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**THE FORMATION OF CAPITAL**

# THE FORMATION OF CAPITAL

BY

HAROLD G. MOULTON

WASHINGTON, D. C.

THE BROOKINGS INSTITUTION

1935

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Published February 1935

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*Printed in the United States of America*

Judd & Detweiler, Inc.

Washington, D. C.

## DIRECTOR'S PREFACE

This book is the third in a series of four volumes which present the results of a study of the *Distribution of Wealth and Income in Relation to Economic Progress*. The study is being conducted under the personal direction of Harold G. Moulton with funds granted by the Maurice and Laura Falk Foundation of Pittsburgh. The scope of this book and its relation to the others in the series are fully described in the Foreword.

In the preparation of the volume, Hugo Bezdek, Jr. acted as general assistant to the author; Malcolm Merriam aided in the assembling of the data used in Chapter IX; and Robert Weidenhammer, of the University of Minnesota, assisted in the compilation of the data used in Chapter X.

The committee which passed on the manuscript consisted of Leo Pasvolsky, Cleona Lewis, and Charles O. Hardy, with the Director ex-officio. Mr. Hardy is not convinced of the validity of some of the conclusions reached in Chapter X.

EDWIN G. NOURSE

*Director*

Institute of Economics

February, 1935

## CONTENTS

	Page
DIRECTOR'S PREFACE.....	vii
FOREWORD: RELATION TO A LARGER STUDY.....	I
CHAPTER I	
THE NATURE AND SIGNIFICANCE OF CAPITAL.....	7
The Meaning of Capital.....	8
Capital Formation under Primitive Conditions.....	11
Capital Creation in a Communistic Society.....	12
Capital Formation in a Capitalistic Society.....	13
CHAPTER II	
THE FLOW OF MONEY INCOME.....	16
The Disposition of Income.....	17
The Financial and Business Structure.....	21
CHAPTER III	
IS THERE AN ECONOMIC DILEMMA?.....	26
The Nature of the Dilemma.....	28
The Process Illustrated.....	29
A Primary Conclusion.....	35
CHAPTER IV	
THE RELATION OF CONSUMPTION TO CAPITAL FORMA-	
TION .....	37
The Classical Road to Progress.....	37
Consumptive Demand and Demand for Capital.....	41
Concurrent Increase of Consumption and Capital	
Formation .....	43
Conclusions .....	47
CHAPTER V	
WHICH LEADS: CONSUMPTION OR CAPITAL FORMATION?	49
Conflicting Theories of Recovery.....	50
Does Depression Begin with Curtailment of Capital	
Construction? .....	55

	Page
Does Recovery Begin with the Extension of Capital Construction? .....	59
Residential Construction and Business Fluctuations....	67
New Industries in Relation to Recovery.....	69
Conclusions .....	70
CHAPTER VI	
COMMERCIAL BANKS AND THE SUPPLY OF FUNDS.....	75
How the Commercial Banking System Manufactures Credit .....	77
Evolution of the Credit Structure in the United States	84
CHAPTER VII	
THE PURPOSES FOR WHICH COMMERCIAL BANKS EX- TEND CREDIT.....	91
The Original Character of the "Commercial" Bank...	91
Investment Operations of Commercial Banks.....	92
CHAPTER VIII	
COMMERCIAL BANKS AND CAPITAL FORMATION.....	100
The Central Position of Commercial Banks.....	101
The Process of Simultaneous Expansion.....	102
Limitations upon Expansion.....	108
The Long-Run Growth of Capital.....	112
Credit Expansion and the Level of Prices.....	114
CHAPTER IX	
THE FORMATION OF PUBLIC CAPITAL.....	119
The Character and Growth of Public Capital.....	120
Federal Government Expenditures for Capital Purposes, 1930-34 .....	125
How Public Capital Development is Financed.....	130
CHAPTER X	
THE MALADJUSTMENT BETWEEN SAVINGS AND CON- SUMPTION .....	136
The Disproportionate Increase of Investment Funds...	136
The Restricted Rate of Capital Formation.....	138
What Becomes of "Excess" Savings?.....	140

**CONTENTS** xi

**CHAPTER XI** Page

**CONCLUSIONS** ..... 155

**APPENDIX A**

**OTHER ANALYSES OF THE SAVINGS PROCESS** ..... 163  
The Theory of F. A. von Hayek ..... 164  
Benjamin M. Anderson's Analysis ..... 166  
The Critique of E. F. M. Durbin ..... 169  
John A. Hobson's Theory of Under-Consumption .... 173  
The Viewpoint of Foster and Catchings ..... 177  
The Diagnosis of Major C. H. Douglas ..... 179  
A Recent Contribution by Paul H. Douglas ..... 181

**APPENDIX B**

**NATIONAL WEALTH AND CAPITAL, 1929** ..... 185

**APPENDIX C**

**PRODUCTIVE vs. UNPRODUCTIVE CAPITAL FINANCING**... 190

**APPENDIX D**

**STATISTICAL TABLES** ..... 193  
**INDEX** ..... 205

## FOREWORD

### RELATION TO A LARGER STUDY

This is the third of four volumes devoted to an analysis of the relation of the distribution of national wealth and income to economic progress. The purpose of the investigation as a whole is to determine whether the existing distribution of income in the United States among various groups in society tends to impede the efficient functioning of the economic system.

The study is concerned with something deeper than the causes of business depressions. The economic system, for some reason, never succeeds in operating at full capacity. It has been observed that even in periods of prosperity we have some unutilized plant and equipment and a considerable volume of unemployment. This situation not unnaturally suggests that there must be some basic maladjustment which seriously impedes the operation of the economic machine by means of which the material wants of society are supplied.

The fact that business enterprises seldom produce at full capacity, and that the greatest problem of business managers appears to be to find adequate markets for their products, has raised in the minds of many business men and economists the question, Is not the primary difficulty a lack of purchasing power among the masses? This leads at once to the correlative question, What is the bearing of the distribution of income upon the demand for the products of industry? Concretely, if a larger percentage of our annual income were somehow made available to the purchasers of consumption goods,

would not business managers find it profitable to utilize existing capital equipment more fully, thereby giving to the masses of people higher standards of living, and at the same time promoting a steadier and more rapid rate of economic progress?

In endeavoring to throw light upon the great problem with which we are here concerned, we divided this investigation into four major parts. In the first volume, entitled *America's Capacity to Produce*, we attempted to get an objective and comprehensive picture of our economic society as a producing mechanism. To what extent had we piled up excess productive capacity in the United States during the boom period of the late 1920's? Was the amount of unused capacity increasing over the three decades from 1900 to 1930? We chose this period for study in order to focus attention upon the situation at its best—in a period of great technological advancement.

The conclusions reached may be briefly summarized as follows: Idle productive capacity is not a phenomenon that appeared for the first time in the years just preceding the collapse of 1929. On the contrary, a considerable amount of unutilized capacity existed throughout the period under review. However, with the exception of transportation and a few other special lines, we found in general no persistent increase in the percentage of unutilized capacity. At the height of the boom period the amount of idle capacity, expressed in terms of a generalized figure, was something like 20 per cent. In periods of depression this percentage is, of course, very greatly increased—rising perhaps as high as 50 per cent in the current depression.

In the second volume, *America's Capacity to Consume*, we directed our inquiry to the division of the

money income which arises out of the nation's productive operations. This investigation and analysis was divided into three major parts. In Part I we showed, as accurately as available data would permit: (1) The amount of the national income and the extent of its increase during the first three decades of the twentieth century; (2) the division among the various claimants, such as wage earners and investors, and among the various income groups; and (3) its distribution on a geographic basis.

In Part II we indicated how those who receive the national income dispose of it. We showed (1) the allocation of expenditures among the major types of consumers' goods; (2) how the amount that is spent for consumptive purposes by the several income groups compares with the amount which is saved, and the bearing of this apportionment upon the division of aggregate income as between spending and saving; and (3) whether there was any tendency during the period from 1900 to 1930 for the proportion of the aggregate income set aside as savings to increase as compared with the amount devoted to consumptive purposes.

In Part III, entitled "The Relation of Consumption and Production," our findings were related in a broad general way to the conclusions reached in the preceding volume. We indicated the extent to which the demand for consumption goods would be modified by comparatively slight increases in the purchasing power of the lower income groups and compared these consumptive potentialities with the existing productive capacity of the nation. Finally, the analysis was related to certain important current issues, such as the fear of persistent over-production and consequent demand for restriction of output, the amount of leisure that is compatible with

high standards of living, and the necessary length of the working day.

The conclusions which pertain specifically to the primary issue with which the larger investigation is concerned were as follows: First, the masses of the people had very low standards of living and were able to make savings of negligible importance. Second, the productive capacity of the United States was not adequate to turn out sufficient goods and services to satisfy the unfulfilled consumptive desires of the American people as a whole. Third, owing to the uneven distribution of the national income the bulk of the national savings is made by a small fraction of the population. Fourth, the increasing number of people in the higher income brackets as the years have passed, and particularly in the decade of the twenties, has led to the diversion into savings as distinguished from consumptive channels of an increasing percentage of the total national income.

These two volumes carried us a considerable distance toward an understanding of the modern economic system. They revealed, on the one hand, a persistent failure to make full use of our productive resources, and, on the other, a chronic state of under-consumption on the part of the great masses of the people. It is clearly apparent that consumptive requirements and productive possibilities are not satisfactorily articulated. The uneven distribution of income evidently has an important bearing on the problem.

Before reaching any final conclusions as to the source of our economic difficulties it is necessary to give consideration to the process of capital formation. Having found that an increasing proportion of the national income tends to be saved rather than spent for consumptive purposes, we must inquire whether the result is to

accelerate or retard the growth of capital. This is the task of the present volume. Then in the fourth volume—*Income and Economic Progress*—we shall bring together the various segments of our investigation for purposes of integration and interpretation with a view to indicating ways and means of bringing about a more effectively functioning economic system.

In this analysis of capital formation it is not our objective to make a quantitative study either of the accumulation of investments by the American people or the growth of the national supply of productive capital. The purpose is rather to analyze the process of capital creation and the factors which govern the rate of growth of plant and equipment. National income is received by individuals chiefly in the form of money, and the savings of individuals are made, in the first instance, in the form of bank deposits, insurance payments, or investments in securities. Before actual productive capital can eventuate, these money savings of individuals have to be used by business enterprisers in employing labor and materials in the building of new plant and equipment.

In the present volume we attempt accordingly to reveal what is involved in converting monetary savings into actual additions to capital equipment. We consider especially the connection between consumptive demand and the creation of new capital and the part which financial institutions, particularly commercial banks, have come to play in the process of capital formation. The conclusions reached as to the forces which control the growth of capital will be found fundamentally at variance with traditional views on the subject.

The present study was foreshadowed by the author in a series of articles published in the *Journal of Political*

*Economy* in 1918. The tentative analysis there presented has here been developed and elaborated. Thanks to the accumulation in the intervening years of more adequate statistical data, it has now been possible to subject some of the major issues involved to the test of factual verification.

## INDEX

## INDEX

- Agriculture, in relation to recovery, 60-64
- America's Capacity to Consume*, 16, 17, 19, 136, 140, 141, 151, 153
- America's Capacity to Produce*, 109, 111, 112, 139, 140
- Anderson, B. M., 166-69
- Automobiles, 57, 70
- Banks. *See* Commercial banks and investment banking institutions
- Buyer's strike, 58
- Capital, confusing definitions of, 51-53  
definition of, 8, 9  
long-run growth of, 112-14  
nature and significance of, Chap. I.  
*See also* Public capital
- Capital equipment, 109, 110
- Capital financing, 190-92
- Capital formation, and commercial banks, Chap. VIII  
classical analysis of, 27, 37-41, 156  
conflicting theories of, 50-54  
consumptive demand and, 41-43, 152, 153, 157  
factual analysis of, in depression, 56-59  
in recovery, 59-70  
indexes of consumption and, 45, 46, 56, 57, 66, 67, 109, 115, 193  
in primitive societies, 11-12  
relation of consumption to, Chap. IV  
restricted rate of, 138-40, 152, 153  
simultaneous increase of consumption and, 43-47  
which leads—consumption or, Chap. V
- Capital formation (*continued*), under capitalism, 13-15  
under communism, 12-13
- Capital goods, demand for derived from consumption, 42  
in relation to depression, 56-59  
in relation to recovery, 59-70
- Catchings, Waddill, 177-79
- Clark, Victor S., 44
- Commercial banks, and the economic system, 103  
and the manufacture of credit, 77-84  
and the supply of funds, Chap. VI  
central position of in the economic system, 101-03  
deposits and notes of national, 86, 87, 194, 195, 196  
evolution of credit structure of, 84-90  
investment operations of, 93  
loans and investments of national, 86, 87, 93-99  
original character of, 91, 92  
reserves of national, 87-89
- Commercial and Financial Chronicle*, 143, 144, 198-201
- Construction, building permits, 67  
contracts awarded, 56, 68  
other, 69  
residential and business fluctuations, 67-69
- Corporate issues, character and grouping of, 200, 201
- Credit, expansion and the level of prices, 114-18  
purposes for which commercial banks extend, Chap. VII

- Credit resources, adequacy of, 111, 112
- Depression,  
and residential construction, 69  
of 1929, 57
- Depressions, analysis of, 56-59
- Dilemma,  
description of, 30-35  
in graphic form, 31  
is there an economic, Chap. III  
nature of, 28, 29
- Douglas, C. H., 179-81
- Douglas, Paul H., 181-84
- Durable goods, 9, 10
- Durable Goods Industries Com-  
mittee, 51
- Durbin, E. F. M., 169-73
- Financial markets, 24
- Ford Company, 57, 147
- Foster, W. T., 177-79
- Funds,  
current flow of, 18  
limits on expansion of, 108-12  
simultaneous expansion of, 103-  
08
- Greenbacks, 62, 134
- Hamilton, Walton H., 40
- Hansen, Alvin H., 117
- Hardy, Charles O., 94
- Hobart, Alice Tisdale, 73
- Hobson, John A., 173-76
- Housing. *See* Construction
- Income,  
control of flow of, 21-25  
disposition of, 17-21. *See also*  
Funds, current flow of  
flow of money, Chap. II  
nature of the flow, 16, 17
- Industries,  
growth of, 149, 150  
new, in relation to recovery, 69,  
70
- Institutions, financial and busi-  
ness, 22
- Investment banking institutions,  
23, 24, 36
- Investment funds,  
compared with security flota-  
tions, 141-52, 198-201. *See*  
*also* New financing
- Investment funds (*continued*),  
disproportionate increase of,  
136  
excess of, 159, 160
- Investments,  
national bank holdings of other  
securities, 93, 99  
national bank holdings of U. S.  
securities, 93-99
- Johnson, Alvin S., 40
- Kuznets, Simon, 46, 58, 193
- Labor supply, adequacy of, 110,  
111
- Leather and shoes, 57
- Loans,  
national bank,  
secured, 93-99  
unsecured, 93-99  
real estate, 93-99
- Mills, Frederick C., 45
- Mitchell, Wesley C., 67
- Moody's *Investors' Service*, 144,  
145, 152
- National wealth and capital, 185-  
89
- New financing, 198-99  
character and growth of, 200,  
201. *See also* Investment  
funds
- Noyes, Alexander D., 62
- Panics, 58, 60  
in foreign countries, 59
- Partington, John E., 63
- Prices,  
credit expansion and the level  
of, 114-18  
movement of wholesale com-  
modity, 116
- Public capital,  
financed by  
local government, 123-25, 197  
national government, 121, 122,  
125-31, 197  
state government, 123-25, 197
- Public debt, growth of and sources  
of funds, 1929-34, 132-35,  
197
- Public utility holding companies,  
growth of, 148

- Public Works Administration, expenditures of, 126, 128
- Publications of Brookings Institution, 203-13
- Railroad,  
in relation to business cycles, 59, 61, 63, 64  
purchasing and the business cycle, 63
- Reconstruction Finance Corporation,  
expenditures of, 126, 129  
repayments to, 135
- Recovery,  
and new industries, 69, 70  
and residential construction, 67-69  
conflicting theories of, 50-54
- Residential construction. *See* Construction
- Riggleman, John R., 68
- Roundabout process of production, 15, 27
- Savings,  
corporate, 22, 141  
dissipation of "excess," 150-54  
excess of, 159-60  
flow of, 23, 24  
individual, 22, 141  
maladjustment with consumption, Chap. X  
transformation of, into capital equipment, 26, 31
- Security values, inflation of, 147, 149
- Standard Trade and Securities Service*, 150
- Terborgh, George, 143
- Textiles, 57
- United States notes. *See* Greenbacks
- Villiers, Brougham, 73
- Viner, Jacob, 94
- Von Hayek, F. A., 164-66
- War supplies, 65

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