Some Theoretical Problems suggested by
THE MOVEMENTS OF INTEREST RATES,
BOND YIELDS AND STOCK PRICES
IN THE UNITED STATES SINCE 1856

FREDERICK R. MACAULAY

NATIONAL BUREAU OF ECONOMIC RESEARCH

NEW YORK · 1938
Some Theoretical Problems suggested by
THE MOVEMENTS OF INTEREST RATES,
BOND YIELDS AND STOCK PRICES
IN THE UNITED STATES SINCE 1856
Officers

JOSEPH H. WILLITS, Chairman
GEORGE SOULE, President
DAVID FRIDAY, Vice-President
SHEPARD MORGAN, Treasurer
JOSEPH H. WILLITS, Executive Director
W. J. CARSON, Assistant Executive Director
MARThA ANDERSON, Editor

Directors at Large

CHESTER I. BARNARD, President,
New Jersey Bell Telephone Company
HENRY S. DENNISON, Dennison Manufacturing Company
GEORGE M. HARRISON, President,
Brotherhood of Railway and Steamship Clerks
OSWALD W. KNAUTH, President, Associated Dry Goods Corporation
HARRY W. LAIDLER, Executive Director,
The League for Industrial Democracy
L. C. MARSHALL, Johns Hopkins University
GEORGE O. MAY, Price, Waterhouse and Company
SHEPARD MORGAN, Vice-President, Chase National Bank
BEARDSLEY RUMIL, Treasurer, R. H. Macy and Company
GEORGE SOULE, Director, The Labor Bureau, Inc.
N. I. STONE, Industrial and Financial Consultant

Directors by University Appointment

WILLIAM L. CRUM, Harvard          HARRY ALVIN MILLIS, Chicago
WALTON H. HAMILTON, Yale           WESLEY C. MITCHELL, Columbia
HARRY JEROME, Wisconsin            JOSEPH H. WILLITS, Pennsylvania

Directors Appointed by Other Organizations

FREDERICK M. FEIKER, American Engineering Council
DAVID FRIDAY, American Economic Association
LEE GALLOWAY, American Management Association
MALCOLM MUIR, National Publishers Association
WINFIELD W. RIEFLER, American Statistical Association
GEORGE E. ROBERTS, American Bankers Association
MATTHEW WOLL, American Federation of Labor

Research Staff

WESLEY C. MITCHELL, Director

ARTHUR F. BURNS          FREDERICK R. MACALAY
SOLOMON FABRICANT         FREDERICK C. MILLS
SIMON KUZNETS            LEO WOLMAN
EUGEN ALTSCHUL, DAVID L. WICKENS, Associates
RELATION OF THE DIRECTORS
TO THE WORK OF THE NATIONAL BUREAU
OF ECONOMIC RESEARCH

1. The object of the National Bureau of Economic Research is to ascertain and to present to the public important economic facts and their interpretation in a scientific and impartial manner. The Board of Directors is charged with the responsibility of ensuring that the work of the Bureau is carried on in strict conformity with this object.

2. To this end the Board of Directors shall appoint one or more Directors of Research.

3. The Director or Directors of Research shall submit to the members of the Board, or to its Executive Committee, for their formal adoption, all specific proposals concerning researches to be instituted.

4. No study shall be published until the Director or Directors of Research shall have submitted to the Board a summary report drawing attention to the character of the data and their utilization in the study, the nature and treatment of the problems involved, the main conclusions and such other information as in their opinion will serve to determine the suitability of the study for publication in accordance with the principles of the Bureau.

5. A copy of any manuscript proposed for publication shall also be submitted to each member of the Board. If publication is approved each member is entitled to have published also a memorandum of any dissent or reservation he may express, together with a brief statement of his reasons. The publication of a volume does not, however, imply that each member of the Board of Directors has read the manuscript and passed upon its validity in every detail.

6. The results of an inquiry shall not be published except with the approval of at least a majority of the entire Board and a two-thirds majority of all those members of the Board who shall have voted on the proposal within the time fixed for the receipt of votes on the publication proposed. The limit shall be forty-five days from the date of the submission of the synopsis and manuscript of the proposed publication unless the Board extends the limit: upon the request of any member the limit may be extended for not more than thirty days.

7. A copy of this resolution shall, unless otherwise determined by the Board, be printed in each copy of every Bureau publication.

(Resolution of October 25, 1926, revised February 6, 1933)
To

My Friend

WESLEY CLAIR MITCHELL
ACKNOWLEDGMENTS

I wish to thank sincerely Miss E. Gail Benjamin, who aided me in the earlier stages of the statistical work of this book, Miss Celeste Nason, who assisted me later, and Miss Dorothy Achilles, who was in charge of that work as the book went to press. Miss Achilles made most of the calculations and drew all the charts.

To Miss Martha Anderson goes deep appreciation of her careful editorial scrutiny and of the laborious work of seeing the book through the press.

I am grateful to the Metropolitan Life Insurance Company for clerical aid in the collection of bond prices and the calculation of yields. My friend, the late Walter Case, defrayed the expenses of collecting stock prices and constructing the stock price index numbers.

To Dr. Wesley C. Mitchell I am indebted not merely for scientific and scholarly criticism throughout the course of the study, but also for a friendship without which it is literally and exactly true that this book would never have been written.

F. R. M.