efficient.

We have noted that the relatively high costs, limited access, and quick-withdrawal arrangements which new and young enterprisers face result in considerable part from the smallness and scatter of new and young enterprise in contrast to the bigness and concentration of suppliers of capital. An increase in the size of new and young enterprise can lead to an increase in efficiency, to a lessening of the scatter, costs, and risks faced by capitalists in attempting to finance new and young enterprise, and to an increase in the power of such enterprise to bargain with capitalists for modest rates and stable credit arrangements.

It appears practical to move independently from the enterprise side toward increasing the size and strength of new and young enter-

prise. Even if such steps did not help such enterprise much in obtaining capital at lower rates and under less volatile arrangements they would contribute directly to dynamic growth. In addition, moving independently toward increasing efficiency and competitive power on the part of new and young enterprisers is important as a means of lessening the differentials in interest rates and terms to which they are otherwise subject. An increase in size is a necessary foundation for breaking the circle in which new enterprisers tend to face high rates, in part because of extreme smallness and scatter, and, facing such rates, are unable to start or operate on a scale sufficient for efficiency and success.

We hear much about the curse of bigness and much about fostering small business. There is point in striving to limit extreme centralization of economic power, especially extreme centralization in the ownership and control of capital. The answer is not, however, a large push for an ever greater number of extremely small business units. Except that the general attitude and policy of maintaining a reasonable balance of competitive power is healthy, there has been much misplaced emphasis on striving to promote small business. There is need for new enterprisers and for new enterprises, but it would be more conducive to progress to avoid an excessive number of extremely small new business units. The establishment of large new business units would tend both to eliminate the production inefficiencies of extreme smallness and to contribute somewhat to a balancing of economic power. Such increase of economic and competitive power for new and young enterprise at the lower end of the size scale may be both more practical and more conducive to aggregate effectiveness in the economy than attempts either to overcome bigness of enterprise at the top or to provide artificial aid for small business at the bottom.

Developing understanding and perspective

A prime necessity for the achievement of increased size on the part of new and young enterprises is increased understanding and perspective. There is need for intensive and widespread education and encouragement for prospective enterprisers. It is important that our colleges and other educational agencies place before oncoming generations of students the opportunities for them and the importance for

their economy of starting new enterprise; and it is equally important that they place before such students the prime importance, for profit and success, of starting and operating such enterprises on a reasonable scale.

To a large extent, emphasis in education for business organization and finance is either on the financial problems of large going concerns or on the organizing and financing of small concerns involving a minute amount of capital and but a few employees. There is definite need for educating men to organize, finance, and operate new business firms that are of sufficient size for technical efficiency in the beginning. The scale of operation necessary for efficiency differs extensively by lines of industry, and new enterprisers need to understand the scale requirements in their chosen line. Such understanding would reveal that in many spheres modern technology requires that production units, to be efficient, start on such a large scale that only the man educated for large-scale enterprise is likely to be capable of organizing and operating them effectively. Efficiency tends more and more to warrant and demand education for starting "bigger than tiny."

It is especially important to develop understanding of the limits to the gross rate of interest which an enterpriser can pay in his line and still have a reasonable prospect of net profit and growth. What such a rate is differs with circumstances, of course, and is not subject to precise determination. It depends, for example, on the degree of control the enterpriser receives, on the extent of services rendered by the supplier, and on the prospect of gross returns from the enterprise. A consciousness that payment of excessive interest rates can lead to failure would, however, tend to lessen the tendency for new and young enterprisers to borrow at rates that are excessive relative to the prospects of profit. Education of men of enterprise leading to a "cautious rate" attitude could exert desirable pressure toward rates that tend to be consistent with probabilities of success.

New enterprisers need to be fully aware also of the implications of various types of credit arrangements, particularly with reference to their true costs and to the degree of control they provide in periods of stress. The new enterpriser, especially the unincorporated new enterpriser, is severely limited, even as with respect to rates, in his power to obtain control over capital on terms and conditions that give him reasonable assurance that he could retain the necessary control during periods of stress. Such an enterpriser often owns little

capital compared to the needs of the enterprise he has in mind; and he normally is not in position to drive a hard bargain. Clear recognition, however, by new enterprisers of the importance to their probable long-run success of arrangements that enable them to retain control in case of a temporary setback could induce them to struggle to the limit of their power to secure more flexible and stabilized arrangements.

In our illustrative list of spheres in which understanding, perspective, and attitudes are important we feel it desirable to emphasize one further sphere. It is important for prospective enterprisers to be impressed with the necessity for assembling some capital through personal earning and saving, as an important requisite for establishing a business enterprise. If the prospective enterpriser accumulates at least a small amount of capital from his own earnings, he provides in this way an assurance to suppliers of capital and to society that he has some capacity for enterprise and that he is seriously motivated.

Recent decades have seen the development of a philosophy of borrowing and spending for consumption, which is coupled logically with a reliance on social insurance to care for periods of unemployment and for old age. Compared with an extreme emphasis on saving and a complete dependence on individual resources for a rainy day, this development is clearly a mark of progress. Social insurance not only provides greater security and purchasing power for unfortunate individuals in times of stress, but it provides an element of market stability for the economy as a whole. It is possible, however, that the pendulum has swung farther in the emphasis on spending and long-term consumer borrowing in early years than is conducive to continuously dynamic development in our capitalistic economy. Such emphasis, if excessive, is a threat to the possibility of a maximum crop of new enterprisers.

A reorientation of social and economic attitudes toward greater emphasis on saving by those interested in becoming enterprisers—even as we emphasize efforts to increase business credit for new enterprisers—could be a useful part of a program for facilitating the establishment and development of new enterprise in our economy.

Utilizing the corporate form

An important avenue for achieving greater size, efficiency, and power, and for obtaining capital on favorable rates and terms, is

through wise organization. This warrants more emphasis than is generally given. The manner of organizing—whether as proprietorship, corporation, etc.—and the financial structure of the prospective enterprise have a large bearing both on technical efficiency and on the capacity to obtain control over capital and to retain control during times of stress. Wisdom in organizing for efficiency and in a manner that will make it worth while for suppliers of capital to commit capital in accordance with the prospective enterpriser's needs can go a long way toward assuring success of the enterpriser and the enterprise.

In this connection, prospective, new, and young enterprisers may well give greater consideration to possibilities of utilizing the corporate form. It is well known that the corporation offers a means of assembling capital in large amounts, and this fits with the desirability of starting "bigger than tiny." The possibility of obtaining commitment on an equity basis would lessen the power of suppliers to restrict the supply suddenly during periods of stress. Since it is probable that enterprise organized on a corporate form would not tend to be excessively small, would tend to be more efficient, and would tend to have a more stabilized financial structure, it is likely also that the corporate enterprise could obtain capital at somewhat lower rates relative to the degree of control and relative to the prospects of profit.

There is, of course, a place for unincorporated new businesses. There are obviously many types of business that by nature are small and are best financed and operated as proprietorships or partnerships. Better understanding of the advantages of the corporate form and of the steps and implications involved in incorporation could, however, reveal many more opportunities for bringing together adequate outside capital on the one hand, and men of ideas who can use capital profitably on the other.

Incorporation involves a certain sacrifice of personal independence by the originators of a prospective enterprise; and there are circumstances in which this is of sufficient weight to warrant remaining unincorporated. However, a fundamental emphasis in harmony with the necessity of starting bigger may be on developing a willingness to surrender the seemingly wide independence of the unincorporated enterpriser. Such legal and administrative independence may militate severely against economic independence.

Combining small firms

In discussing the corporate form of organization, we have so far referred to choices which an individual enterpriser may make with respect to the size and financial structure of his own firm. There is another and perhaps even more practical and profitable way in which he may move toward a new enterprise of desirable size and strength. This is through joining hands with other enterprisers in related activities, so as to form a single corporation of greater size and carrying on more varied activities. For example, construction materials suppliers, building contractors, and land developers may merge to form such a corporation. These mergers may include small existing units and may also create additional units in order to round out their range of corporate activities.

The combining of small enterprises in order to achieve efficient size and scope has some real advantages over and above the credit advantages to which we are giving our main attention. For example, some of the enterprisers involved may own more capital than they were using effectively in their own firm, and may be able to contribute such additional capital to the larger venture. Thus, the group as a whole may have to seek less outside capital than would have been the case if each member had tried to "go it alone." Moreover, the group can utilize the full range of entrepreneurial talents of all its members—a range not available to any one member if he were trying to run his own small firm. The advantages and possibilities of such mergers of related firms deserve much greater consideration than they ordinarily receive.

The desire for independence is again a barrier to such consideration. Just as an individual enterpriser is reluctant to give up his administrative independence by incorporating and seeking equity finance from outside, so is he reluctant to share his administrative authority with other enterprisers, as he would have to do in the event of a merger. Much of our story in this book, however, has been concerned with the hazardous outlook for excessively tiny and improperly financed business enterprise. Such hazards do, indeed, represent a heavy price to pay for the possible advantages of administrative independence.

Local corporations, formed by merger of a number of smaller units, would still tend to be small relative to the industrial giants; but they

would be of sufficient magnitude to overcome the many difficulties of extreme smallness. By being less "risky" than any of their components, they could attract local capital more readily. By bargaining more effectively for capital, they could secure it at lower rates. By bargaining for larger amounts of capital, they could secure it at a lesser cost per dollar of proceeds. They could even deal more effectively with the larger and more distant financial institutions such as life insurance companies.

Much good could come from a concerted drive to increase the size, efficiency, and competitive power of new and young enterprisers; and better understanding and better organization among such enterprisers could play a large part in such a drive. If, each year, not 800,000 new businesses were started with average assets of less than \$25,000, but a much smaller number, by better trained men, and many more of these involving capital assets of a few hundred thousand to a few million dollars, the volume of successful new enterprise in our economy could be dramatically increased. Such enlarged and more efficient new enterprise could provide a powerfully flowing well of dynamic growth for our capitalistic economy; and it could play a significant role in preventing abnormal breakdown.

RECHANNELING THE SUPPLY OF CAPITAL

It is possible for new enterprise to start bigger and for young enterprise to develop rapidly only if suppliers of capital find ways to provide new and young enterprisers with adequate capital under arrangements that permit success. To a large extent, the power to lessen excessive interest rates, to increase the availability of capital, and to lessen the volatility of credit arrangements rests with the suppliers of capital. It is thus fundamental that the problem be approached energetically from the capital-supplying side.

We noted earlier that the relatively high cost of credit for new and young enterprisers stems to a considerable extent from the long distance between new enterprisers and large suppliers of investment credit. Thus the localization of the supply structure appears as a logical step toward overcoming these difficulties. It is as important to lessen the difficulties caused by bigness or concentration in the capital-supplying structure as it is to overcome extreme smallness among new and young enterprises. Localization could consist, in part, of channel-

ing a larger share of the nation's capital directly from local owners to local enterprisers and, in part, of moving capital already held by centralized financial institutions out to local areas.

Action by individual owners of wealth

An outstanding need is for individual owners of wealth to participate directly in the establishment and development of new enterprise. There are, in every community, men who combine broad business knowledge and experience with ownership of or access to capital, and who are closely familiar with the promising enterprisers and industries in such communities. These men can exercise an exceptionally constructive capitalist function. They can quickly recognize economic opportunities when presented even embryonically by men of ideas and capacity for enterprise. Such owners of capital can contribute significantly to progress by backing men with capacity for leadership in enterprise and production in the establishment and expansion of enterprise.

Enterprisers must, of course, take the initiative in visualizing production and profit opportunities and in seeking capital. However, local owners of capital with a lively willingness to listen and to make an energetic appraisal of both the enterpriser and his enterprise can go far toward finding for the economy the prospective enterprisers most likely to succeed. Furthermore, such owners can aid in culling out many starts that the experienced eye quickly realizes would probably result in failure. This vital appraisal of men, and the tailored and courageous allocation of capital to such men, can be most effectively performed by capitalists working directly with men of enterprise. Men who have surplus capital plus know-how are often in a position also to provide advice and guidance tailored to the needs of infant and growing enterprises; and this, there is little doubt, is also a vital need. There is, of course, a good deal of financing of new and young enterprise on a direct personal basis; but there is need to increase the tempo of this type of activity.

While local capitalists may help greatly by lending to local enterprises, the critical need is for their participation on an equity basis. This is admittedly difficult if the local enterprises are small and risky; but the capitalist can encourage the merger of such small units into those larger and less risky corporations which we have already dis-

cussed. Here, too, he performs an active capitalist function that would contribute much toward the development of successful new enterprise in our economy.

Larger corporate production units for new enterprise could result in a good return for the capitalists at the same time that they enabled new and young enterprisers to obtain capital at lower rates relative to the more stabilized arrangements possible through such corporate new enterprise units. Because such corporations could avoid some of the costs and risks of long distances and of unfamiliarity between capitalist and new enterpriser, and because they would tend to be of sufficient size to be efficient, they could, if effectively financed by local capitalists, provide a good interest return for the capitalists as well as a fair profit for the enterprisers.

"In-between" loan corporations

There may be need for a network of localized long-term loan credit institutions to function between the loan financing institutions and capital-deficit enterprise. There has been some development of new, primarily financial, institutions designed to make more long-term loan capital available to small enterprise. The Maine-type development credit corporations, several of which have been established in recent years, are designed to channel funds, assembled primarily by conventional financial institutions, to small enterprises that could not be financed on a long-term basis by such financial institutions. The Maine Development Credit Corporation has a nominal capital of \$50,000 which is subscribed by individuals and nonfinancial business firms; and it gets its main lending power from loans or "lines of credit" of banks and insurance companies. Financial institutions can become members of the Maine Development Credit Corporation by agreeing to lend, on call, up to 2½ per cent of their capital and surplus. Its total lending power, though not large, is much greater than that subscribed directly by individuals. It fits well Dr. Alfred Neal's category of "in-between" corporations—corporations that operate between the existing financial institutions and small enterprise in the provision of risk capital.¹

¹ See Alfred G. Neal, "Financing Industrial Expansion," *Proceedings of the Twenty-fifth Annual Conference of the American Industrial Development Council* (Washington: American Industrial Development Council, 1950), pp. 1-11.

The proposal for capital banks embodied in Senate Bill 1329, 82nd Congress, 1st Session, aims at providing a larger flow of primarily loan credit to small if not new and young enterprise. There are several variants of the capital bank proposal, but that embodied in this bill is indicative of its general nature.

Provisions of Senate Bill 1329 are well summarized by Edwin George as follows:

It would establish a number of capital bank corporations—maximum number not to exceed the number of Federal Reserve Banks and branches thereof—each to have a paid-in capital and surplus equaling at least \$5 million. Federal Reserve Banks would be allowed to invest up to 2 per cent of the capital and surplus of all member banks within the district (or \$5 million if this is larger) and each member bank could invest up to 2 per cent of its own capital and surplus. Other financial institutions and individuals may acquire shares of stock, but no agency except a Federal Reserve Bank can own more than 10 per cent of the total stock. A corporation may issue debentures or borrow up to the amount of its paid-in capital and surplus. Member banks may purchase RIC (Regional Investing Corporation) obligations up to 10 per cent of their own capital stock and surplus. The corporation is empowered to make or acquire loans and obligations of only such classes of small and independent enterprises as satisfy general standards of eligibility issued by the Secretary of Commerce—these operations to be done singly or in co-operation with other lending institutions. No more than one-third of the corporation's capital, surplus, and indebtedness may be used to acquire in excess of \$300,000 of the obligations or securities of any single enterprise without special Federal Reserve Board approval. Each unit is to be equipped to supply business with consulting and advisory services on a fee basis. All corporate assets shall be exempt from all save non-Federal ad valorem real property taxation for a period of fifteen years.²

In-between, long-term loan credit institutions could, if established widely, bring significant amounts of loan capital closer to new and growing enterprisers provided that such enterprisers already own or have other means of obtaining a substantial equity base. The in-between, loan financing institutions could thus play a much more useful role once the provision of equity capital for new and young enterprise was substantially increased via an increase in their size and strength.

² Edwin B. George, "Can Small Businesses Get the Capital They Need?" *Dun's Review*, October 1952, p. 137.

Equity financing corporations

Perhaps the outstanding possibility for facilitating the flow of risk capital to new and young enterprise is the establishment of a widespread network of corporations designed primarily as equity financing corporations. By contrast with all types of lending institutions—including the “in-between” loan corporations just discussed—these would be set up to invest in the stocks of new and growing enterprises and to finance such enterprises on a contingent return basis. The expansion of young enterprise requires the financing of enterprisers who personally own relatively small amounts of capital; and this, as well as the irregularity of return in earlier years, makes it difficult if not impossible for loan financing institutions to meet fully the basic capital needs of such enterprisers. Equity financing corporations could help to meet these needs.

In addition to drawing on their own wealth, capitalists could, through equity financing corporations, assemble funds from life insurance companies, pension funds, and other large holders of capital at modest rates; and they could profitably provide many new and young production corporations with risk capital. The equity financing corporations would need basically to provide capital in a manner that would leave the operating controls largely in the hands of the individual operating corporations. They could, however, provide general management services.

Such equity financing corporations would finance mainly young enterprises which have already attained considerable size and strength. If many new and young enterprisers develop an organizational form that permits size and efficiency and that offers a potentially profitable outlet for centralized accumulations of capital, a network of equity financing corporations could, laws permitting, form a strong unit in an improved structure for channeling capital to new and young enterprise.

We do not have in mind corporations primarily interested in new products. There are some intriguing private investment corporations emphasizing new product development. This new product sphere is extremely important and it is well that it be given strong consideration. The sphere that needs to be covered is much broader, however.

The pattern we have in mind assumes a basically private profit

operation and one that would move boldly into the business of assembling and channeling capital into profitable uses and with an eye to a return that compares favorably with that from channeling it in other directions. The potential for progress lies in aiding men with capacity for leadership and capacity to establish and develop successful production units whether involving new products or old. The focus would be on men who in their own way are likely to add a grain of increase to the aggregate efficiency of the economy; and such increase in efficiency is the prime source of interest returns to capitalists.

Localization by life insurance companies

A major possibility for rechanneling capital to capital-deficit enterprisers is through modifying the powers and policies of large financial institutions. Many have emphasized the desirability of wider participation by life insurance companies in risk financing and some insurance companies are striving in this direction. Because life insurance companies control such a large share of the nation's investment capital, efforts to get capital from such institutions to new, young, and capital-deficit enterprise are especially important.

We have noted that the possibility of participation by insurance companies in financing such enterprise would be increased considerably if there were a substantial development of sizable new production corporations, in-between loan financing institutions, and equity financing corporations. Changes in policy on the part of life insurance companies and in law are needed, however, to bring about a large increase in financing of new and young enterprise by life insurance companies. With such development and with slight shifts in policy and law, life insurance companies could expand greatly their direct and indirect financing of such enterprise.

The funds available for investment by life insurance companies are in large concentrations and in practice are subject to relatively low liquidity requirements. Technically, the reserves held by life insurance companies are extensively subject to withdrawal on short notice. There is, however, little likelihood that any large portion of insurance reserves will be withdrawn at any one time.

Given these size and liquidity characteristics it would appear safe for insurance companies to invest to some extent in promising new

companies without long earnings records. Not all investments of insurance reserves need possess a high degree of liquidity and stability. Following the principle of averaging, it would be both safe and profitable for insurance companies to invest a modest share of their accumulated reserves in the securities of in-between lending corporations and in equity financing corporations and even in the larger new production corporations. The over-all experience of a portfolio that includes a modest amount of investment in promising new financing and production corporations would tend to compare favorably with that of a portfolio that includes only established firms.

Some changes in law and supervisory policy are necessary if such desirable shifts in the investment policies of life insurance companies are to take place. For example, some relaxation of the requirement of a long earnings history as a prerequisite for insurance company investments would be helpful. Some further relaxation of limits to investment in equities by insurance companies would also be helpful, although even present limits to such investment would permit substantial direct and indirect equity financing of new and young enterprise if related rules were modified to make investment up to present limits feasible.

There is legitimate fear that insurance companies might obtain too much control over business enterprise if they were permitted to invest a large share of their reserves in equities and if they were permitted to acquire a large share of the voting stock of individual companies. These matters must be borne in mind in considering extension of present limits for equity investment. However, the small increases in limits necessary to permit a significant increase in the direct and indirect equity financing of new and young enterprise in our economy would not be large enough to create a serious problem.

Professor Howard Ellis has suggested that consideration be given to limiting the power of life insurance companies to accumulate investment funds through predominantly savings policies such as endowment policies.³ He emphasizes well that such policies result in large accumulations of funds which then become subject to the strict investment regulations appropriate to protection type policies. Such

³ Howard S. Ellis, "Economic Expansion through Competitive Markets," in *Financing American Prosperity—A Symposium of Economists* (New York: The Twentieth Century Fund, 1945), p. 149.

limitation might help to keep investment funds at local levels and more available for investment in equities and in new enterprise. It would be a drastic step, however; and it might be quite unnecessary if there were developed such mechanisms, policies, and laws for facilitating the return flow of funds as we have suggested above.

Insurance companies as insurers provide an invaluable service to our economy; and even with less emphasis on "savings policies" they would accumulate large volumes of investment funds in addition to those which they have already accumulated. The great need, therefore, is to develop attitudes, laws, and policies that would tend toward wider availability of such funds at all levels, in all forms, and to all types of new, young, and capital-deficit enterprisers, either directly or through intermediate financial institutions. Insurance companies can provide capital on a long-term basis and at relatively low rates; and, with appropriate modifications of laws and policies, they could play a much larger role in the provision of capital for new and young enterprise. Here is a great field for economic statesmanship on the part of our largest capital-supplying institutions.

STABILIZING COMMERCIAL BANK CREDIT

We have discussed several possible developments that would tend to facilitate the provision of capital for new and young enterprise at profit-promising rates and in relatively stable forms. Such developments would contribute especially to the achievement of maximum dynamism in our economy by contributing to the success of new and young enterprise. The provision of capital for new and young enterprise in equity and other more stable forms would also lessen somewhat the possibilities of sudden contraction in the supply of credit and would thus lessen somewhat the tendency toward cyclical breakdown toward which such contraction strongly contributes. The contraction of capital supplies that leads to deep depression when only slight recessions in the rate of growth would be normal affects many more than the new and young enterprisers, however. The effects are widespread and the tendency toward excessive contraction of credit, we have seen, lies deep in human attitudes and economic institutions.

To a considerable extent the instability of the supply of credit in our economy has been associated with large fluctuations and sharp contractions in the volume of credit created by the commercial bank-

ing system. We believe a significant step toward stabilizing the supply structure of credit in our economy could be taken, without hampering the impetus to growth which created credit provides, by keeping the possible volume of created credit at moderate levels and by keeping it relatively stable.⁴

There is a school of thought, which includes such able economists as Henry C. Simons, Irving Fisher, and more recently Milton Friedman, that, fearing the instability resulting from a high volume of created credit and having in mind the impact of credit creation on the money supply, has advocated the "100 per cent reserve plan" under which credit creation would be eliminated. We doubt the wisdom of any such drastic limit on credit creation. Created credit plays a vital role in permitting the shift of capital to new, dynamic, and productive enterprise and, therefore, in facilitating economic growth, and any severe limitation on the volume of created credit may well be viewed with caution.

We have noted that extensive reliance on created credit may contribute to some unwise business undertakings and capital formation at the top of modern booms. This is not our main reason, however, even from a credit standpoint, for suggesting moderation in the reliance on created credit. The major problem is not that there are some excessive and unwise business expansions during growth periods. The major problem is that, as the volume of created credit becomes large, the credit structure as a whole becomes more volatile and more vulnerable to precipitous contraction. We have seen that the contraction of created credit tends to be particularly rapid and that such contraction tends to contribute strongly to events that lead to a general spiral of credit contraction and economic breakdown.

If fears of cyclical breakdown could be eliminated, if supplier attitudes and policies came to be such that the volume of credit generally would not tend to be sharply contracted when signs of leveling off appear, and if rigidities in the economy could be over-

⁴ Policy pertaining to credit creation, of course, also bears on the money supply. At this point, however, our concern is with the credit impact of such action. The process by which the commercial banking system creates both credit and money, let us recall, moves originally and strongly toward economic fluctuation and breakdown through the credit impact. This is often overlooked in monetary interpretations of cycles and in policies, actual and proposed, for lessening excessive cyclical fluctuations.

come, the volume of created credit could be considerable without great danger. Until the rigidities, fears, and quick-withdrawal attitudes and policies can be largely overcome, however, caution in the reliance on created credit would appear to be helpful in avoiding severe cyclical breakdown.

It would be conducive to stability also if the possible ratio of created credit to total credit were held relatively stable. Once the volume of created credit becomes relatively high—even if higher than may have been desirable—it is treacherous to take steps that force a sudden lessening of this proportion. The Federal Reserve Board, by taking such steps, appears to have contributed from time to time to precipitous contraction of credit and economic activity. For example, the Board, after allowing the volume of created credit to become relatively high, has at times increased the reserve requirements during periods of rapid expansion.⁵ Such action was perhaps motivated by a monetary objective, the avoidance of inflation. From a credit standpoint, however, such action is quite illogical. It cuts back the capacity and desire of suppliers to provide credit at a time when that capacity is already stretched. The result is that bankers who had been lending in quantities and on terms geared to a high potential volume of created credit are suddenly forced to tighten rein. An increase in reserve requirements at such times amounts thus to a sharp reversal of lending practices.

Such action tends to be a crucial unstabilizing step. Loans made on the assumption of renewal by both lender and borrower are suddenly not renewable. Compounded by fear, created in part by the credit-tightening procedure and in part by business failures that result from this procedure, lending policies become—spiraling—much more cautious than underlying conditions warrant or than the Federal Reserve Board intended. Once banks reach this cautious stage, nonbank lenders often follow suit and credit generally becomes scarce. Even enterprisers who at first wanted credit and were refused now become cautious and no longer seek credit in great volume. Thus an

⁵ See Board of Governors of the Federal Reserve System, *The Federal Reserve System, Purposes and Functions* (Washington: The Board, 1954), pp. 113-16, for ill-fated increases in 1936-37 and in 1948. See, also, Clark Warburton, "The Theory of Turning Points in Business Fluctuations," *The Quarterly Journal of Economics*, November 1950, pp. 542-48, for history of Federal Reserve Board action affecting reserves. Note especially the action previous to 1929.

original restriction of created credit by suppliers via Federal Reserve Board action can spiral into a sharp contraction in credit generally. Without sufficient credit to maintain economic activity at growth levels, we tend toward depression and breakdown.

Possibly the logical policy is first to set the reserve requirement low enough to permit healthy expansion but high enough for safety and then to hold it constant as the growth surge runs its course. Such a policy would be flexible in that it would permit continued expansion of credit, although the pressure against further increases in bank-created credit would become greater as the volume of such credit increased. There would, however, be no compounding of the credit-tightening process.

If the credit multiple were set at a modest level in the beginning, enterprisers could not undertake some of the less worthy projects permitted with a larger multiple, and fewer projects would be financed on a volatile short-term basis. If, then, there were no artificial, sudden, and panic-creating shift by suppliers via the Federal Reserve Board (after having created the impression of freely available credit), the pressure toward contraction of credit, enterprise, and employment would be considerably less. The establishment of such a modest and stabilized credit multiple would contribute considerably toward lessening the tendency toward cyclical breakdown in our economy. We could then have the basic stimulation that created credit gives to expansion and have it without an accompanying threat toward subsequent breakdown.

A logical corollary to a policy of modest reliance on created credit is an increased emphasis on longer-term lending by the commercial banking system. Were laws developed permitting commercial bankers to engage more extensively in long-term lending, and were they willing to make long-term and intermediate loans on flexible repayment terms, they could contribute considerably toward stabilizing loan credit generally as well as for new and growing enterprisers. Commercial bankers, being well localized, tend both to be familiar with local owners of wealth and to know much about the new enterprisers and the expansion possibilities of growing enterprises in their areas. Being close to the enterprisers they can lend with minimum risk and, equally important, can give needed guidance in the early stages of business life.

Such a shift in the structure of commercial bank lending would help greatly to lessen the proportion of highly volatile credit in the total credit structure. Such a shift from volatility in the composition of bank credit, together with greater emphasis on equity capital and other stabilized credit arrangements for new and young enterprise, could contribute significantly toward lessening the breakdown pressure associated with the high volatility of the present credit structure in our economy.

DEVELOPING SUPPLIER ATTITUDES

We noted earlier that in a capitalistic economy the capitalist holds the ultimate balance of power relative to the enterpriser and the laborer, and that because of superior size the suppliers of capital tend to hold an especially strong balance of power relative to new and young and capital-deficit enterprisers. Given the power of the capitalist in our economy, it is quite improbable that new and young enterprise can achieve the success necessary for full and permanent dynamism without long-range and broad-gauge attitudes on the part of the leading suppliers of capital. Such changes in the supply structure as we have suggested cannot be brought about without the efforts of capitalists; and the knowledge and efforts of capitalists are necessary to bring about such other institutional and policy changes as are needed to assure an adequate flow of capital at modest rates to new and young enterprise. Understanding and enlightened leadership among capitalists is a prime requisite for assuring dynamism in a capitalist economy.

Basically, there must be an economic incentive for capitalists to modify their credit institutions and policies beyond the point that might be attained by increases in the competitive power of enterprisers or by changes in law and governmental policy. Economic incentives may have broad content, however; and increased understanding may reveal economic incentives that do not lie on the surface.

Understanding and dynamism

The changes we have suggested for strengthening new and young enterprisers and for channeling capital to such enterprisers more effectively rest first on the direct mutual advantages for both capitalist

and enterpriser. The possibility of intensive efforts and wise action by capitalists and intermediate financial institutions to provide capital for new and young enterprise depends, however, on developing among leading capitalists a thorough recognition of the importance of modest rates and stabilized terms for the success of new and young enterprise and a recognition of the importance of such enterprise for fully and permanently dynamic growth in our capitalistic economy.

There is a long-range economic incentive for capitalists as for all in maintaining a capitalistic economy; and if, as we believe is true, this requires the provision of capital for new and young enterprisers at lower rates and in more stabilized forms, then there is an underlying incentive for capitalist leaders to strive toward the establishment of attitudes, policies, and institutions that will bring about such rates and forms. The development of understanding may be painfully slow; but it is fundamental if a broad-gauge view of incentives is to be harnessed for achieving full and permanently dynamic growth in our economy.

Removing fear of depression

We have noted that the precipitous contraction in credit underlying cyclical breakdown results in considerable part from fears of economic breakdown which lead suppliers to require quick-withdrawal terms when extending credit and then cause suppliers to exercise their power to tighten the spigot of credit quickly and sharply as the normal growth cycle levels off. The primary source of the desire on the part of suppliers for capital-liquid arrangements when providing credit is fear; a fear not of failure or ineptness on the part of individual enterprisers, but of breakdown in the economy as a whole. This fear could be overcome if there were thorough understanding concerning the nature of the normal cyclical growth process under a capitalistic economy. The development of such understanding is a basic need. The vital point to make clear is that cycles of surge and plateau are normal under capitalism and that a leveling off or slight recession in economic activity following surges need not necessarily or should not normally degenerate into a depression (see Chapter IX). If this principle were widely understood and if action were based upon it, suppliers would not need to require capital-liquid terms nor would

they need to move precipitously to enforce such terms when economic opportunities leveled off.

The development of understanding concerning the normalcy of plateaus following surges of growth in a capitalistic economy could do much to overcome the fear of breakdown that leads to the requirement of capital-liquid terms, to the enforcement of such terms, and thus to the very breakdown feared. With firm conviction that general breakdown is not inevitable there could develop a willingness to avoid at least the extremes in liquidity requirements and to go much slower in tightening the spigot of credit. Thus, the development of knowledge on the part of private suppliers of capital concerning the nature of the capitalist growth process, along with enlightened exercise of their power, could form a bulwark against the occurrence of depression when the economy is merely ripe for a normal plateau.

This is not to say that at this time the fear of breakdown and the extension and withdrawal of credit based on such fear are entirely unwarranted. An individual capitalist finds it difficult to "buck the tide" if all others are afraid and act accordingly. If, however, the relatively small number of large suppliers of capital took the lead in developing credit arrangements that did not permit extremely rapid contraction of credit and in avoiding full exercise of even the more limited withdrawal powers, it seems probable that all would tend to provide credit in a more stabilizing manner.

If, in addition, the Federal Reserve Board or the Federal Government would both keep the maximum volume of created credit low and avoid tightening such credit at the top of booms, the possibility of sudden and widespread contraction would be greatly lessened and a large basis of "warranted" fear for individuals would be removed. If, further, monetary policies that do not press toward depression and fiscal policies that help to prevent it can be developed, as we shall see is possible (see Chapter XII), then individual suppliers would not need to fear. A primary necessity, we repeat, is to develop the conviction, well based in logic, that depression following major growth surges is not normal and certainly is not inevitable.

There must be an economic incentive for individual capitalists and for capitalists as a group to strive toward greater understanding and to gear their lending policies to an assumption of a continuously upward trend of growth interrupted only by temporary plateaus. It

may be difficult to guarantee greater short-run gains to capitalists under such policies. There can be little doubt, however, that the long-run gains for them as well as for society as a whole would be substantial. Few would doubt that deep depressions cut deeply into the long-run average gains of capitalists. Above all, few can doubt that repeated deep depressions can threaten the very existence of our type of economy and thus the economic gain and welfare of capitalists along with all their fellow men. A long, understanding look shows the economic wisdom of stabilized credit policies; and this gives us confidence that such policies, and with them stabilized growth, can be achieved. If leading capitalists recognize the probability that, with wise credit policies "across the board," depressions can be avoided and that (as noted in Chapter IX) without such policies they cannot, there is both an incentive to develop such policies and a likelihood that, with full understanding, it will be done.

It is, of course, important that understanding of the growth power and of the growth process under capitalism be acquired by other groups as well as by capitalists. Enterprisers, consumers, and government officials could and, we believe, would tend to act in a manner that would help to prevent cyclical breakdown if all had a greater understanding of these matters. We emphasize especially the need of such understanding among suppliers because in their hands lies much of the power of decision that determines what can possibly be done by other groups in the economy and that determines the extent to which dynamic growth without breakdown will be our lot in the years and generations ahead.

THE WISE USE OF GOVERNMENTAL POWERS

In addition to changes in structures, policies, and attitudes among private enterprisers and capitalists, there is need for modification of law and governmental policy pertaining to private credit and new enterprise. We have already noted that several of the changes necessary to assure the effective provision of credit for business enterprise require changes in law and governmental policy, and an exhaustive program for assuring such provision would require considerable modification of our governmental framework and policies.

In general, the various changes in law and governmental policy must contribute to the effectiveness of the economy, which includes

the balancing of competitive power, while maintaining the essential atmosphere of freedom and predictability necessary to wise and confident decisions on the part of private capitalists and enterprisers. The suggestions we have made which involve changes in law and governmental policies pertaining to the strengthening of new enterprise and the provision of credit are in harmony with this philosophy. For example, the modification of laws pertaining to life insurance companies would facilitate the flow of capital to new and young enterprise without restricting the essential freedom of such companies. Likewise, the suggested modification of governmental policy toward more moderate and stabilized use of created credit would tend to prevent excessive expansion and contraction of credit generally and would remove some of the uncertainties which now cause individual suppliers to require and to exercise quick-withdrawal terms.

Where wide differences in power exist, and as balances of power change, general government must be ever on the alert to provide a changing framework that, while facilitating private economic activity, combines equality of opportunity with a maximum of individual freedom. To a considerable extent the problems faced by new and young enterprise result, as previously noted, from large differences in competitive power. To a considerable extent, also, these differences are themselves the result of a legal and institutional structure that permits such differences to develop. Because new and young enterprise is such a vital element of dynamic growth, we believe it desirable, while striving to develop a better balance of competitive power by such means as we have already suggested, to take steps more specifically designed to offset the competitive disadvantages which these enterprisers now face.

A number of aids designed to help balance competitive power for small enterprise already exist, and many others have been suggested. We believe it desirable that thought be given to the development of aids geared to newness rather than to smallness. For example, small corporations are now favored by the provision that the first \$25,000 of corporate income are exempt from the surtax of 22 per cent which is levied on corporate income in excess of \$25,000. Consideration might be given to an exemption of a larger amount, perhaps \$100,000, from the surtax and to limiting the additional exemption to a period of 5 years after the corporation is established.

Similarly, thought may be given to a system of loan insurance to be administered by the government and designed to meet the needs of new and growth enterprise rather than primarily those of small enterprise. Proposals for insuring loans for business enterprise usually emphasize loans by commercial banks with ceilings on loans for any single borrower of \$25,000 or less and with maturities of 10 years or less. In order to meet the needs of new and young enterprise, a loan insurance system would have to include loans of other financial institutions (including such new institutions as we have mentioned), much larger loans, and loans with longer maturities. Such a broader program would provide a better spread of risks and a better basis for calculating the risk premium.

A system of loan insurance could be self-financing and still tend toward lower rates relative to the degree of control over capital. By establishing uniform rules and providing a mechanism through which lenders could work, the government could encourage and enable responsible suppliers of capital to move with assurance in providing new and young enterprise with a larger volume of investment capital, at relatively modest rates and on longer and more flexible terms. Under a broad system of loan insurance lenders could forego the more rigid repayment requirements and would have less need to exercise powers of quick withdrawal. This would strike at a critical factor that touches off the wave of credit withdrawal and leads toward deep depression when only a normal plateau is in order.

Other illustrations could be given. However, we wish only to make the point that it would be a wise use of governmental power to develop special aids which, at relatively little cost to the government, and without burdensome restrictions, would tend to overcome or at least offset the competitive disadvantages now faced by new and young enterprisers in our economic structure.

We believe that there is little to be gained by efforts to expand the volume of direct lending to small business by governmental agencies. It is basic that the provision of credit be a private function if we are to retain an essentially private capitalistic system. A small amount of direct lending to new and young enterprise may, however, be warranted on the grounds of the special importance of such enterprise and as a means of offsetting its current competitive disadvantages. The emphasis in such direct lending as appears advisable

may well be shifted toward providing adequate capital at modest rates for new and young enterprise rather than for merely small enterprise.

Governmental powers can and must, of course, play a larger role in achieving dynamic and stabilized growth than that pertaining to the development of competitive power and to the provision of adequate, low-cost and stabilized credit. Governmental monetary and fiscal policy must play an important role in assuring such growth. We shall, in Chapter XII, discuss the relationship of these governmental spheres to private and public action pertaining directly to private credit and enterprise, and we shall suggest desirable development of policy in these spheres.

XII. Governmental Monetary and Fiscal Policies

THE ACHIEVEMENT of continuous growth without severe interruption or breakdown depends fundamentally on the development of understanding, wise attitudes, and policies pertaining to the private provision of capital and the development of business enterprise. In discussing possible policy and institutional changes in the capitalist-enterpriser linkage, we noted that development and understanding and wise action on the part of both enterpriser and capitalist are basic. We also mentioned several areas in which facilitating and regulatory action by government could contribute to improvement in this capitalist-enterpriser linkage. The achievement of dynamic growth without breakdown depends also, however, on governmental policy in two other areas of governmental responsibility; namely, on policy pertaining to money and on fiscal policy.

There are possibilities for facilitating movement toward our goal by some reorientation of policy in each of these two realms. In this chapter we shall consider possible directions for such reorientation.

POLICY FOR MONEY

We have seen that, under the present close tie-up of the money mechanism with the creation of credit by our commercial banking system, the volume of money has tended to increase in rough harmony with that necessary to maintain a relatively stable price level during ordinary periods of rapid growth, although there have been excesses in the volume of money and considerable inflation during war-related and active defense periods. We have seen also, however, that, under this close tie-up of the money mechanism with credit creation, the volume of money has tended to contract excessively along with the contraction

in created credit during periods when signs of leveling off appear. At such times this contraction of the volume of money, working toward a decreasing price level, has tended to reinforce and amplify tendencies toward depression originating with the contraction of credit generally, and of created credit particularly.

With wise governmental control of credit creation, there would be no danger of excessive monetary expansion and inflation during normal growth periods. A contraction of created credit sufficient to cause significant monetary contraction and price declines as economic opportunities show signs of leveling off remains as a tantalizing probability, however.

Given the basic objectives of private credit provision and use, some slackening in the volume of credit creation as economic opportunities level off could be quite consistent with sound economic judgment. With the volume of money closely tied to the volume of created credit, it is possible that even such a moderate and economically sound slackening in the volume of such credit could result in a decline in the volume of money and prices which, joining with the pressure of contraction in created credit and credit generally, might exert considerable pressure toward abnormal economic decline. If, in addition, the unwise exercise of withdrawal powers were to cause the volume of created credit to fall significantly below the amount that would give the greatest credit impetus to growth without breakdown the result could be a decline in the volume of money that would move us more violently toward undesirable instability and possible breakdown.

Since the money problems to which we have just referred have their origins in credit variations, we must emphasize that, to a large extent, the money pressure toward excessive economic swings and breakdowns in our economy would be removed if the supply schedule of credit, including created credit, were stabilized. If the possible ratio of created credit to total credit in our economy were held to modest levels and stabilized, if capital-liquid attitudes and policies in the private economy generally were substantially lessened, and if inflationary credit financing of war and defense activities could be avoided, not only the most serious fluctuations in credit supplies but the most serious fluctuations in money supplies would be overcome. Thus, a prime road to the achievement of desirable variations in the volume of

money and to the achievement of a relatively stable price level is to develop wise policies for credit, both private and public. Our suggestions for lessening the instability of credit made in Chapter XI may, accordingly, be viewed also as primary suggestions for overcoming excessive variations and contractions in the volume of money. The problem of avoiding excessively inflationary credit financing of war and defense will be considered briefly in the following section.

Although, as we have indicated, we are hopeful concerning desirable modifications in attitudes and policies with respect to credit, it would scarcely be realistic to assume that all obstructing fears and unwise policies can be immediately overcome. Thus, further thought is necessary concerning the problem of achieving stabilized expansion in the volume of money and especially of avoiding contraction from time to time.

In moving to meet these problems, it may be well to start by making certain that there is clarity of thought concerning the functions and objectives of and needs for created credit and money, respectively. Clarity of thought concerning these respective functions, objectives, and needs is necessary if there are to be both wise governmental regulation of credit creation and wise movement by government toward stabilized expansion in the volume of money. A prime need is to develop such clarity of thought concerning objectives and criteria of needs for created credit and money, respectively, and then to gear policies for the control of credit creation and for the provision of money to these respective objectives and needs. The development of clear objectives and adequate criteria for determining the volume and variation in credit creation and money, respectively, that would be most conducive, each in its way, to dynamic growth without breakdown would help considerably in devising governmental policies that would move effectively, via both credit and money, toward this desirable goal.

In general, utilizing the best information available, it is important for the government, when establishing policy affecting both the volume of created credit and the volume of money, to strive to avoid affecting the one unwisely when attempting to cause the other to move in a desirable direction.

Because of the prime importance of adequate but stabilized credit provision in our economy it would seem desirable, when action

affecting bank credit creation and money is taken by the Federal Reserve Board or by the government, to focus first and foremost on the need for credit and on the credit impacts of such action. Then, if such action does not appear also to satisfy money objectives and needs, it might be possible to carry out the specific action that affects both credit and money, but simultaneously to move otherwise to bring about the desirable changes in the volume of money.

At times, it is possible mechanically for the government to move considerably toward achieving desirable variations in the volume of money while moving wisely in regulating credit creation. It is doubtful, however, that, even with the wisest of policies pertaining to created credit, the government can achieve entirely satisfactory variations in the volume of money. Further modifications of policy appear, therefore, to be needed.

We have so far suggested that the development of wise credit policy, including wise governmental control of credit creation, represents a primary step toward stabilizing money supplies. We have further suggested that, operating within the present institutional framework, government could do much good by keeping clearly in mind the separate credit impacts and money impacts of its actions. We now wish to suggest, in addition, that consideration be given to the development of means by which the government can be set free of nonmonetary objectives in discharging its basic function of providing money and can assure expansion in this volume in a manner consistent with the objective of maintaining a relatively stable price level. To this end we suggest that consideration be given to possibilities for providing a larger share of the nation's money supply independently of the volume of created credit and in such a manner that the total volume of money would tend to expand in accordance with the normal surges and plateaus of growth in our economy. This requires that there be a substantial share of the nation's money that is not subject to rejection, destruction, or recall, once it is issued. We have noted that because of the large government debt to the banks a considerable share of the bank deposits which serve as money is not subject to private credit decisions. But the volume of deposits subject to private credit decisions is sufficiently large to be a threat following surges of growth.

Just how a larger share of the money supply may be provided

independently of created credit is not easy to say; and we are not prepared to offer a final procedure. One relatively simple possibility would be, while keeping the possible volume of bank-created money relatively low, for the government to create and infuse into the economy a small additional quantity of money at a rate that is geared to the trend of economic growth. If, for example, the trend of increases in the product of the economy is at a rate of 3 per cent per year, the government could create each year a volume of new money equal to a small per cent of the existing money supply (the per cent depending somewhat on the supply at the beginning) and rely on bank credit creation to provide the additional amount sufficient to provide for rapid cyclical growth. The aim would be to increase the total money supply by around 3 per cent on an average. Even with the possible volume of credit creation relatively low, "bank money" would tend to increase by considerably more than average during periods of rapid expansion and would tend to increase by considerably less than average during plateau periods. The volume of bank money might actually decrease if suppliers did not overcome their fears of breakdown. The likelihood of a sufficient decline in bank money to cause a decline in the total volume of money under our twofold approach would, however, be small. Such a combination would not guarantee a variation in the over-all supply of money that would tend to maintain a relatively stable price level throughout the normal surges and plateaus of economic growth. It would, however, tend strongly in this direction; and it could make wide swings in the price level improbable even if quick-withdrawal policies on the part of suppliers of credit are not entirely overcome. Although the volume of created credit would presumably vary above and below the general trend of growth and although the volume of bank money would vary with it, though in a somewhat different degree, the regular increase in "government money" would cushion any tendency for the total supply to fall in plateau periods.

Provision of a substantially larger share of the total money supply in accordance with long-run growth trends would do much to break the cumulative and spiraling movement of credit and money in the same direction, a movement that we have seen is especially conducive to deep depression. The provision of money in a manner which includes provision by credit creation to a modest extent, but which also

involves provision of a larger share independently of credit creation and in accordance with long-run economic trends, would thus result in an over-all supply that expands flexibly at varying rates with the cyclically expanding economy.

Such a combined approach is clearly a difficult problem. Fortunately it is basically a problem in mechanics, and there is nothing inherent in our type of economy that makes the solution impossible. Fundamentally, it requires only that the federal government exercise its responsibility for providing the economy with money in a manner that is conducive to dynamic growth without breakdown and to economic progress. It would be essential under an approach of this type to fasten onto maintaining a relatively stable price level as a basic monetary objective and to devise the best criteria possible of the variations in the volume of money necessary to achieve this objective.

There would also need to be devised a means of creating new government money and of infusing such additional money into the economy without disturbance. Technically this could be done in various ways. One way would be by creating monetary certificates and using them as ordinary revenues. A major problem in this approach is to make certain that the volume of such certificates is determined by monetary needs and not by primarily fiscal objectives. The suggestion to proceed toward a desirable supply of money through creating monetary certificates and using them to finance government expenditures or debts is not new. It has been extensively developed by Professor John Philip Wernette and by Professor Milton Friedman.¹

Although we believe it feasible for the government to expand the money supply steadily and in a small degree by creating government money and using it as general revenues, we believe it would both be dangerous and result in undesirable variations in the money supply to let the quantity of money created by the government be determined by budgetary needs or deficits. It can scarcely be assumed that the need for money in a private economy varies in accordance with such deficits. Fundamentally, the volume of money to be created by government should be determined independently of budgetary deficits.

¹ See John Philip Wernette, *Financing Full Employment* (Cambridge: Harvard University Press, 1945); and Milton Friedman, "A Monetary and Fiscal Framework for Economic Stability," *American Economic Review*, June 1948, pp. 245-64.

Not only does the need for money vary quite differently than does the need for deficits, but different philosophies of spending, taxing, and financing could lead to vastly different quantities of money. Under such a system the money supply would, to a considerable extent, be at the mercy of government spending programs; and the ease of financing government expenditures by creating money could easily lead to both excessive expenditures and excessive money supplies. To be workable, the volume of government money created each year would have to be geared strictly to the objective of maintaining a relatively stable price level and determined independently of governmental budget needs or deficits even though the money created were used to finance government expenditures. This use would simply be a means of infusing the new money into the economy.

In summary, we are suggesting that, in addition to striving for a modest credit creation multiple and toward lessening the quick-withdrawal forces and attitudes that periodically lead to severe contractions of created credit and therefore of money, consideration be given to lessening the dependence of our money supply on bank credit creation. We suggest that by some method, possibly but not necessarily the one we have suggested, the government move toward the provision of a stabilizing flow of government money in accordance with growth trends. Under adequate protective laws a money mechanism which combined a steady flow of government money in accordance with growth trends, and a supply of bank money that fluctuated somewhat but not violently with growth cycles in the private economy, might serve well the objective of dynamic growth without cyclical breakdown in our economy.

In spite of recognizing the importance of developing monetary policies and techniques to avoid excessive instabilities in the volume of money, we must not overlook the fact that the origins of growth and the origins of breakdown lie not with money supplies and policies but with the nonmonetary forces in the economy. It is worthy of re-emphasis that the seeds of upsurges are in the minds of enterprisers and that the upsurges themselves are facilitated by the transfer of control over capital via credit. Improvement in the monetary mechanism can do little to overcome the forces of retardation and breakdown that lie in the original limits, costs, and instabilities of

credit. We must keep our focus on the development of improved access, lower cost, and greater stability of credit through private "nonmonetary finance," even though we also urge clarification of thought and consideration of policies for achieving stabilized expansion in the volume of money.

GOVERNMENTAL FISCAL POLICY

The governmental sector of the economy has come to be such a large part of the total economy that the nature of our governmental economic and fiscal policies has a significant bearing on the rate of growth and the degree of stability in the economy as a whole. Governmental economic and fiscal activities can contribute considerably to the rate of growth and to the avoidance of breakdown in our economy, provided that they are conducted with full perspective concerning the nature of the capitalist growth process, are consistent with wise policies pertaining to the provision of money and the creation of credit, and are conducted with deep concern for and faith in the basic freedom principles of a capitalistic economy.

We have learned to do much through governmental economic and fiscal activity to lessen or cushion tendencies toward unemployment and decline. In general, the large forward movement has been through the provision of built-in stabilizing mechanisms such as the social security system, the financing of works and services enjoyed by the public generally, and a tax system that draws most heavily from those most able to pay. Such a system accomplishes a transfer of income which tends to lessen the threat of substantial loss of purchasing power in the economy at a time when economic activity levels off. Such activities of government, by removing fear as well as by providing funds for consumer spending, help considerably in lessening the intensity of minor cycles; and these activities can play a helpful role in stemming the drive of the more deep-seated and powerful forces that tend toward major depressions. We believe that in these and in many other respects our governmental economic and fiscal policy has developed in harmony with the needs and demands of stabilization and growth. We also believe, however, that some modifications of thought and policy pertaining to governmental economic and fiscal policies are necessary if government through such policies is to con-

tribute its full share to assuring permanently dynamic growth without breakdown in our economy.

Governmental works, services, and expenditures

Policy pertaining to governmental activities and expenditures has in recent decades been considerably influenced by the assumption that there is a strong tendency toward cyclical breakdown, and that a prime possibility for avoiding such breakdown is a large and fast-moving program of deficit financed governmental works, services, and expenditures. The development of understanding concerning the nature of the cyclical growth process, of the true potentials of a free private economy, and of the primary sources of abnormal breakdown could do much toward preventing excessive reliance on public works and expenditures as a road to stabilized growth. At the same time the development of such understanding could facilitate the development of a program of governmental works, services, and expenditures that could make a significant contribution to the achievement of permanently increasing growth without breakdown in our economy.

Such understanding would suggest first of all that government place primary emphasis on such factors as wise regulation of credit creation, the development of information and understanding that would lessen the tendency toward quick withdrawal of credit, and the development of more independent means of controlling the money supply. It would then suggest that the governmental program of works and services be basically viewed as one sector of the economy as a whole; and that, in planning and carrying out such a program, the emphasis be on the long-run trend of needs.

The need for governmental facilities and services continues to expand along with trends of growth in population and in wants, even as does the need for goods and services in the private economy. Government could carry its share of the desirable expansion in the economy as a whole and make a modest contribution to lessening abnormal cyclical swings in the economy by striving to expand governmental services and facilities in rough proportion to the trend of expansion in the economy as a whole but varying the amount somewhat with the normal growth cycle, and moving as close to a non-cyclical expansion as would be technically feasible and possible without failing to meet important needs during the normal upsurge.

It would be helpful if such a relatively noncyclical program could be approached at all levels of government. We recognize that state and local governments would find it difficult to achieve such programs through their own powers of finance. Federal policy could well be designed to help state and local governments achieve such programs, however.

With effective advance planning and finance there should be no difficulty in at least avoiding greater fluctuations in public activity than those that would be commensurate with normal surges and plateaus in the private economy. Expansion of governmental activity and expenditures in accordance with a rising trend of needs would not be counter-cyclical in the sense of providing for more facilities and services in downswings than in periods of prosperity. But such expansion could help to prevent abnormal swings in the private economy. A relatively noncyclical program would contribute to economic growth, would always tend to meet the most urgent needs of the people, and would always tend to make the best use of economic resources. It would involve a minimum of treacherous short-run forecasting and of discretionary shifts in program, and would make a significant contribution to stabilized economic growth.

A program of noncyclical expansion of public facilities, services, and expenditures in accordance with growing population and needs would, of course, involve a considerable degree of deficit spending during plateau periods, since tax intake at such times would tend to be relatively low. Such deficits are desirable in order to avoid postponement of needed public works and services during such periods. Slumps in public capital formation would reinforce the downpressure of lessened capital formation in the private economy. Failure to borrow and to provide needed public facilities and services during plateau periods can also contribute to excessive downswings and instability by contributing to unemployment and lessening over-all effective demand. Judicious deficit spending could, on the other hand, be a stabilizing force on the money supply and on purchasing power in the economy. Pressure toward *additional*, lower priority public works and services and pressure toward *additional* deficit expenditure can, however, lead to the long-run retardation, if not downfall, of the free private economy which such pressure is allegedly designed to avoid.

Fundamentally, the public economy serves as another sector of the

economy in using resources—human and nonhuman—and in producing services for the nation. The primary aim should be toward a wise allocation of the nation's men and resources to these works, just as this is the aim in the private economy. Allocation of resources by government in marked contrast to consumer desires for the resulting services and benefits and primarily for purposes of countering unemployment may be necessary if improved private and public policies pertaining to credit and improved public policies pertaining to money are not followed and if, therefore, we do not avoid deep depression. With wise policies, we have seen, such emergency resort to low priority works should not be necessary; and at any rate it should be a device of last resort.

There has, we believe, developed in the minds of many an excessive reliance on the possibility of utilizing a large and fast-moving program of deficit financed public activities as a means of avoiding depression. Many assume that it is necessary to "step in fast" with a large public works and expenditure program as soon as signs of leveling off appear and that by so doing major downswings can be avoided. We believe it necessary to reorient thought on both counts.

A policy of primary reliance on public activity and its finance as a major and fast-moving stabilization mechanism is not soundly related to the basic processes of growth and forces of abnormal breakdown in our modern economy. We have seen that some leveling off in economic activity following surges of growth is normal in a dynamically expanding economy. If governmental authorities attempt to move rapidly toward extensive governmental activity as soon as signs of leveling off appear, the result may be the provision of low priority works to offset a slackening in the private economy that is entirely normal and basically healthy. Excessive enthusiasm for public activity can also lead to considerable over-all expansion in the ratio of public to private activity. If there is no conscious attempt to keep public activity near trend levels in periods of expansion in the private economy and if there is a policy of large-scale expansion of public activity during downswings, the result can only be an increase in the public sector of the economy out of proportion to the increase in the economy as a whole.

The philosophy of heavy reliance on public activity and expenditure is often fostered by a fear of secular decline and by a lack of con-

fidence in the potentials of dynamic expansion which we believe possible. If a strong reliance on public activity and finance, accompanied by such fears and doubts, were allowed to become general public policy, the result would be an ever-greater and quicker use of public activity and finance and ultimately a gradual transition from a truly private capitalistic economy.

We have seen, finally, that the prime sources of breakdown are attitudes and policies that lead to excessive variation and contraction in credit and money; and even though a large program of public activity could offset some of the credit and money pressures toward breakdown, it would not remove the basic source of deep depression. Combined with private efforts to provide an adequate and stabilized flow of credit at moderate rates to business enterprise, and with governmental efforts to facilitate stabilized expansion of created credit and money, a relatively noncyclical program of expansion in public activity roughly proportionate to but not exceeding growth in the economy as a whole could form a strong part of an integrated private-public program for assuring permanently dynamic growth without breakdown in the economy. It is as important for government, while avoiding excessive reliance on public activities and expenditures as a stabilization device, to keep public facilities and services moving forward with the growth of the economy as it is to keep private activities increasing rapidly.

Clarifying and co-ordinating governmental financial policies

What we have said to this point implies that the general level of taxation should be sufficient to balance government income and outlay in the long run, with government borrowing viewed as desirable during periods when such a level of taxation does not yield sufficient revenue to finance necessary and steadily growing needs for governmental facilities. It implies that, except for war-created debt, the regular tax structure should be set to provide a cyclically balanced budget. If, as now, we start with a large government debt, it may be desirable to have a level of taxation which will yield somewhat more revenue than would be necessary to balance the budget cyclically, in order to repay the debt. A program of debt reduction in periods of prosperity would co-ordinate well with a relatively noncyclical program of works and services. Our analysis implies, of course, and this

is implicit in a private enterprise economy, that the general level of governmental activity, expenditure, and taxation be held to a level that does not usurp, by displacement, the private enterprise function—a danger sometimes overlooked in the enthusiastic endorsement of large public works programs. The level of taxation is, of course, determined ultimately by the level of government activity.

We have said little concerning the impact of the method of taxation on the dynamism of a capitalistic economy. The methods of taxation, as distinguished from the level of taxes, do not appear to be a major source of difficulty in our economy at this time. There are, it is true, a number of changes that would be helpful. There appear, for example, to be some elements in the tax structure that tend to drive the flow of funds away from dynamic enterprise. The taxation of dividends moves somewhat in this direction, and tax-exempt securities have a tendency to pull capital into passive channels. Extremely high rates in the top brackets, such as resulted from excess profits taxes, tend toward excessive limitation of incentive and toward some wasteful incurrence of costs and should be avoided. There is reason to believe, also, that high corporate tax rates tend to check the growth of young enterprise. While these in general do not appear to be major problems, this latter area is one in which a considerable contribution to dynamism and stability could be made. A possible means which was suggested earlier was to raise the surtax exemption on corporate income taxes from the first \$25,000 to \$100,000 and to limit this additional exemption to perhaps the first 5 years after the corporation is established.

At this time we merely wish to emphasize the desirability of always striving to obtain necessary tax receipts with a minimum of hindrance to the active flow of capital to business enterprise; and to emphasize that in tax policy as in policies pertaining to interest, profits, and incomes generally it is important to bear in mind the key significance for progress under capitalism of the man of enterprise, including always the new and young enterpriser.

It is evident that the type of governmental economic policy that we have been discussing involves extensive resort to borrowing by government from time to time. It is important that there be clear thinking concerning the relationship of borrowing by government to basic fiscal objectives and to the creation of credit and the provi-

sion of money. The basic purpose of such borrowing is to finance governmental activities. The borrowing has other consequences, however. These consequences depend on the type of borrowing. We must note especially that when the borrowing is through the commercial banking system it has special effects on the economy via credit creation, money, and prices.

There are times when governmental borrowing through the commercial banking system, in addition to serving the basic purpose of financing governmental activities, would serve, mechanically, to bring about increases in created credit and in the volume of money that would be desirable in terms of the needs and objectives in each of these other two spheres. This is quite likely to be the result at the beginning and possibly throughout normal plateau periods.

Unfortunately, borrowing through the commercial banking system does not always have this happy result. At times, government wishes to borrow amounts that would result in excesses of credit or money or both. This occurs primarily in war-related periods. Under such circumstances the volume of money, as we noted earlier, has at times been somewhat buffeted by essentially fiscal needs and objectives. This has not been entirely a matter of failure on the part of government officials to distinguish clearly between monetary and fiscal objectives. Often it is a pragmatic compromise with principle. Failure to think clearly concerning the monetary effects of fiscal policy leads easily to some inadvertent disturbance of the money supply. Intense pressure to obtain funds for financing high levels of governmental expenditures as in periods of active defense or war makes it difficult to avoid such disturbances.

Although such unstabilizing impacts cannot be entirely avoided, we believe that clarification of thought concerning the respective purposes of credit, money, and the provision and financing of governmental activities could lead to a co-ordination of policies and a lessening of difficulty in these spheres. The development of better criteria and statistics of need in these spheres would, of course, help greatly in achieving effectiveness of co-ordination among fiscal, credit, and monetary policies; and the desirability of striving toward such criteria and statistics cannot be overemphasized.

We have seen that the purpose of credit provision differs basically from that of providing money in our economy. It is evident that the

primary purpose of governmental borrowing, whether from banks or generally, differs from both. It should be equally evident that the volume of government borrowing from commercial banks which would be called for by purely fiscal purposes would not automatically have precisely the impact on the volume of created credit and on the volume of money called for by credit and monetary objectives, respectively. Thus there is a fundamental need, when deciding on methods of financing government, to think clearly concerning the purposes of and needs for credit and money, respectively, and then to utilize financing methods that do not cause the supplies of credit and money to deviate from those most conducive to growth without breakdown in our economy.

Many of the monetary difficulties resulting from government borrowing arise during periods of war-related activity. It is not absolutely necessary from a technical standpoint to disturb the money supply greatly through governmental finance even when the volume of governmental activity is large. If at such times governmental revenues were confined largely to taxation and borrowing that did not result in excessive credit creation, governmental finance would have no large disturbing effects on the supply of money and on the general price level. A policy of avoiding or greatly limiting government borrowing from commercial banks during periods of active defense activity and war is difficult to follow, however. There is no satisfactory or economic way of financing war. War itself is in a sense noneconomic, and surely uneconomic. We can, however, strive to avoid the compounding of these difficulties by giving careful thought to the respective impacts of fiscally-induced credit variations and monetary variations in the economy and by doing all we can to keep war-related fiscal activities from causing unstabilizing variations in these spheres.

If the strength of capitalistic economies is to be maintained after wars, and if the great economic breakdowns—possibly causing us to lose the institutions we successfully defended in war—are to be avoided, enlightened movement toward financing war without resorting extensively to borrowing that results in large amounts of created credit must be a prime objective.

An interesting possibility that could do much to help accomplish this would be a system of forced lending or refundable taxes. Such a system would involve the collection by the government, along with

the personal (and perhaps corporate) income tax, of an additional amount which would be refundable after the war period was over. These amounts could be held by the taxpayer as tax credits or converted into bonds. Such refundable taxes would enable the government to borrow without such a great resort to bank borrowing, they would not affect work incentives adversely, and they would reduce inflationary pressures during the war period. A discussion of this and other possibilities is found in Albert G. Hart's *Defense and the Dollar*.² These refundable taxes could be kept from being an inflationary pressure in the postwar period by handling them as bonds with fixed maturity dates and by limiting their redeemability or convertibility before those dates.

Many economists have emphasized the desirability of financing war without bank borrowing, but all realize the difficulty of achieving this goal. It requires, of course, a substantial and courageous modification of social attitudes as well as modifications of techniques. We believe, however, that clear thinking concerning the functional separateness of financing government, of supplying money, and of creating credit, regardless of the mechanical tie-ups, can serve as a stimulus and guide in devising means toward such improved war financing, as well as toward improved financial policies for peacetime stability.

It should be clear that we do not hold that government should not borrow during periods of war and defense preparation, although we recognize that even nonbank borrowing for such purposes raises pertinent questions of both economics and equity. The much more limited objective of avoiding extensive borrowing via the creation of bank credit is, we believe, within the realm of possibility and would tend to eliminate the worst of the difficulties connected with large-scale government deficit in wartime.

Once the volume of money has been pushed up extensively by financing war and defense via created credit, it is necessary to follow a policy of caution in reducing the government's debt to the banking system in order to avoid deflationary impacts in the general price level. A gradual and judicious reduction of such debt during the post-war expansion period could be made without decreasing the price

² Albert G. Hart, *Defense and the Dollar* (New York: The Twentieth Century Fund, 1953). See especially his discussion of refundable taxes, pp. 131 ff.

level, and such a reduction would serve to prevent any further excesses in the volume of money and to prevent further inflation. In the longer run, however, we think it wise to be "idealists" and, if such periods of war there must be, to make their financing without inflation a major drive.

PERSPECTIVE ON GOVERNMENT

We have now discussed several areas in which governmental activities of various types would be conducive to the achievement of dynamic growth without breakdown and to achievement of maximum potential in our economy. In Chapter XI we suggested modifications of law and policy to facilitate the flow and stability of capital and the development of enterprise. In this chapter, we have suggested several modifications of policy, some of which may involve changes in law, pertaining to the provision of money and to the planning and financing of governmental works and services.

These governmental changes must be part of a larger program looking toward the achievement of ever-increasing economic effectiveness in our economy. We doubt, for example, that the modifications we have suggested in monetary and fiscal policies could go far toward preventing booms and depressions without basic changes pertaining to created credit and to the capitalist-enterpriser linkage generally. We believe, however, that the changes in governmental policy which we have suggested, if co-ordinated internally and if coupled with energetic developments of policy by private capitalists and enterprisers, can and must play a strong role in an over-all program for assuring continuously dynamic growth without breakdown.

This entire group of governmental changes, it should be noted, has one common characteristic. It is designed to increase the effectiveness of private economic activity without lessening the degree of freedom or self-regulation of individuals or groups. We have emphasized that the rapid growth exhibited by our capitalistic economy in the past is in no small way associated with the power of freedom to release the energies of men and, through men, the energies of nature in such a manner that, combined, they result in maximum production of goods, services, and satisfactions for mankind. It is particularly important to bear in mind the freedom aspects when considering modifications of governmental policies.

By maintaining and developing a framework of laws and policies characterized by freedom, by regulating credit creation effectively, by striving toward policies and mechanisms leading to stabilized expansion in the volume of money, by developing a long-range program of governmental economic activities geared to growing needs, by emphasizing built-in transfer-type stabilizers, by co-ordinating governmental financial policies mechanically without deviating from the basic objectives of each financial sphere, and by moving with full faith in the individual and in the potentials of a truly democratic capitalistic economy—by doing these things government can contribute strongly to the achievement of permanently dynamic growth without breakdown in our economy.

XIII. Capitalism and Progress

WE HAVE said that democratic capitalism with its unique reliance on the leadership of private enterprisers, on private capitalists for allocating the nation's capital among enterprisers, and on individual freedom can give men in the United States, and men wherever they will accept these principles, outstanding aid in achieving an ever-increasing standard of living for their ever-increasing numbers. Such an economy makes for dynamic growth—growth that has its source in new ideas and changing techniques and that results in rapidly increasing product per unit of labor and resources. It is this type of growth that is fostered by a truly democratic capitalism.

We have recognized that, in the United States, there have developed some attitudes, institutions, and policies which place a drag on and threaten the permanence of dynamic growth in this capitalistic economy, and which tend toward abnormal fluctuations and breakdowns. If these retarding and breakdown factors can be overcome, as we believe they can, and if we can thus give full sway to the powers of production and growth that inhere in a democratic capitalistic system, we can achieve permanently dynamic growth without breakdown.

We have placed the spotlight on what we believe to be the critical sources of both retardation and cyclical breakdown; namely, difficulties in the financial linkage between capitalist and enterpriser and in the government's provision of money for our economy. Finally, we have suggested policies, both private and public, for overcoming the difficulties in these critical spheres. Although sources of retardation and breakdown are primarily in the capitalist-enterprise linkage and in the monetary mechanism, governmental economic and fiscal policies can have a strong bearing—for better or for worse—on growth

and stability. Accordingly, we have also suggested desirable directions for policy in this sphere.

We believe that wise development of attitudes, policies, and institutions pertaining to the capitalist-enterpriser linkage, to money, and to fiscal policy can go a long way toward assuring continuously and permanently dynamic growth in our economy. Our emphasis, it should be clear, is on the general areas of difficulty and on the general spheres and directions in which policy change can be helpful. These areas and spheres are broad and intricate. While we believe that the specific steps or policies which we have suggested are worthy of consideration, they are primarily suggestions illustrative of possibilities for moving in basically necessary general directions within the strategic spheres. Some of the specifics we suggest could be quite wrong, and surely many more specifics are necessary for adequate movement in the general directions we suggest; but this in no way lessens the importance of moving energetically toward development of attitudes, institutions, and policies in the several strategic spheres.

RELATED SPHERES

We do not maintain that modifications pertaining to capital for the business enterpriser, to money, and to governmental policy are in themselves sufficient to assure permanently dynamic growth without breakdown in our capitalistic economy. In focusing as we have on these spheres we take for granted the necessity of sound conditions in other spheres of the economy. We simply find that on the whole the basic conditions for progress in other realms exist, or are less critical. In addition our analysis suggests that the problems in some other realms would be somewhat lessened by the development of wise attitudes, institutions, and policies along the lines we suggest in our three strategic spheres.

It is evident, for example, that the wisest of private financing policies could be of little help if wages lagged far behind increasing productivity, if income distribution became increasingly uneven, or if prices in some product areas were held high and rigid through the exercise of great competitive power while others remained subject to competitive downpressure. Considerable progress has been made in recent years toward adjustment in these and other important

related matters, however, and there is reason to believe that such adjustments will continue.

Much progress has, for example, been made in bringing wage rates up with advances in productivity, and machinery for continuing in this direction appears to be well established. We believe that, at this time, the ratio of interest to profit, particularly as it affects new, young, and capital-deficit enterprise, is much more of a problem than the ratio of wages to "management return."

Similarly, the problem of excessive inequality in the flow of income has lessened in recent years, even though the ownership of capital continues to be extensively concentrated in few hands. To a considerable extent our approach suggests a means of overcoming some of the more serious difficulties associated with such concentration and of lessening somewhat the possibilities of further concentration. If interest rates generally are kept modest, if enterprisers are able to retain control over capital—and thus not lose what they own—during times of stress, and if the opportunities for men of little capital to become enterprisers and be successful are increased, we shall move considerably toward overcoming the major difficulties associated with the excessive concentration of wealth at the same time that we move positively toward dynamic expansion under capitalism.

We recognize that a high degree of monopolistic power—we prefer to call it unbalanced competitive power—exists in our economy. We do not, of course, assume that the development of wise attitudes and policies pertaining to capital and enterprise will completely overcome competitive unbalances and associated problems. The problem of getting an adequate and stabilized flow of capital at modest rates to new, young, and capital-deficient enterprisers is by no means unrelated to the problem of monopoly, however. If financial power of entry with reasonable likelihood of success under good management can be established, the monopoly problem will surely be lessened. Financial obstacles to entry of new enterprisers and to success of and expansion by young enterprisers may indeed be the most serious set of obstacles to healthy, competitive growth under capitalism.

Finally, we recognize that there are special problems of international trade, the solutions to which would increase the effectiveness of our economy. We believe it highly important to overcome the

obstacles to free and extensive trade among different nations. We have not treated these problems in considering how to make our capitalistic economy contribute most to economic progress, because we regard these problems as primarily political problems that are not peculiarly associated with capitalism or with particular economic systems. We must continue to hope, however, that the political problems that lead to obstacles and barriers to trade among nations can be overcome. Fundamentally, we may move toward increased effectiveness in our economy as well as in other nations by following, in trade with other nations, the basic principles that lead to effectiveness in domestic economic activity.

BEYOND ECONOMIC SYSTEMS

The possibility of achieving a rapidly increasing standard of living is, of course, dependent also on factors other than those pertaining to the achievement of economic effectiveness in our economy. The probability of achieving ever-higher levels of living per person in the United States is sharply conditioned, for example, by man's response to the desire for family. The extent to which it is possible under any economic system to provide an ever-greater volume of goods per person depends significantly on and, other things equal, varies inversely with the increase in numbers.

During the first fifty years of this century, the world was adding another "United States" (1950 size) to its population each decade. The United States doubled its population during this half century. There can be little doubt that such high rates of population increase will continue during the second half of this century. We have great faith in the power of knowledge in enabling man to release the energies and powers of nature and in man's power to organize effectively for production. Still, it must be recognized that the product available per person, even though our system is highly effective, will depend on the choice people make between more family and more food and shelter per family. More than is commonly recognized these are basically consumer choices; and they are, to a considerable extent, mutually limiting.

The possibility of achieving an ever-higher standard of living in the United States depends also on the extent to which it is possible to avoid war. War involves a tremendous drain on resources; and

intensive war or even long periods of "armed peace" can lessen severely the levels of living for future generations. A failure to appraise the human consumer values—or their absence—of many things produced for war gives a misleading feeling of "prosperity" associated with war. It is easy to mistake a high level of employment and activity for prosperity. The great power that guides the destinies of men could give us no greater "economists" than leaders with perspective, vision, and a passion for peace.

FOCAL NECESSITIES

In summary, our analysis suggests that, barring the ravages of war, and given the economic trends now prevailing, the development of wise policy pertaining to the financial linkage, to money, and to fiscal policy could lead to continuously and permanently dynamic growth and increasing effectiveness in our United States economy.

It suggests that, barring extremely rapid population growth, such achievement of the full potential of our democratic capitalistic economy can lead to increasing product per capita in spite of our rapidly increasing population.

(The extent to which we actually achieve these dynamic potentials in our economy in the years, decades, and generations ahead will depend fundamentally on the development of understanding and enlightened attitudes among men, particularly among capitalists and among leaders of government. Enlightened attitudes on the part of capitalists are basic. A capitalistic economy is characterized by the private ownership of the nonhuman means of production, both natural and man-made. The delegation to dispersed private owners of the privilege of and responsibility for governing capital resources (under general government) as they choose distinguishes, more than any other characteristic, a capitalistic from a socialistic or communistic economy.

Under capitalism, the owners of capital have not only great power with respect to what is done with the capital they own but also great power to influence the movement of the economy as a whole. The rates at which, the terms under which, and the wisdom with which they, through credit, permit and encourage a continuously and permanently large flow of dynamic enterprisers to use the nation's capital in effective combinations with human labor will be significant

if not fundamental determinants of both the dynamism and the continuity of growth and progress in our economy. To a very large extent these depend on enlightened attitudes and on the wise use of power; and the future of capitalism will be what capitalists make it.

We place this responsibility on the capitalist (the owner and private governor of capital) in our economy even though we recognize—indeed, emphasize—that the spark of progress is the enterpriser. We do this because we believe that, with the development of knowledge and the march of science, men of ideas and leadership talent will carry us forward provided only that they can gain ready and stabilized access to capital at profit-promising rates; and because we believe that only with enlightened attitudes on the part of capitalists can such access be assured. If, as history moves forward, our capitalistic economy should fail to achieve permanently increasing effectiveness, it will not be, we believe, because of difficulties between laborer and enterpriser, both of whom are fundamentally “men without property,” but either because we allow excessive restriction of individual freedom or because men of capital—the trustees of capitalism—fail to exercise the wisdom and the enlightened self-interest of which we believe free private owners of capital are fundamentally capable.

One cannot be certain that capitalists will accept this responsibility and carry it wisely. However, full understanding—of the benefits to our economy and to them, when viewed broadly and over time, of developing wise policies, and of the threat to capitalism and to them of not developing such policies—can be a powerful force for desirable improvement. Fully enlightened self-interest would lead the trustees of capitalism toward the attitudes and policies that are fundamental for achieving dynamic growth without breakdown. A prime hope in writing this book is to sow seeds of understanding that will bring this power to bear on what appears to be capitalism’s most critical problem.

The future of our economy will also depend heavily on the extent to which our government can take on tasks of ever-increasing magnitude without resorting to growing closeness of control over individuals and economic activities. This again is extensively a matter of understanding, perspective, and attitude. Understanding of the contribution which freedom makes to economic effectiveness can,

if widespread, strengthen greatly the determination to maintain such freedom.

There is some tendency, during periods when breakdown is feared or exists, to look not only toward extensive governmental action but toward a type of action that involves direct and discretionary control by governmental authorities. We have, in contrast, urged that major efforts be centered on overcoming the sources of retardation and breakdown both through enlightened action by individuals and through changes in laws and governmental policies that do not lessen the degree of freedom of individuals. Failure of private capitalists to undertake enlightened action to avoid retardation and breakdown invites increasingly extensive, close, and discretionary action by government; and if there is failure to recognize the vital importance for system effectiveness of a high degree of freedom and self-regulation for capitalists and for individuals in all spheres, a gradual spiral toward an essentially undemocratic capitalism can result. With such loss of freedom the essence and dynamism of capitalism would also be lost.

If, however, there is enlightened reconstruction of policies on the part of private capitalists and if there is full recognition of the productive power of freedom on the part of government, the likelihood of losing the essential freedoms of democratic capitalism is small and certainly resistible. There is no basic reason why the increasing responsibilities of general government cannot be met without encroachments on essential individual freedoms. On the whole, our history gives hope of maintaining a high degree of freedom in our economy.

We have recognized that there are also significant problems pertaining to money and that erratic variations and contractions in the supply of money (reinforcing erratic variations and contractions in credit) continue to be a source of instability in our economy. It is important that these problems be overcome if our economy is to enjoy permanently dynamic growth without breakdown. The money problem is basically a mechanical problem however, and not one that involves the heart of the capitalist philosophy, as does the relationship of capitalists to enterprisers and as does the relationship of general government to both. In this sphere, increased understanding is also the basic need. The particular solution we propose in the sphere of money (as in other spheres) may not be the best or even feasible. There can be little doubt, however, that the problem of

achieving stabilized expansion in the volume of money, once clearly visualized, can be solved.

Thus, though it requires substantial reorientation of thought, we believe that much improvement can be brought about in the financial linkage of capital and enterprise and that government can meet its increasing responsibilities pertaining to money, fiscal policy, and economic activity generally without lessening the basic freedoms of American capitalism. Such reorientation of thought can lay a strong foundation for achieving continuous, dynamic growth and ever-increasing effectiveness in our United States economy.

BEYOND OUR BORDERS

We have focused on the problem of how to achieve a maximum product under the capitalistic system as we find it in the United States. Partly our motive is simply to contribute our bit to increasing the aggregate economic effectiveness and product of this country now and in the years to come. More fundamentally, we view the United States as an important "case of capitalism." Through developing an understanding of the basic principles of capitalism, through searching out the problems as we find them and developing policies that lead to dynamic and permanent growth without breakdown in this country—through system success here—we can provide men in other lands with an example which, if they wish to follow it, could also contribute to greater economic effectiveness for them.

To a considerable extent we believe that the economic progress of mankind everywhere is tied closely to what is done under capitalism in the United States. The degree of success in achieving permanently dynamic and stabilized growth, and in meeting the challenge which exists, here as elsewhere, of a rapidly increasing population with rapidly increasing desires for better living, is certain to have a strong influence on the extent to which sound economic principles are followed in other lands. If, as we believe, the principles of capitalism are highly conducive to the aggregate effectiveness of economies, it follows that the development of understanding and wise policies here may also be a road to greater economic welfare for many men of many nations.

Index

- Atomic energy, 34
- Automobile, as example of clustering, 92
- Automobile industry, 34
- Bank credit, created, 97
 - economic growth and, 49-53
 - see also Credit
 - short-term, 51
 - stabilizing of, 133-137
- Bank money, creation of, 52
- Bell, Haughton, 78 n.
- Berle, A. A., 60
- Bondholders, as owners, 48
- Boom, 4, 6-7
 - see also Cyclical breakdown
- Borrowers, small-asset, 62
 - see also Enterpriser, capital-deficit
- Boulding, Kenneth E., 46
- Breakdown, cyclical, see Cyclical breakdown
 - postwar, 106
 - severe, 95
 - sources of, 57 ff.
- Bridge, Lawrence, 63, 68
- Business, small, see Small business
- Business cycle, 4
 - see also Cyclical breakdown
- Business enterprise, see Enterprise
- Business enterpriser, see Enterpriser
- Business failures, 68
 - high interest rates and, 66
- Business forecasting, and population increase, 10
- Business forms and functions, 39-41
- Business optimism, excessive, 4
- Business organization, education for, 122
- Business risk, and high interest rates, 81, 83
- Business scatter, 80
- Capital, concentration of, 76-77
 - costs of distributing, 82
 - efficient transfer of, 45-46
 - financial linkage with enterprise, 43 ff.
 - government of, 38
 - modification of flow of, 88
 - vs. money, 48
 - nature of, 37-38
 - need for ready flow of, to enterprisers, 118
 - private ownership of, 38
 - risks of furnishing to new enterprisers, 83
 - supply of, see Capital supply
 - transfer of control over, from private owners to enterprisers, 118 ff.
- Capital banks, 129
- Capital resources, shift of, to more effective uses, 44-46, 118 ff.
- Capital supply, rechanneling involved in, 126-133
 - and reduction in interest-rate differences, 86-87
- Capitalism, business forms and functions under, 39-41
 - democratic, 4, 24
 - economic progress and, 162-169
 - functions and freedoms of, 24-27
 - nature of, 37-38
- Capitalist, vs. enterpriser, 39
 - responsibilities of, 38, 167
 - role of, 37-42
- Capitalist economy, growth process and cycles of, 90-94
- Capitalist function, 38
 - in free society, 23
 - passive nature of, 40
 - relation of, to enterprise functions, 31
- Churchill, Betty C., 68 n., 70 n., 80 n.
- Clustering, 92

- Committee for Economic Development, 60
- Competitive power, balancing of, 141-142
unbalanced, 164
- Consumers, in democratic society, 24
- Consumption levels, increase of, 14
- Control groups, basic, 27-28
- Corporate equities, control through, 39
- Corporate form, utilization of, 123-124
- Corporate taxes, 156
- Corporation, leadership in and control of, 40
- Created credit, 49, 97, 101, 105, 135
acceleration through, 50-52
extensive reliance on, 134
lending of, 50-51
- Creativeness, and economic progress, 33-34
- Credit, 7
bank, see Bank credit
created, see Created credit
and cyclical breakdown, 95-100
defined, 59
domination of, by financial institutions, 80
excessive, 95
extension of, 44
growth surges and, 92-93
and noncorporate enterprise, 48
stabilization of, 145-147
tightening of, 135
volatility of, 95-98, 137
wartime, 108-109
- Credit arrangements, types of, 48-49, 122
- Credit policy, enterprise and, 120-143
- Credit process, money and, 47
- Credit reserves, minimum, 50
- Cyclical breakdown, 89, 90-112, 134
fear of, 98, 130-140
growth and cycles of, 90-95
money and, 100-106
postwar, 106-110
prime sources of, 155
- Cyclical growth process, 152
- Dauten, Carl A., 62 n.
- Debt, public and private, ownership of, 79
- Debt reduction, government, 155
- Deflation, and money supply, 102-103
- Demand, interest-elasticity of, 66
- Democratic capitalism, 4, 6, 24-27
defined, 38
- Depression, 4, 6-7
abnormal, 110
fear of, 137
see also Cyclical breakdown
- Dockeray, James, 62
- Dynamic enterprise, and introduction of new ideas and products, 32-33
- Dynamic growth, vs. cyclical breakdowns, 18-19, 57
drags on, 57, 117
governmental control and, 143
new enterprise and, 69-70, 120-126
permanent, 168
profit prospects and, 64
- Economic activity, flow of, 32
ultimate objective of, 17
- Economic breakdowns, 4-6
see also Cyclical breakdown
- Economic development, new ideas and, 34
- Economic effectiveness, and dynamic growth, 17-19
- Economic fluctuations, excessive, 6
- Economic freedom, 23-26, 32-33
- Economic groups, in capitalist system, 24-25
- Economic growth, and bank credit, 49-53
finance and, 44-49
see also Economic progress
- Economic incentive, and credit policies, 137-138
- Economic institutions, 16
- Economic policy, strategic spheres for, 117-119
- Economic progress, creativeness and, 33
freedom and, 26
increase in human knowledge and, 31-32
increased money supply and, 52-53
leadership and, 33
new ideas and, 70, 91
- Economic retardation, 57-74
- Economic satisfaction, natural factors in, 25
- Economic system, increased effectiveness of, 5
and increasing wants, 14

- Economic understanding, 5-6, 121-123, 137, 144, 167
- Economic wealth, distribution of, 77
- Economy, healthy, 99
- high-level, prospects for, 5
- Ellis, Howard S., 132 n.
- Employment, effectiveness of, 18
- low-level, 19
- and production objectives, 17-18
- see also Unemployment
- Enterprise, expansion of, 19
- financing of, 7
- function of, 31, 41-42
- increase in size and strength of, 120-126
- institutional structure, 88
- significance of, in capitalist economy, 41
- Enterpriser, access to capital by, 44
- capital-deficit, 44, 61, 73, 76, 82-84, 111, 116, 137
- competitive disadvantage of, 67
- and high interest rates, 60-64
- surpluses paid by, 87
- vs. capitalist, 30-31
- control exercised by, 60
- as control group, 27
- credit policy and, 120-143
- dependence on bank credit, 51
- development of new leadership among, 34-35
- differences in bargaining powers among, 84-85
- as economic group, 24
- function of, 23, 29-31
- gross interest rates faced by, 59
- high degree of freedom exercised by, 29
- high rate of failures among, 68
- as leader of economic activity, 30
- vs. monopolistic power, 164
- and rechanneling of capital supply, 126-133
- "scatter" by, 76
- small business and, 36
- as spearhead of economic progress, 31-33
- as special type of worker, 30
- transmission of control to, through financial mechanism, 43 ff.
- Equity arrangements, 48
- Equity financing corporations, 130-131
- Estate tax, federal, 76
- Failures, business, see Business failures
- Fear, effect of, on credit policy, 135
- removal of, 138-140
- Federal Reserve Board, 61, 66
- restriction of created credit by, 136
- Finance, and economic growth, 44-49
- institutional structure of, 88
- as primary sphere of capitalism, 7-8
- Finance companies, rates charged by, 62
- Financial centralization, impact of, on interest rates and credit access, 81-85
- vs. new enterprise "scatter," 75-81
- Financial channels, 77-80
- Financial obstacles, to stabilized economic growth, 57-169
- Financial problems, education for, 122
- Fiscal policy, 151-160
- Fisher, Irving, 134 n.
- Free bargaining, 29
- Freedom, individual, 26
- obstacles to, in democratic capitalist economy, 26
- productive power of, 168
- Friedman, Milton, 134 n., 149 n.
- Full employment, 17
- General government, functions of, 25
- George, Edwin B., 129
- Goldsmith, Raymond W., 76
- Goods and services, demand for, 75
- Government, functions of, in democratic capitalist society, 25
- Government borrowing, 156-160
- wartime, 108-109
- Government control, 25, 27-28
- Government expenditures, 152-155
- Government fiscal policy, 151-160
- clarification and coordination of, 155
- need for, 119
- Government monetary policy, 144-151
- Government money, creation of, 149
- Government spending programs, 150
- Governmental activities, perspective in, 160-161
- Governmental finance, 8
- Governmental powers, wise use of, 140-143
- Governmental works and services, 152-155

- Growth process, in capitalist economy, 90-95
 see also Dynamic growth
- Hart, Albert G., 159 n.
- High-credit economy, 99
- Holmes, Lois E., 62, 68
- Human knowledge, increase of, 3
- Human wants, increase of, 9-17
- Ideas, new, and economic progress, 34, 70, 91
- Income tax, excessive, 112
- Incorporation, 123-124
- Independence, desire for, 124-125
- Individual freedom, degree of, 26
- Inflation, and money supply, 102
 wartime, 108
- Innovation, and economic progress, 91 ff.
- Internal combustion engine, 34
- Interest, defined, 59
 vs. profit, 64-65
- Interest rate, differences in, 59-74
 general level and average values, 1920-1954, 71-72
 gross vs. net, 60
 institutional foundations of, 75-89
 lessening of differences in, 85-89
 possible increases in, 70
 reduction in, 86-87
- International trade, special problems of, 164
- Jacoby, Neil H., 62
- Labor, as control group, 27
- Land, vs. producer's goods, 37
- Leadership talent, selection of, 23
- Life insurance companies, financing of
 new enterprise by, 131-133
- Loan arrangements, 48
- Loan corporations, in-between, 128
- Loan credit, 48
 long-term, 78
- Loan-credit arrangements, 96
 see also Credit
- Loan insurance, 142
- Loans, control through, 39
- Macaulay, Frederick R., 73
- Maine Development Credit Corporation, 128
- Mendershausen, Horst, 76
- Monetary policy, 144-151
 governmental, 119 ff.
- Money, vs. capital, 48
 creation of, by commercial banking system, 52-53
 cyclical breakdown and, 100-112
 excessive variation in supply of, 106
 financial linkage between capital and enterprise, 46-48
 fluctuations in supply and volume of, 111, 168-169
 and government control of credit, 106
 need for adequate supply of, 118-119
 variations in volume and supply of, 106, 111, 168-169
 wartime contraction of, 109-110
- Money mechanism, 105-106
- Money needs, 103-105, 118-119
- Money supply, and created credit, 147-148
 excessive variations in, 106
 fluctuations in, 168-169
- Money system, credit process and, 47
- Monopolistic power, 164
- Mortgage loans, rates for, 71
- Natural resources, allocation of, in production, 15-16
 and increased productivity, 14-15
- Neal, Alfred G., 128 n.
- New enterprise, impact of, on economic progress, 69-70
- New enterprise scatter, vs. financial centralization, 75-81
- New enterpriser, high cost of credit to, 82
 see also Enterprise; Enterpriser
- New ideas, economic progress and, 34, 70, 91
- Noncorporate enterprise, 48
- Noncyclical expansion, and government spending, 153
- Notenstein, Frank W., 12
- Old-age pensions, private, 112
- Peace, and economic growth, 166
- Perspective, developing of, 121-123
 see also Economic understanding

- Physical resources, 37
- Population, downward pressure of, 10
 - and economic growth, 166
 - U. S., doubling of, 165
 - world, doubling of, 3
- Population growth, economic welfare and, 9-11
- Population growth rates, 11-13
- Population pressure, 12
- Prices, and money supply, 102-103
- Private debt, long-term, 79
- Private enterprise, 4
 - see also Enterpriser
- Private enterprisers, leadership and, 162
 - see also Enterpriser
- Private ownership, capitalism and, 38
- Private property, 4
- Production and employment objectives, 17-18
- Production task, perspectives on, 6
- Productivity, and natural resources, 14-15
- Profit, assurance of, 65
 - and enterprise function, 41
 - vs. interest, 64
 - significance of, 42
- Property owners, in democratic society, 24
- Prosperity, U. S., and population growth, 3-4
- Public debt, ownership of, 79
- Public works and services, 152-155
- Recessions, normal, 93-95
- Rediscount rate, 66
- Resources, natural, see Natural resources
- Retardation, economic, see Economic retardation
- Schumpeter, Joseph A., 34, 92 n., 94, 95 n.
- Securities and Exchange Commission, 64
- Saulnier, Raymond J., 63 n., 73 n., 105 n.
- Simons, Henry C., 134
- Small business, combining of, 125-126
 - direct lending to, 142
 - excessive number of enterprisers in, 121
- Small business—Continued
 - prime significance of, 35
 - see also Enterpriser
- Soviet Union, 38
- Standard of living, increasing, 5, 165
- Stock, sale of, by enterprisers, 63-64
- Stockholders, control exercised by, 40
- Supply and demand, modification of, 88-89
- Tax policy, 156
- Tax rates, corporate, 156
- Tax system, and government fiscal policy, 151
- Tax wealth, 77 n.
- Television industry, 34
- Term loan, 96-97
- Trade credit, cost of, 62
 - see also Credit
- Understanding and perspective, developing of, 121-123
 - see also Economic understanding
- Unemployment, elimination of, 17
- Unemployment insurance, 112
- United States
 - Bureau of the Census, 13
 - as case of capitalism, 169
 - Department of Commerce, 62, 68
 - doubling of population, 1900-1950, 3, 165
 - rate of population increase in, 11-12
 - total wealth, 1944, 76
- Wage rates, and productivity advances, 164
- War expansion, 106-110
- War finance, 106-110
- Warburton, Clark, 105
- Wealth, 37
 - total U. S., 76
- Wealth pyramid, 77
- Wernette, John Philip, 105 n., 149 n.
- Workers, defined, 30
 - in democratic society, 24
- World population, doubling of, 3, 11-12
- Woytinsky, W. S. and E. S., 12
- Youngdahl, Richard, 61

Set in Linotype Electra
Format by Marguerite Swanton
Manufactured by The Haddon Craftsmen, Inc.
Published by HARPER & BROTHERS, New York