

This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: Conference on Research in Business Finance

Volume Author/Editor: Universities-National Bureau

Volume Publisher: NBER

Volume ISBN: 0-87014-194-5

Volume URL: <http://www.nber.org/books/univ52-1>

Publication Date: 1952

Chapter Title: Table of contents, foreword

Chapter Author: Universities-National Bureau, Simon Kuznets

Chapter URL: <http://www.nber.org/chapters/c4782>

Chapter pages in book: (p. -21 - 0)

\$5.00

# Conference on Research in Business Finance

*Held under the auspices of*

UNIVERSITIES-NATIONAL BUREAU

COMMITTEE FOR ECONOMIC RESEARCH

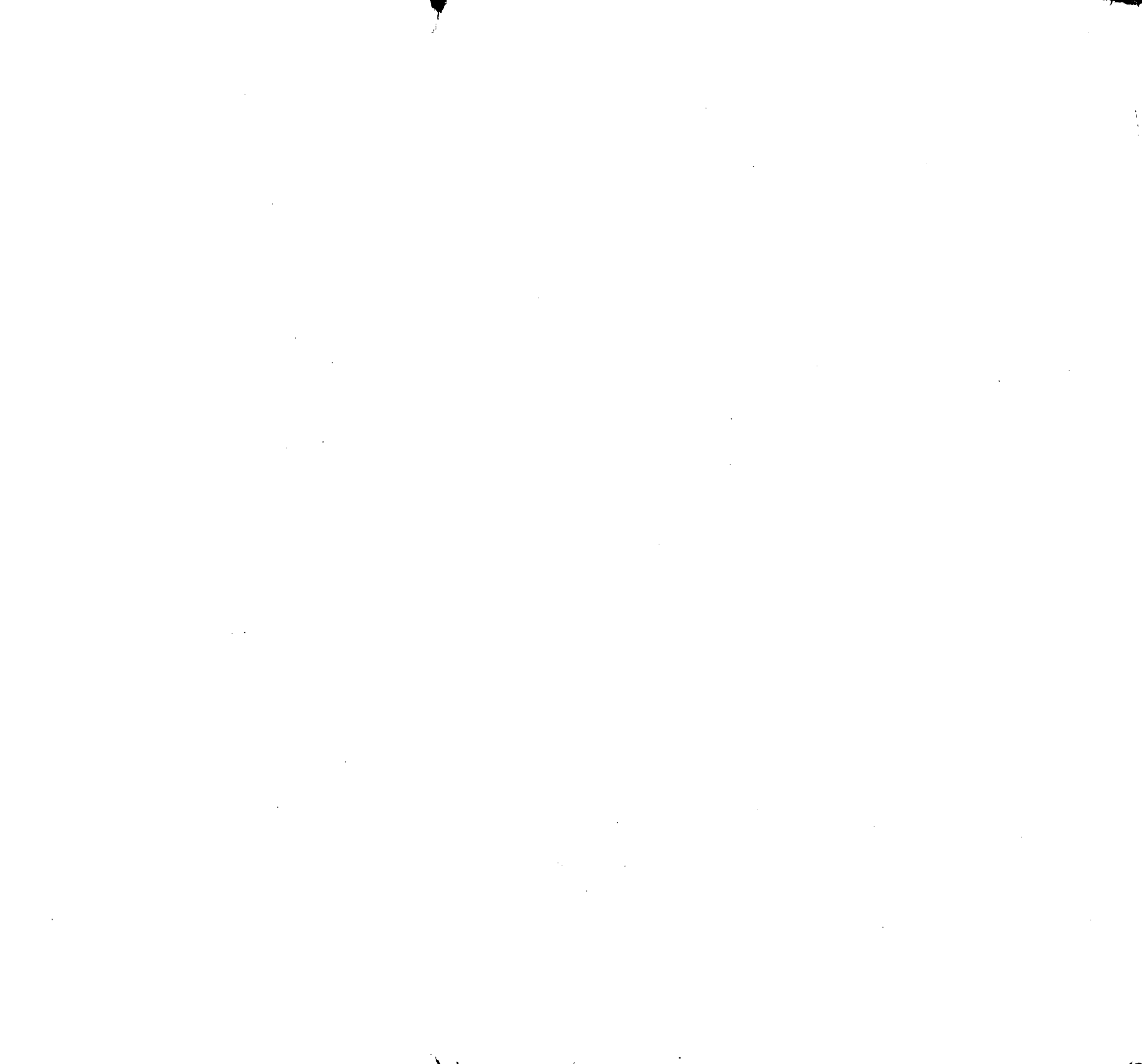
The aims of the Conference on Research in Business Finance, called by the Universities-National Bureau Committee for Economic Research in June 1950, are stated by Simon Kuznets in his introduction to this volume of conference papers and discussions. The participants included representatives of universities, government agencies, industrial concerns, and financial institutions.

Research on sources and uses of corporate funds is the opening topic, on which Loughlin F. McHugh, Charles H. Schmidt, and Lawrence Bridge contribute papers. These deal, respectively, with a Department of Commerce project for developing a reliable historical series on fund sources and uses, the inadequacy of data on the relationship between business size and financing practices, and the problems of financial research on new and small businesses.

NATIONAL BUREAU OF ECONOMIC RESEARCH

NEW YORK

1952



OFFICERS, 1952

Harry Scherman, *Chairman*  
C. C. Balderston, *President*  
Percival F. Brundage, *Vice-President*  
George B. Roberts, *Treasurer*  
W. J. Carson, *Executive Director*

DIRECTORS AT LARGE

Donald R. Belcher, *American Telephone and Telegraph Company*  
Oswald W. Knauth, *Beaufort, South Carolina*  
Simon Kuznets, *University of Pennsylvania*  
H. W. Laidler, *Executive Director, League for Industrial Democracy*  
Shepard Morgan, *New York City*  
C. Reinold Noyes, *Princeton, New Jersey*  
George B. Roberts, *Vice-President, National City Bank*  
Beardsley Ruml, *New York City*  
Harry Scherman, *Chairman, Book-of-the-Month Club*  
George Soule, *Bennington College*  
N. I. Stone, *Consulting Economist*  
J. Raymond Walsh, *New York City*  
Leo Wolman, *Columbia University*  
Theodore O. Yntema, *Vice President-Finance, Ford Motor Company*

DIRECTORS BY UNIVERSITY APPOINTMENT

E. Wight Bakke, <i>Yale</i>	Gottfried Haberler, <i>Harvard</i>
C. C. Balderston, <i>Pennsylvania</i>	Clarence Heer, <i>North Carolina</i>
Arthur F. Burns, <i>Columbia</i>	R. L. Kozelka, <i>Minnesota</i>
G. A. Elliott, <i>Toronto</i>	Paul M. O'Leary, <i>Cornell</i>
Frank W. Fetter, <i>Northwestern</i>	T. W. Schultz, <i>Chicago</i>
H. M. Groves, <i>Wisconsin</i>	Jacob Viner, <i>Princeton</i>

DIRECTORS APPOINTED BY OTHER ORGANIZATIONS

Percival F. Brundage, *American Institute of Accountants*  
Frederick C. Mills, *American Statistical Association*  
S. H. Ruttenberg, *Congress of Industrial Organizations*  
Murray Shields, *American Management Association*  
Boris Shishkin, *American Federation of Labor*  
Donald H. Wallace, *American Economic Association*  
Frederick V. Waugh, *American Farm Economic Association*  
Harold F. Williamson, *Economic History Association*

RESEARCH STAFF

Arthur F. Burns, *Director of Research*  
Geoffrey H. Moore, *Associate Director of Research*  
Moses Abramovitz, *F. F. Hill*  
Harold Barger, *Thor Hultgren*  
Morris A. Copeland, *Simon Kuznets*  
Daniel Creamer, *Clarence D. Long*  
David Durand, *Ruth P. Mack*  
Solomon Fabricant, *Frederick C. Mills*  
Milton Friedman, *Raymond J. Saulnier*  
Millard Hastay, *Lawrence H. Seltzer*  
W. Braddock Hickman, *George J. Stigler*  
Leo Wolman

RELATION OF NATIONAL BUREAU DIRECTORS TO  
PUBLICATIONS REPORTING CONFERENCE PROCEEDINGS

Since the present volume is a record of conference proceedings, it has been exempted from the rules governing submission of manuscripts to, and critical review by, the Board of Directors of the National Bureau. It has, however, been reviewed and accepted for publication by the Director of Research.

*(Resolution adopted July 6, 1948  
and revised November 21, 1949)*

## *SPECIAL CONFERENCE SERIES*

---

- 1 Problems in the Study of Economic Growth
- 2 Conference on Business Cycles
- 3 Conference on Research in Business Finance

UNIVERSITIES-NATIONAL BUREAU COMMITTEE FOR ECONOMIC RESEARCH

This Committee is a cooperative venture of universities and the National Bureau. Its guiding objective is the encouragement of economic research on problems susceptible of objective treatment and of sufficiently broad scope to merit attention by institutions serving a scientific and public interest

SIMON KUZNETS, Chairman  
*University of Pennsylvania*

I. L. SHARFMAN, Vice-Chairman  
*University of Michigan*

V. LEWIS BASSIE, *University of Illinois*

JOHN D. BLACK, *Harvard University*

FRANCIS M. BODDY, *University of Minnesota*

ARTHUR F. BURNS, *National Bureau of Economic Research*

JAMES S. EARLEY, *University of Wisconsin*

G. HEBERTON EVANS, JR., *The Johns Hopkins University*

R. A. GORDON, *University of California*

ALBERT G. HART, *Columbia University*

M. S. HEATH, *University of North Carolina*

RICHARD B. HEFLEBOWER, *Northwestern University*

BENJAMIN H. HIGGINS, *McGill University*

EDGAR M. HOOVER, *Washington, D. C.*

A. D. H. KAPLAN, *The Brookings Institution*

DEXTER M. KEEZER, *McGraw-Hill Publishing Company*

M. SLADE KENDRICK, *Cornell University*

ADOLPH LOWE, *New School for Social Research*

D. C. MACGREGOR, *University of Toronto*

OSKAR MORGENSTERN, *Princeton University*

WILLIAM G. MURRAY, *Iowa State College of Agriculture and Mechanic Arts*

LLOYD G. REYNOLDS, *Yale University*

PAUL A. SAMUELSON, *Massachusetts Institute of Technology*

T. W. SCHULTZ, *University of Chicago*

HAROLD M. SOMERS, *University of Buffalo*

JOSEPH J. SPENGLER, *Duke University*

EMANUEL STEIN, *New York University*

GEORGE W. STOCKING, *Vanderbilt University*

JOHN R. STOCKTON, *University of Texas*

M. C. URQUHART, *Queen's University*

RUTLEDGE VINING, *University of Virginia*

HOLBROOK WORKING, *Stanford University*

Conference on  
Research in Business Finance

*Held under the auspices of*

UNIVERSITIES-NATIONAL BUREAU

COMMITTEE FOR ECONOMIC RESEARCH

NATIONAL BUREAU OF ECONOMIC RESEARCH, INC.

*NEW YORK, 1952*



Copyright, 1952, by National Bureau of Economic Research, Inc.

1819 Broadway, New York 23. All rights reserved

Typography by Oscar Leventhal, Inc.

Presswork and binding by H. Wolff Book Manufacturing Co., Inc.

*Library of Congress catalog card number: 52-7305*

## FOREWORD

SIMON KUZNETS

*Chairman,*

*Universities-National Bureau*

*Committee for Economic Research*

### I

In deciding to devote one of its conferences to a discussion of research in business finance, the Universities-National Bureau Committee was guided by certain convictions: that important investigation in this field has developed along several lines in recent years; that men actively engaged in such investigation would both welcome and profit from an opportunity to set their conclusions down on paper and throw them open to discussion; and that from such concerted exploration would emerge a clearer view of the field and of the limits of our knowledge, as well as a sharpened sense of direction for future work. The soundness of these convictions was confirmed by the willingness with which scholars in the field accepted the task of preparing papers or comments when invited to do so; by their readiness to participate in the conference through the three days, June 19-21, 1950, over which it was held; and by the efforts many subsequently made to revise their papers and comments for publication.

That the conference was as successful as it was, and that it yielded a gratifying return — both tangible in the papers and discussion assembled in this volume and intangible in the intellectual sparks that were struck in the meetings — was, in large part, due to the Planning Committee in charge. This Committee, of which C. R. Whittlesey was chairman, R. J. Saulnier, secretary, and James S. Earley, Irwin Friend, and Albert R. Koch (serving for Ralph A. Young) were members, labored for two years prior to the conference. It mapped out the field, formulated topics for the papers, found the scholars competent and ready to prepare them, selected and invited the discussants, set the time sequence and the general mechan-

ics of the meeting, and, finally, chose the participants, other than authors and discussants, to be invited. The heaviest burden fell, as it always does, upon the shoulders of the chairman and secretary; and the latter, in particular, had to assume the major responsibility also for preparing the compilation for the press. Readers of this volume, which should be of interest to everyone concerned with the way in which a business economy operates, owe a large debt not only to the authors and the discussants but also to the Planning Committee; and in this pleasant debt the Universities-National Bureau Committee gratefully acknowledges its own substantial share.

## II

The broad area covered in the conference, and detailed in the papers and discussion that follow, is briefly and effectively reviewed by Irwin Friend in his *Summary and Appraisal*. The reader who would like to orient himself in the volume might first read this summary, and with the over-all view thus secured turn to the individual papers and comments.

It would be presumptuous for one who is relatively unfamiliar with the field to attempt to add either to the discussion or to Mr. Friend's summary. But it may be useful to preface these with the impressions of an interested outsider.

The papers presented at the conference fell into several groups. The first dealt with the broad statistical framework of sources and uses of funds of American business; the several papers combined represented an attempt to indicate what we know, and what we still have to learn regarding the flow of funds through business firms. The authors raised pertinent questions and attempted a summary of available information not only for American nonfinancial corporate business in the aggregate, but also for important sectors — by industry, by size of firm, and for new vs. established firms. In this group were the papers by Messrs. McHugh, Schmidt, and Bridge, included in the present volume, and a discussion by Sidney Alexander of sources and uses of business funds prior to 1926, which unfortunately was not available for inclusion.

The second group of papers included a collaborative effort by Messrs. Hoover and Klein and a related paper by Mr. Koch covering the general problem of projecting business capital requirements. The Hoover-Klein paper appraises the relative usefulness of various methods of estimating future capital requirements, whereas Koch attempts in his paper to project requirements for all manufacturing corporations over a five-year period. The two papers which follow constitute a more or less distinct group: both treat the problem of capital demand from a nonquantitative viewpoint

and are principally concerned with the motivational aspects of user and investor decisions with respect to capital use. The joint paper by Messrs. Jacoby and Weston analyzes the various factors that influence managements in determining the form in which capital funds will be sought in the markets, while Mr. Jones's paper explores the motivations of investors in determining how they will hold their assets and the effects of such decisions on corporate financial structure.

The final set of papers, by Mr. Durand and Messrs. Modigliani and Zeman, presents theoretical analyses, supported by certain empirical tests, of the relationship between business demand for capital funds and the costs of obtaining these funds. In this instance the authors are not attempting to measure the volume of funds required or utilized, but rather to increase our understanding of the effect that changes in the terms on which funds are available have on the decisions of would-be users.

This brief description of the scope of the conference papers and discussion should be sufficient to indicate that no definitive answer could be given to many of the challenging questions. The stock of statistical data available for research in the field of business finance is still rather scanty, and notably poorer than that in several other fields which have been in the forefront of public attention for a longer time. As a result, estimates of aggregates and components can be made for only a few years, and even these are not without exceptions for unincorporated enterprises, and present major difficulties even for corporations. For obvious reasons, tested observations and records of the kind that would penetrate inside the business firm and reveal the factors that made for decisions in crucial test cases (situations differing with respect to the demand for, and supply of, funds) are still an object of hope rather than of accomplishment. One is therefore not surprised to find in the papers and in the discussion a strong undercurrent of lament over our ignorance and urgent calls for additional data, analyses, or both.

With such a reaction and such emphasis one can only sympathize. But it may be pertinent to make some comments which, while obvious to scholars in the field, might place their difficulties in a broader perspective.

First, accumulation of reliable statistical data, on totals and on components, over a period long enough to permit proper historical perspective and distinction between the transient and the relatively invariant, is the indispensable base of progress. Yet accumulation of such data, over a sufficiently long period, is a slow process. For deep-seated and far-reaching reasons, the collection of fundamental statistics in any society follows a historical sequence — and data on sources and uses of funds by business come quite late in that sequence, much later than, say, data on population,

foreign trade, or manufactures. Even today, information on important sectors of fund-using business, e.g., unincorporated enterprises, is lacking; and systematic collection of it is still a matter of the future. One must, therefore, expect that a sufficiently long and articulated statistical record will not be available for years to come.

Second, this does not necessarily mean that the relatively scanty data already available should not be analyzed most intensively, or that efforts could not be made to assure the supply of basic data where they are either lacking or in danger of neglect. As Mr. Friend points out, there are bodies of data in the field of which no adequate analysis has as yet been made. Active and intensive utilization of statistical data for analytical purposes is a major, and perhaps the only means of assuring that, once society recognizes a field as sufficiently important to warrant collection of basic statistics, such collection will be adequately guaranteed and so produce the cumulative results necessary to a proper statistical framework.

Third, when and if such a statistical framework for business finance is adequately built up, revealing properly the significant components by industry, age, size, region, etc., and providing a long enough time coverage to include a variety of historical conditions, a great deal will be learned about the behavior of business firms in terms of their financial policies — without entry into the confines of the single firm or the use of interviews, questionnaires, etc. One sometimes wonders whether recourse to the latter is not a desperate short cut to significant results — a short cut that seems attractive, even indispensable, when we lack quantitative data in the field, and lack accordingly the results of analysis of such data in the past. One may also wonder whether advocacy of this short cut is always accompanied by clear realization of the difficulties that arise in testing the results, and of the extent to which the findings can be construed as valid — not only as a *post hoc* description of entrepreneurial decisions and of the reasons advanced for them, but also as a proper evaluation of those factors, with weights attached, that govern groups of business firms in their aggregate behavior.

Clearly, as far as results are concerned, the approach via the statistical framework and its analysis, and that via model or interview analysis of individual firm behavior, are complementary. But like all resource-using undertakings in this world, they are *competitive* in that, at least for resources that are mobile, absorption in one approach precludes their use in another. To this extent there arises a broad question of intellectual strategy which each investigator will have to answer for himself, within the conditions in which he is working and according to his understanding of the major problem. No single and authoritative answer can be given to

this question. It may be hoped, however, that the discussion in the papers and comments that follow will have clarified some of the elements involved.

### III

Economic research is carried on under conditions in which the investigator is either tempted or compelled to concern himself with current problems. This is certainly true of scholars engaged in research under business auspices, since their work must be oriented to the practical problems of their firms. It is also true of the vast majority of investigators engaged in research under government auspices — whose analysis must bear close relation to immediate problems bearing on their particular agency. Even for academic scholars the temptation to orient their work to issues currently in the forefront of public discussion and concern is quite strong — if only from a desire to glean further knowledge from current experience or to apply what is known to the problems of the day.

From the standpoint of the long-term contribution of economic research to a comprehension of underlying processes and to a firm empirical foundation from which to observe and classify the results of economic and social interaction, such emphasis on current business problems or public issues of the day may seem, and in fact is, a diversion that draws resources away from a continuous building up of scientific conclusions. The attention paid by the authors in the present volume to problems of small or new business firms, and to the alleged shortage of equity capital, may be characterized by a captious critic as typical of such diversions, which precipitate claims to conclusions that cannot be founded on sufficient evidence and raise issues which, however important they may seem today, are likely to be out of fashion tomorrow.

But it is idle to imagine that society would be willing to concentrate all its intellectual resources in a given field on a systematic and continuous study of the past, sheltered from preoccupation with current problems that shift from day to day and from research directed at questions of practical importance to the business firm or government agency. Nor should we assume that such direction of research to current practical ends is completely or largely a waste of time from the standpoint of cumulative growth of objective knowledge. Provided that minimum standards of objectivity are preserved, and the results made accessible for wider use, with proper identification of the empirical and of the conjectural, such "practical" research can add immensely to our knowledge even if we as individuals are concerned with the eternal verities. To the academic scholar in par-

ticular, such practical research can contribute insights ordinarily attainable only through close familiarity with business or public policy.

From that standpoint the participation in the conference of groups from academic institutions, from business firms, and from government agencies, was one of its most valuable features. For it is in the pooling of the experience and viewpoints contributed by academic and by practical research that the greatest promise lies. In the natural sciences, the pioneers of the dispassionate empirical approach, who were the founders of modern science and the progenitors of what turned out to be the most immensely practical project mankind has ever undertaken, learned much from craftsmen and practitioners who, in their daily work, accumulated a store of knowledge of the properties of materials and of the more obvious manifestations of natural forces. So also in the building up of the empirical groundwork of social science, the scholars who are interested in the basic and persistent forces underlying economic processes can learn a great deal from those who have to practice economic arts. And it is through such contacts that the investigators engaged in practical research will in turn be assisted in raising the standards of objectivity and levels of historical perspective that will make their own work more useful practically and their results, when available, more valuable to the academic scholar.

#### IV

It is to be hoped that, necessarily limited as the results of the conference may seem, they will prove sufficiently useful so that the experiment will be repeated in the same field of research in business finance a few years hence, when a greater body of data and experience has accumulated and the need for taking another broad look becomes apparent. In such an event, it is to be hoped that the next conference will also draw, as this one did, upon scholars in universities, government offices, and research divisions of business firms; that it may, in addition, pay some attention to experience in other countries for the sake of any additional data or analysis that such countries, particularly those with a social structure like our own, may contribute; and that the next conference, like the present, will elicit a wide and wholehearted response from all active investigators in the field, and owe its success in large part to a group who will give to its organization the skill and devotion that were lavished on the present undertaking by its Planning Committee.

## CONTENTS

### FOREWORD

*Simon Kuznets*

vii

### THE DEVELOPMENT OF HISTORICAL SERIES ON SOURCES AND USES OF CORPORATE FUNDS

*Loughlin F. McHugh*

1

STATUS OF PREWAR "SOURCES AND USES" STATISTICS

1

MAJOR STATISTICAL PROBLEMS

5

THE COMMERCE PROJECT

6

Plant and equipment, 6. Working capital items, 7.

Corporate savings, 8. Net new issues, 8.

SUMMARY OF COMMERCE FINDINGS

10

DISCUSSION

*F. C. Dirks*

16

*Eli Shapiro*

24

*George Heberton Evans, Jr.*

28

### ANALYZING THE EFFECTS OF BUSINESS SIZE ON SOURCES AND USES OF FUNDS

*Charles H. Schmidt*

35

MAJOR OBJECTIVES OF RESEARCH

36

Social and economic responsibilities for facilitating small  
business financing, 36. Industrial differences in business

financing, 37. Impact of central monetary and credit policies, 37.

The role of the capital markets, 38.

PRESENT STATUS OF RESEARCH

38

Use of sample data, 38. Summary of analytical  
methods and findings, 40.

MAIN PROBLEMS OF RESEARCH

46

Global statistics, 47. Accumulation of sample data, 50.

Noncomparability of financial statements, 53.

SUGGESTIONS FOR FURTHER RESEARCH

54

Cyclical variation in financial structure and practices, 55.

Determination of long-term credit and equity capital  
requirements, 60.



DISCUSSION	
<i>Robert V. Rosa</i>	62
THE FINANCING OF INVESTMENT BY NEW FIRMS	
<i>Lawrence Bridge</i>	65
AVAILABLE MATERIALS ON NEW FIRMS	66
New trade and manufacturing firm surveys, 66.	
Minneapolis survey, 71. Federal Reserve survey of	
bank loans, 71. Business mortality studies, 72.	
Other data, 73.	
ADDITIONAL RESEARCH NEEDS	74
DISCUSSION AND COMMENT	
<i>Joseph K. Wexman</i>	75
<i>Alfred R. Oxenfeldt</i>	80
<i>Donald B. Woodward</i>	86
FACTORS INFLUENCING THE DEMAND FOR FUNDS BY BUSINESS ENTERPRISES AND THE PROBLEM OF PROJECTING BUSINESS CAPITAL REQUIREMENTS	89
Part 1 – ANALYSIS OF THE PROBLEM AND DISCUSSION OF PROCEDURES	
<i>Edgar M. Hoover</i> and	
<i>Burton H. Klein</i>	89
INTRODUCTION	89
PROJECTION OF INVESTMENT REQUIREMENTS: BASIC APPROACHES	90
SOME SPECIFIC PROJECTION PROCEDURES BASED ON RELATION OF INVESTMENT TO GROWTH OF CAPACITY	93
Working capital outlays, 93. Fixed capital outlays, 94.	
PROFIT INCENTIVES	105
A method for projecting the “expected level” of profits, 106.	
The expected level of profits from an incentives viewpoint, 109.	
AVAILABILITY OF FUNDS FOR INVESTMENT	112
Koch’s sources and uses projection for manufacturing, 113.	
The problem of aggregation, 115. Suggestions for further research, 117.	
SUMMARY AND CONCLUSIONS	119

Part 2 — A METHOD OF PROJECTING EXPENDITURES AND FINANCIAL REQUIREMENTS OF MANUFACTURING CORPORATIONS UNDER FULL-EMPLOYMENT CONDITIONS	
<i>Albert R. Koch</i>	121
INTRODUCTION	121
DERIVATION OF THE PROJECTIONS	124
Plant and equipment expenditures, 125. Selected items of working capital, 125. Profits, taxes and dividends, 127. Depreciation, 128. Outside financing other than by trade suppliers, 129.	
THE FINDINGS	131
APPENDIX	133
DISCUSSION AND COMMENT	
<i>Evsey D. Domar</i>	138
<i>O. J. Firestone</i>	143
FACTORS INFLUENCING MANAGERIAL DECISIONS IN DETERMINING FORMS OF BUSINESS FINANCING: AN EXPLORATORY STUDY	
<i>Neil H. Jacoby and J. Fred Weston</i>	145
BASIC ISSUES AND CONCEPTS	145
Relation of public and business policy to knowledge of financing forms, 146. A classification of forms, 148.	
THE PRESENT STATUS OF KNOWLEDGE	150
Studies of the formation of financial plans, 150. Studies of financial standards, 153. Aggregative studies of financial structure, 155. Aggregative studies of financial behavior through time, 157. Studies of types of financial contracts and their uses, 159. Historical studies of firms and industries, 160. Recapitulation, 162.	
A COMPREHENSIVE FRAMEWORK OF ANALYSIS	163
Direct influences on managerial decisions, 163. Indirect influences on managerial decisions, 165. A tentative classification of influential factors, 167. Comments on the classification, 172. Relative weighting of direct and indirect factors, 173. Relative weighting of direct factors, 174.	
RESEARCH METHODOLOGY	175

POSSIBLE AREAS OF RESEARCH	177
Influential factors in internal vs. external financing, 177.	
Influential factors in debt vs. equity financing, 178.	
Influential factors in short-term vs. long-term financing, 180.	
Influence of financial standards upon forms of financing, 180.	
General economic instability and forms of financing, 181.	
Influence of tax policy upon forms of financing, 182.	
Influential factors in the financing of expanding vs. stable businesses, 183.	
CONCLUSION	184
DISCUSSION AND COMMENT	
<i>W. Yost Fulton</i>	185
<i>Dan Throop Smith</i>	188
<i>Mrs. Ruth P. Mack</i>	193
<i>Walter Hoadley</i>	196
THE INVESTIGATION OF FACTORS INFLUENCING THE FORM IN WHICH FUNDS ARE MADE AVAILABLE FOR BUSINESS INVESTMENT	
<i>Homer Jones</i>	199
DEBT AND EQUITY	199
SURVEYS OF CONSUMER FINANCES	201
General, 201. Sampling special categories of investors, 202. Miscellaneous problems, 203.	
SOME TENTATIVE RESULTS	204
ROLE OF FINANCIAL INSTITUTIONS	206
BUSINESS SAVING	207
DISCUSSION AND COMMENT	
<i>Raymond W. Goldsmith</i>	208
<i>Donald B. Woodward</i>	211
<i>James S. Earley</i>	213
COSTS OF DEBT AND EQUITY FUNDS FOR BUSINESS: TRENDS AND PROBLEMS OF MEASUREMENT	
<i>David Durand</i>	215
BASIC CONSIDERATIONS	216
Maximizing income vs. maximizing investment value, 216.	
Required return, 221. Reformulation of basic theory, 222.	

THE PROBLEM OF SECURITY APPRAISAL	225
Two methods of capitalizing earnings, 225. Effect of appraisal method on required return, 234. Effects of the corporate income tax, 235. Implications for research, 237. Implications for business cycle theory, 239.	
A BRIEF ANALYSIS OF EQUITY FINANCING	240
Variations in common stock financing, 240. Stock flotation by direct sale to the public, 240. A stock flotation with pre-emptive rights, 243. Financing with cash earned and accumulated, 243. Equity financing in conjunction with debt financing, 245.	
CONCLUSION	246
DISCUSSION	
<i>Clay J. Anderson</i>	248
<i>Martin W. Davenport</i>	254
THE EFFECT OF THE AVAILABILITY OF FUNDS, AND THE TERMS THEREOF, ON BUSINESS INVESTMENT	
<i>Franco Modigliani</i> and <i>Morton Zeman</i>	263
CASE I — SUBJECTIVE CERTAINTY	264
Subcase I-a: Absence of corporate income taxes, and constant market factors, 265. Subcase I-b: Consideration of corporate income taxes, 266.	
CASE II — SUBJECTIVE UNCERTAINTY	268
Subcase II-a: Risk aversion measured by certainty equivalents, 269. Subcase II-b: Risk aversion measured by an explicit function, 269. Subcase II-c: The effect of institutional limitations, 276. Subcase II-d: Consideration of corporate income taxes, 277.	
THE PROBLEM RESTATED	278
TESTING THE THEORETICAL MODEL	280
APPENDIX A — DEFINITIONS OF VARIABLES; STATISTICAL SERIES	293
APPENDIX B — SOURCES OF DATA	295
APPENDIX C — NOTES	297
DISCUSSION	
<i>Lawrence R. Klein</i>	309
<i>George L. Bach</i>	312

## SUMMARY AND APPRAISAL

<i>Irwin Friend</i>	317
Historical sources and uses of funds, by major industry groups	318
Sources and uses of funds by size of firm and for new businesses	320
Factors influencing the demand for funds by business enterprises, and the problem of forecasting business capital requirements	323
Factors influencing managerial decisions in determining forms of business financing	326
The investigation of factors influencing the form in which funds are made available for business investment	327
Costs of debt and equity funds for business: trends and problems of measurement	328
The effect of the availability of funds, and the terms thereof, on business investment	330
Some concluding remarks	332
REPLY	
<i>David Durand</i>	333
INDEX	335
NATIONAL BUREAU PUBLICATIONS	339

*Conference*  
*on*  
*Research in Business Finance*

