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PART I

*An Inventory  
of Recent Research  
on the Capital and Securities Markets*



### *Scope of the Inventory*

Since the publication of the report of the 1946 Exploratory Committee on Research in Securities Markets, a large number of studies have been made of the problems outlined there and of topics closely related to them. The research has followed a variety of patterns: in some cases it has been directed specifically at problems posed in the report, while in other cases problems have been clarified in whole or in part as a by-product of work undertaken in some other connection; some of the studies have been of broad scope, but more often attention has been focused on narrower aspects of the securities business; some of the most important contributions have consisted of purely statistical compilations, whereas others are of an analytical or interpretive nature; finally, the collective effort of sizable research staffs is represented in some of the studies, while others are the work of individual investigators. Whatever the specific nature of the studies, however, they have the common attribute of having contributed to our understanding of the organization and operations of the securities markets and of the capital markets generally.

An essential part of the work of the present Exploratory Committee was to take an inventory of this work, as a basis for its discussion of needs for further research. The inventory is presented here with the thought that it may be useful as a bibliography of recent financial literature. It should be borne in mind, however, that it is a selective listing, compiled on the following principles. First, the list is restricted to studies of the capital and securities markets, defined as the process of financing domestic business and government in the markets for long- and intermediate-term funds, with the financing process construed broadly to cover the issuance and subsequent transfer of stocks, bonds, mortgages, loans, and similar instruments. With but few exceptions, studies of agricultural credit, urban real estate finance, the financing of foreign trade and investment, consumer credit, and short-term business credit have been excluded. Compilations of data have been included — except

extensions of series started before 1946 — as have been all analytical and descriptive studies directly related to these markets.

Second, the inventory is limited to materials published since around 1946 and to those still in process. Third, studies were excluded unless they were of high quality and directed to basic problems of the securities markets, the latter criterion eliminating a spate of literature on operational matters.

It goes without saying that there is room within these limits for wide differences of judgment as to the disposition of particular items. In general, these listing requirements, to borrow a term from the securities business, have been interpreted severely, in view of the practical necessity of presenting a list sufficiently compact to be useful and to highlight significant research contributions.

Studies have been grouped under seven major areas: (1) Activities and Institutions of the American Capital and Securities Markets, (2) the Securities Markets, Savings, and Capital Formation, (3) the Transfer Function of the Securities Markets, (4) the Securities Markets in the Financing of Business Enterprise, (5) the Securities Markets and the Investor, (6) the Relation of Government to the Securities Markets, and (7) the Functioning of the Securities Markets in the American Economy. Not unexpectedly, difficulties were encountered in classifying some studies in these groups — some of which overlap — but it is unlikely that serious confusion has resulted therefrom. Individual studies are listed under each heading or subheading exclusively on the basis of subject matter; the order of listing is in no sense intended to imply a critical rating of their importance or of their quality. Indexes of studies, keyed to author and to subject, are given at the end of the book.

## *Inventory of Recent Research*

### A. ACTIVITIES AND INSTITUTIONS OF THE AMERICAN CAPITAL AND SECURITIES MARKETS

Two extensive investigations have been made in this area since 1946, and several smaller studies have been completed. First, as a result of the antitrust action taken by the U. S. Department of Justice against certain selected investment banking firms, a tremendous amount of information was assembled, including information on the techniques and methods employed by each such firm. Second, the study of the over-the-counter markets made by the Securities Research Unit at the Wharton School of Finance and Commerce of the University of Pennsylvania has made major contributions to this area of financial research. Two of the studies completed under the Wharton School project concern the activities and institutions of the securities markets; the bulk of work, however, falls under section C, below, on the transfer function of the securities exchanges.

#### 1. MATERIALS ON THE INVESTMENT BANKING INDUSTRY developed in the antitrust action *United States v. Morgan*

- a) Opinion of Harold R. Medina, C.J., reported at 118 F. Supp. 621 (S.D.N.Y. 1953)

Judge Medina's opinion summarizes the charges and evidence in the antitrust proceedings against seventeen investment banking firms; reviews the evolution and growth of the investment banking industry, including its relation to the capital market as a whole; and discusses methods and types of transactions involved in the issuance and distribution of securities.

#### BRIEFS FOR THE UNITED STATES

- b) Trial Brief for the United States (Part I)  
Sets forth the contentions of the Department of Justice concerning competition among the defendant firms, as well as between them and all other investment banking houses, and the methods used in underwriting and distributing securities.
- c) Plaintiff's Memorandum on Price-Fixing  
Sets forth the government's contention as to the claimed illegality of price clauses in syndicate agreements.
- d) Brief in Support of Plaintiff's Motion to Connect the Evidence, Parts I and II  
Two documents in which the Department of Justice summarizes the evidence introduced to "show the exis-

tence of a conspiracy among the defendants to channelize the distribution of new securities and to maintain the prices upon which they are merchandised.”

#### DEFENSE BRIEFS AND RELATED MATERIALS

e) Defendants' Preliminary Memorandum for the Court

This account of the modern operations of the securities issues business covers the role of the investment banker in various types of transactions, and the relationship of public underwritings to other forms of new money financing and to the market for outstanding securities. It describes the practices and functions of investment bankers and deals generally with methods. Also discussed is the influence of various government regulatory bodies and policies on the industry.

f) Defendants' Brief on Price Agreements in Security Underwritings

Describes principally the pricing of underwritten, and also non-underwritten offerings. Price clauses are examined in detail; the evolution of these business forms is analyzed and their legality discussed.

g) Brief on the Service Function of the Investment Banker

This analysis by several defense attorneys is directed to the question whether the role of an investment banker in a transaction is simply that of a merchandiser, or whether he performs, in addition, a service function of broad scope.

h) Brief on General Points

A brief on general points in the antitrust proceedings submitted by five of the defendants. As stated in the Introduction, page 6, the brief summarizes and discusses evidence relating to the following questions:

“I. What is the competition for heading issues which is claimed to be restrained?

“II. When financing for an issuer takes the form of an underwritten public offering, why is the syndicate method employed and how does it function?

“III. What are the realistic conditions determining the nature and effectiveness of competitive efforts?

“IV. What are the objective measures of the existence of competitive conditions, and what appears as to the alleged 'effects' of the alleged conspiratorial restraints?”

i) *Issuer Summaries*. Ad Press, Ltd., 1951

A two-volume compilation of statistical information on security issues offered from July 26, 1933 to December 31, 1949. The data cover issues of domestic and foreign corporations, foreign governmental units, and revenue obligations of domestic municipalities and pub-

lic authorities. Included in the tabulations is such information as name of issuer, date of offering, description of issue, dollar amount, type of transaction, number of underwriters, name of manager (or agent), seller in secondary offerings, and contemplated gross spread.

j) *Analysis of the Volume of Security Issues, 1935-1949*

A quantitative analysis of securities offered in this fifteen-year period, by class of issuer, type of security, type of transaction, and size of issue.

k) Memorandum on the Chronology of Investigations

A history of the various investigations of investment banking activities, compiled by several defense attorneys as background material.

## 2. THE ORGANIZATION AND ACTIVITIES OF THE OVER-THE-COUNTER MARKETS

a) G. Wright Hoffman – *Character and Extent of Over-the-Counter Markets*. University of Pennsylvania Press, 1952

Describes the general character of over-the-counter markets, treating such matters as the nature of security markets, the broad character of securities traded, the extent and structure of over-the-counter markets, and the new-issue and outstanding-issue sectors of these markets.

b) Willis Winn – ‘Factors Affecting Long-Run Growth of Over-the-Counter Markets’ (to be published in 1955)

This study, which is still in process, will summarize the findings of the Wharton School study of over-the-counter markets. It will examine trends in the structure and operations of over-the-counter markets, discuss the forces shaping these developments, and analyze some of the current problems of these markets. ○

## 3. STUDIES OF FUNDS-SUPPLYING INSTITUTIONS

a) Neil H. Jacoby and Raymond J. Saulnier – *Business Finance and Banking*. National Bureau of Economic Research, Financial Research Program, 1947

Summarizes a series of studies on different forms of debt financing by business. Emphasis is placed on trends in short- and intermediate-term financing by business.

b) David McCahan, editor – *Investment of Life Insurance Funds*. University of Pennsylvania Press, 1953

A symposium on problems of life insurance company investment including articles on investment in various types of assets and on certain conditions affecting the investment problem as a whole.



- c) John Lintner – *Mutual Savings Banks in the Savings and Mortgage Markets*. Harvard University, 1948

A study of the experience of Massachusetts savings banks as holders of savings and investors in urban mortgages.

#### 4. MISCELLANEOUS STUDIES

- a) Securities and Exchange Commission – *Cost of Flotation, 1945–1949*. February 1951

Presents detailed data on the cost of flotation of effectively registered issues for the years 1945 through 1949. The intended spreads on all types of new issues offered for cash sales through investment bankers to the general public are analyzed, as well as on new issue offerings for cash sales through subscription rights issued to security holders, new issues offered in exchange for outstanding securities, securities of investment companies, and secondary distributions. Current data of this type are published monthly in the *Statistical Bulletin* of the Commission.

- b) *Finance Magazine* – “Capital of Investment Banking Firms”

This magazine publishes annually a compilation of the capital of some two hundred of the largest corporate underwriting firms, based on information taken from reports made to the SEC.

- c) “The American Capital Market” (Part I, “The Dearth of Risk Capital”; Part II, “The Market Mechanism,” by T. R. Seton). *The Banker*, Vol. 99, September 1952

- d) Stanley L. Miller – “Financing Security Brokers and Dealers.” In *Money Market Essays*, Federal Reserve Bank of New York, March 1952

Describes the security loan market since 1929. Includes a summary of the purposes for which brokers and dealers borrow, the sources of funds for the loans, the principal types of loans made, the legal margin requirements, and the customary practices of the banks in relating margin requirements and interest charges to the nature of the securities offered as collateral.

See also section G, especially entries (b) and (c) on page 38, and entries under (2) on page 39f.

## B. THE SECURITIES MARKETS, SAVINGS, AND CAPITAL FORMATION

During the past few years research activities have been pursued somewhat more intensively in this sector than in any other covered by the present survey. Although much of the work has not been focused directly on the problems of the securities markets *per se*, it contributes significantly to an understanding of the operations and problems of these markets and promises to contribute even more as studies now in process are brought to completion. The research has been directed to both sides of the securities markets — to the supply of savings and to the demand for capital — and deals with the impact of developments in these areas on the functioning of capital markets.

Certain problems associated with the process of saving, namely the meaning, measurement, origins, trends, and composition of savings, have been examined in detail in specialized studies. Considerable work has been done, also, on projecting capital requirements into the future. Among these efforts, those directed at the development and improvement of estimating and projecting methods are naturally of more interest to the present inventory than specific forecasts of capital requirements.

### 1. FLOW OF SAVINGS

- a) Raymond W. Goldsmith — *A Study of Saving in the United States, 1897 to 1949* (Princeton University Press; in press)

This study, made under a grant of funds from the Investment Research Committee of the Life Insurance Association of America, presents a comprehensive picture of the annual flow of savings into investment since the early part of the century. The estimates presented will show the various forms in which savings have been accumulated and, at selected intervals, the characteristics of the wealth holdings of individuals.

Two volumes of the study are expected to appear shortly. One will present basic data on savings for the period 1897-1949. Another will explain how the estimates of savings were made and will discuss the various problems encountered in the measurement of savings. The third volume, to be published in 1955, will cover the national wealth estimates, information on savings in household expenditure studies, and wealth holdings.

- b) Irwin Friend — *Individuals' Savings: Volume and Composition* (to be published in September 1954)

Will describe trends in individuals' savings, and discuss

the reasons for and implications of these movements. The reliability and limitations of the different series on individuals' savings will be examined in detail and an attempt made to reconcile the conceptual bases of the more important of these series.

- c) Walter W. Heller, Francis M. Boddy, and Carl L. Nelson, editors — *Savings in the Modern Economy — A Symposium*. University of Minnesota Press, 1953

The record of a 1952 symposium organized by the University of Minnesota which was directed toward four problems: (1) Savings and Economic Policy, (2) Savings Concepts, Data, and Behavior, (3) the Savings Problem in Underdeveloped Economies, and (4) Savings and Inflation.

The first section contains papers prepared by Douglas Abbott, Hugh Gaitskell, Alvin H. Hansen, E. A. Goldenweiser, Sumner Slichter, and H. Christian Sonne. The second topic was developed by Irwin Friend, Lawrence R. Klein, Raymond W. Goldsmith, J. K. Gailbraith, Woodlief Thomas, Roger Murray, James S. Duesenberry, Dorothy Brady, Imrie deVegh, James Morgan, Margaret G. Reid, James Tobin, David McCord Wright, Simon Kuznets, and John Lintner. The third problem was discussed by Eugene R. Black, E. M. Bernstein, Emerson A. Ross, Felipe Pazos, and B. R. Shenoy. The single paper on the last problem was prepared by George Garvy.

- d) "1951 Survey of Consumer Finances — Part IV, Distribution of Consumer Saving in 1950." *Federal Reserve Bulletin*, September 1951

This is the most elaborate analysis so far published of consumers' savings based upon data obtained from the Survey of Consumer Finances, a joint undertaking of the Board of Governors of the Federal Reserve System and the Survey Research Center of the University of Michigan. The savers and dissavers in the period studied are examined in terms of income, occupational group, age, and family status. The causes of saving and dissaving, the amount of saving, and forms of saving and dissaving are set forth in considerable detail.

- e) "Survey of Consumer Finances." *Federal Reserve Bulletin*, December 1950 and September 1953

Two articles — "The Distribution of Assets, Liabilities and Net Worth of Consumers, early 1950" (December 1950) and "Net Worth of Consumers, early 1952" (September 1953) — providing information on consumer saving for two additional periods. While somewhat more limited in scope than the 1951 analysis they also deal with the accumulated savings of consumers. Savings are examined in terms of the amount held, the relation of amounts held to the income and age charac-

teristics of the holders, and the form in which the holdings are kept.

f) Lawrence R. Klein —

'Consumer Expenditures and Savings Patterns'

A study now in progress of the relationships prevailing among income, liquid asset holdings, and savings, based on sample data for urban spending units obtained in the Surveys of Consumer Finances.

"Estimating Patterns of Savings Behavior from Sample Survey Data." *Econometrica*, Vol. 19, October 1951

Discusses some of the problems and limitations of the surveys mentioned in (e) above.

g) Robert Ferber — *A Study of Aggregate Consumption Functions*. National Bureau of Economic Research, Technical Paper 8, 1953

Summarizes the main statistical studies of the aggregate consumption function and appraises the predictive value in the post-World War II years of several consumption functions derived from prewar data.

EFFECT OF THE INSTITUTIONALIZATION OF SAVINGS  
ON THE CAPITAL AND SECURITIES MARKETS

h) Irwin Friend — "New Influences in the Stock Market." *Fortune*, March 1953

Presents estimates of the amount of funds available for investment, particularly in equities, by various institutional investor groups and assesses the possible influence of their investment activities on the market prices of common stocks.

i) Harry G. Guthmann — "Effect on the Economy of Channeling Savings Through Pension Funds." *Journal of Finance*, Vol. 7, May 1952

j) Roger F. Murray — "Investment Aspects of the Accumulation of Pension Funds." *Journal of Finance*, Vol. 7, May 1952

Both of these articles examine the possible effects of the flow of savings into pension funds on the behavior of the stock market.

## 2. CAPITAL FORMATION AND ECONOMIC STABILITY

Simon Kuznets et al. —

CAPITAL FORMATION AND FINANCING  
IN THE UNITED STATES

A National Bureau of Economic Research project  
financed by grants of funds from the Investment

Research Committee of the Life Insurance Association of America. Aimed at measuring the amount of capital funds used in different sectors of the economy in the past and identifying the behavior of capital requirements as a basis for estimating demands for capital funds in the next two or three decades.

A number of shorter studies are to be published by the National Bureau as Occasional or Technical Papers before the release of the more general and comprehensive monographs. Papers now in preparation, or published, are as follows:

- a) David M. Blank – *The Volume of Residential Construction, 1889–1950* (Technical Paper 9, 1954)
- b) Israel Borenstein – *Capital and Output Trends in Mining Industries, 1870–1948* (Occasional Paper 45, 1954)
- c) Daniel Creamer – *Capital and Output Trends in Manufacturing Industries, 1880–1948* (Occasional Paper 41, 1954)
- d) Raymond W. Goldsmith – *The Share of Financial Intermediaries in National Wealth and National Assets* (Occasional Paper 42, 1954)
- e) Leo Grebler – *The Role of Federal Credit Aids in Residential Construction* (Occasional Paper 39, 1953)
- f) Robert Rude – ‘Assets of Private Non-Profit Institutions in the United States, 1890–1948’ (mimeo. April 1954)
- g) Alvin S. Tostlebe – *The Growth of Physical Capital in Agriculture, 1870–1950* (Occasional Paper 44, 1954)
- h) Melville J. Ulmer – *Trends and Cycles in Capital Formation by United States Railroads, 1870–1950* (Occasional Paper 43, 1954)

Present plans call for publication of the over-all results of the Capital Requirements Project in nine monographs, as follows:

- i) Alvin S. Tostlebe – ‘Capital Formation and Financing in Agriculture, 1870–1950’
- j) Leo Grebler, David M. Blank, and Louis Winnick – ‘Capital Formation in Residential Real Estate: Trends and Prospects’
- k) Sergei P. Dobrovolsky, Daniel Creamer, and Israel Borenstein – ‘Formation and Financing of Capital in Manufacturing and Mining Industries, 1880–1948’
- l) Melville J. Ulmer – ‘Capital Formation and Financing in Utilities and Transportation, 1870–1950’

- m) Morris A. Copeland – ‘Government Capital Requirements’
- n) Raymond W. Goldsmith – ‘Financial Intermediaries in the Saving and Investment Process in the American Economy, 1900 to 1952’
- o) Simon Kuznets – ‘Capital Formation and Financing in the United States, Trends and Prospects’ (a summary)

OTHER STUDIES OF  
CAPITAL FORMATION AND ECONOMIC STABILITY

- p) ‘Studies in Income and Wealth, Volume Nineteen’ (Princeton University Press for the National Bureau of Economic Research; in preparation)

A volume of papers delivered at a Conference on Capital Formation sponsored by the National Bureau’s Conference on Research in Income and Wealth and held in New York in October 1953. The volume will contain discussions of the existing estimates of capital formation, the conceptual problems in the measurement of capital formation, conceptual and statistical problems in measuring capital coefficients and productive capacity, and behavioral studies of private capital formation.

- q) *Capital Formation and Economic Growth* (Princeton University Press for the National Bureau of Economic Research; in press)

A volume of papers delivered at a Conference on Capital Formation and Economic Growth sponsored by the Universities–National Bureau Committee for Economic Research and held in New York in November 1953. The papers deal with various aspects of capital formation and the factors affecting its rate in advanced and underdeveloped countries.

- r) *Conference on Business Cycles*. National Bureau of Economic Research, 1951

A volume of papers presented at a conference held under the auspices of the Universities–National Bureau Committee for Economic Research in New York in November 1949, dealing in part with financial factors in investment fluctuations.

- s) *Regularization of Business Investment*. Princeton University Press for the National Bureau of Economic Research, 1954

The volume of papers delivered at a conference of the Universities–National Bureau Committee for Economic Research held in New York in November 1951 and dealing with the cyclical behavior of business investment by individual firms, factors affecting investment fluctuations, and public and private policies for the regularization of investment expenditures.

- t) Raymond Nassimbene and Donald G. Wooden — “Producers’ Equipment — Growth, Replacement, and Stock.” *Survey of Current Business*, June 1953

Presents new data on postwar purchases of durable equipment by private producers for replacement as distinct from expansion.

### 3. ESTIMATING FUTURE CAPITAL REQUIREMENTS

Much work has been done in recent years on two different approaches to this problem. One approach is to obtain estimates from the major spending groups — consumers, business, and government — of the expenditures they will make over some forthcoming period. The second approach attempts to explain, and to forecast, short-run changes in capital requirements by discovering the relationships that obtain between capital expenditures and selected factors that have a significant bearing on them.

#### SURVEYS OF ANTICIPATED EXPENDITURES

- a) U. S. Department of Commerce — *Markets after the Defense Expansion*. 1952

Examines the outlook for government purchasing, business investment intentions, the consumer market, prospects for foreign trade, growth elements in the American economy, and the problem of business fluctuations.

- b) Irwin Friend and Jean Bronfenbrenner — “Business Investment Programs and Their Realization.” *Survey of Current Business*, December 1950

Since World War II, the Office of Business Economics of the Department of Commerce and the Securities and Exchange Commission have compiled data on anticipated and actual capital outlays by business. This article explores the differences between the plant and equipment expenditures programmed or planned by business and those actually realized in order to appraise the accuracy with which businesses anticipate their capital outlays. Attention is also given to the nature of investment decisions and an effort is made to obtain information on the factors which cause changes in investment decisions.

- c) “Business Plans for New Plant Equipment.” *Business Week*, April 17, 1954

This is the most recent of the annual surveys made by the McGraw-Hill Economics Department of business plans for plant and equipment investment. The surveys are reported annually in *Business Week* in or around April.

- d) "Business Investment Programs for Early 1954." *Survey of Current Business*, December 1953

Department of Commerce-SEC estimates of expenditures on new plant and equipment by U. S. nonfarm businesses based on anticipated capital expenditures as reported by business in November 1953. Similar reports are made from time to time in the *Survey* and in the *Statistical Bulletin* of the SEC.

#### PROJECTIONS OF INVESTMENT EXPENDITURES

- a) J. Frederic Dewhurst and Associates - *America's Needs and Resources: A New Survey* (Twentieth Century Fund, in press)

Examines long-term trends in consumer spending patterns, capital expenditures, governments costs, and foreign transactions, and in the availability of labor, natural resources, and agricultural and industrial capacity. This material is used as a basis for estimating future employment, productivity, and income, and consumption and expenditure patterns. A revision is to be published in 1954.

- b) Robert W. Hartley in collaboration with Eleanor Wolkind - *America's Capital Requirements: Estimates for 1946-1960*. Twentieth Century Fund, 1950

This report on the estimates of capital requirements in the United States during the period 1946-1960 is a technical supplement to *America's Needs and Resources*. It discusses the concept of "requirements," the basic assumptions of the study, and the estimating methods employed. Detailed estimates of capital requirements for the twenty-eight fields covered by the studies are presented.

- c) "Factors Influencing the Demand for Funds by Business Enterprises and the Problem of Projecting Business Capital Requirements." In *Conference on Research in Business Finance*, National Bureau of Economic Research, 1952

Edgar M. Hoover and Burton H. Klein -

Part I: "Analysis of the Problem and Discussion of Procedures"

Discusses various statistical procedures for the projection of business capital requirements. Deals primarily with the methods of making estimates of future capital demands and is not concerned with any particular estimate of future need for funds.

Albert R. Koch -

Part II: "A Method of Projecting Expenditures and Financial Requirements of Manufacturing Corporations under Full-Employment Conditions"

Discusses the use of the "sources and uses of funds"



- analysis to estimate the magnitude and form of future demands for external funds by manufacturing firms.
- d) U. S. Congress, Joint Committee on the Economic Report – *The Sustaining Economic Forces Ahead*. 1952 (82d Congress, 2d Session)  
 An analysis of factors that may influence the demand for funds in the late 1950's and 1960's.
- e) Frederick C. Dirks and Ernest J. Hopkins – *Private Capital Requirements*. Board of Governors of the Federal Reserve System, Postwar Economic Studies No. 5, September 1946  
 Two studies of capital requirements – one on postwar capital formation and its financing in manufacturing and mining industries and the other on the long-term capital needs of small business.
- f) Everett E. Hagen – “Output and Demand after the War.” In *Jobs, Production and Living Standards*, Board of Governors of the Federal Reserve System, Postwar Economic Studies No. 1, August 1945  
 An early attempt to forecast postwar levels of demand, output, and employment.
- g) Elmer Clark Bratt –  
 “A Reconsideration of the Postwar Forecasts.” *Journal of Business of the University of Chicago*, Vol. 26, April 1953  
 Interprets postwar forecasts in the light of the GNP models employed. A bibliography of post-mortems on postwar forecasts is appended.  
 “Short- and Long-Term Capital Requirements.” *Journal of Finance*, Vol. 7, May 1952  
 Examines and compares a number of alternative methods for projecting long- and short-term capital requirements of business.
- h) *Long-Range Economic Projection*. Princeton University Press for the National Bureau of Economic Research, 1954  
 Volume Sixteen of Studies in Income and Wealth: papers delivered at a meeting of the National Bureau's Conference on Research in Income and Wealth held in New York in May 1951.
- i) *Short-Term Economic Forecasting* (Princeton University Press for the National Bureau of Economic Research; in press)  
 Volume Seventeen of Studies in Income and Wealth; discusses the problem of short-term projections based on data on new orders, consumer buying intentions, and anticipations of business and consumer expenditures. The papers were delivered at a meeting of the National Bureau's Conference on Research in Income and Wealth held at the University of Michigan, September 14–15, 1951.

ECONOMETRIC ANALYSES  
OF INVESTMENT EXPENDITURES

A large number of journal articles bearing on econometric analyses have appeared in the past decade; a few are mentioned below:

- a) Lawrence R. Klein —  
“Pitfalls in the Statistical Determination of the Investment Schedule.” *Econometrica*, Vol. 11, July-October 1943  
“A Post-Mortem on Transition Predictions of National Product.” *Journal of Political Economy*, Vol. 54, August 1946  
Re-examines the uses of the theoretical economic model as a forecasting tool.
- b) Albert Gailord Hart — “‘Model-Building’ and Fiscal Policy.” *American Economic Review*, Vol. 35, September 1945
- c) Jacob L. Mosak — “Forecasting Postwar Demand: III.” *Econometrica*, Vol. 13, January 1945
- d) Arthur Smithies — “Forecasting Postwar Demand: I.” *Econometrica*, Vol. 13, January 1945

See also *Conference on Business Cycles*, cited on page 13, especially the paper by Lawrence R. Klein on “Studies in Investment Behavior.”

C. THE TRANSFER FUNCTION  
OF THE SECURITIES MARKETS

Recent research activity in this area has been concentrated largely on two problems — the operation of the over-the-counter markets and the origin of trading on the New York Stock Exchange. Attention has also been given to certain specialized aspects of the operations of the exchanges.

1. THE OPERATION OF THE OVER-THE-COUNTER MARKETS

- a) Irwin Friend — *Activity on Over-the-Counter Markets*. University of Pennsylvania Press, 1951

The volume of over-the-counter transactions is examined in detail in this monograph. The composition and location of all over-the-counter trading are analyzed, and the characteristics of the business conducted by individual firms are depicted. Estimates are presented of changes in the relative importance of the over-the-counter markets over the past thirty years.

- b) Willis Winn – *Positioning of Securities on Over-the-Counter Markets*. University of Pennsylvania Press, 1951

The inventory policies of firms engaged in dealer activities in the over-the-counter markets are analyzed in this study. The size and composition of the holdings, both in the aggregate and for individual firms, the methods by which these holdings are financed, and the inventory-to-sales ratios characteristic of the industry are examined in some detail.

- c) Morris Hamburg, Stanley Schor, and Willis Winn – *Characteristics of Transactions on Over-the-Counter Markets*. University of Pennsylvania Press, 1953

Individual transactions flowing through the over-the-counter markets are examined in order to identify the leading characteristics of this activity. Factual information is given on the following: the listing status of issues traded, size of corporation issuing traded securities, number of stockholders in traded issues, location of issuing corporations, market price of securities traded, the customer in the transaction, the size of the execution, the legal role of the broker-dealer, and the duration of time the issue was held by the intermediary firm.

The following two studies, also made under the Wharton School project on over-the-counter markets, will be published in 1954.

- d) Irwin Friend, Morris Hamburg, and Stanley Schor – ‘Pricing and Price Differentials on Over-the-Counter Markets’

This volume will analyze the relation between prices and customer costs in transactions executed on the over-the-counter markets. The mechanics of pricing will be examined; comparisons will be made of (a) prices quoted in dealer and customer markets, (b) quoted prices with transaction prices in dealer and customer markets, and (c) transaction prices in dealer and customer markets. An effort will be made to compare costs in over-the-counter transactions with those characteristic of exchange markets.

- e) G. Wright Hoffman – ‘Relation of Over-the-Counter to Exchange Markets’

Will explore the contrasts and similarities of the organized exchanges and the over-the-counter markets. The functions of the two types of markets will be examined and their competitive and supplementary activities described.

## 2. CUSTOMER COMPOSITION OF EXCHANGE TRANSACTIONS

- a) Securities and Exchange Commission, Trading and Exchange Division – “A Report on Stock Trading on the New York Stock Exchange on September 3, 1946” (mimeo August 22, 1947)

Analyzes in considerable detail the purchases and sales

of various groups of buyers and sellers throughout a trading day marked by a very sharp drop in the prices of the majority of issues traded.

b) New York Stock Exchange —

*Summary Report on Public Transaction Study.* October 1952

*Detailed Tables of Public Transaction Study.* December 1952

*Public Transaction Study.* May 1953

These studies provide information on the characteristics of purchasers and sellers of securities on the exchange, and ascertain the reasons, or expectations, which motivated individual transactions.

*Public Transaction Study.* May 1954

Studies of transactions on the New York Stock Exchange on selected days, giving purchases and sales classified according to such characteristics as source of volume, geographic origin of order, and price per share. Data on the characteristics of individuals as purchasers and sellers are more detailed than in the preceding studies.

### 3. MISCELLANEOUS STUDIES

a) Fred R. Macaulay in collaboration with David Durand — *Short Selling on the New York Stock Exchange.* Twentieth Century Fund, mimeo 1951

An examination of the interrelationship of short selling activities and changes in the market prices of securities. Special attention is given to the role of the specialist.

b) D. C. Cook and Myer Feldman — “Insider Trading under the Securities Exchange Act.” *Harvard Law Review*, January-February 1953

The problems of “insider” trading are reviewed and reappraised.

## D. THE SECURITIES MARKETS IN THE FINANCING OF BUSINESS ENTERPRISE

During the past eight years the three general problems related to the role of the securities markets in financing business that have received the most attention in research activities are (1) the identification of factors affecting the capital structure of business concerns, and the methods of studying these factors; (2) the alleged shortage of equity capital and the steps that might be taken to increase its availability; and (3) the credit and capital requirements of small business. There are instances in which studies touch on two or more of these problems, and other work has been done which falls altogether outside the three fields indicated.

### 1. ANALYSES OF THE CAPITAL STRUCTURE OF BUSINESS

One of the major research developments of recent years has been the increased use of techniques for tracing the sources and uses of funds by business enterprises. The following are the more important works in this field.

- a) Irwin Friend — “Business Financing in the Postwar Period.” *Survey of Current Business*, March 1948

Describes the capital requirements of business in the immediate postwar period, the manner in which they were financed, and the price paid for funds raised in the capital and money markets; and compares the postwar experience with that of prewar periods. This article marked the first appearance of estimates of sources and uses of funds for the corporate sector of the economy. The series on sources and uses of corporate funds, compiled by the Department of Commerce, has appeared periodically in the *Survey* since that time.

- b) Paul S. Anderson — “Wartime and Postwar Credit Demands of Large Corporations.” *Federal Reserve Bulletin*, July 1953

On the financing activities of some three hundred large corporations from 1939 to 1952. Composite sources and uses of funds data by industry group are presented, and the financial behavior in the postwar period is contrasted with the prewar developments. Articles discussing financial developments for this group of corporations have appeared annually in the *Bulletin* since 1949.

- c) Loughlin F. McHugh — “The Development of Historical Series on Sources and Uses of Corporate Funds.” In *Conference on*

*Research in Business Finance*, National Bureau of Economic Research, 1952

- Describes the development of historical series on the sources and uses of corporate funds and reviews the statistical materials available for such analyses. Particular attention is given to the estimates of sources and uses of funds developed by the Department of Commerce.
- d) Elwyn T. Bonnell and John A. Gorman – “Changes in Public and Private Debt.” *Survey of Current Business*, September 1953
- The most recent analysis of the composition and structure of public and private debt in the United States. Attention is directed to annual changes in both gross and net debt of various sectors of the economy, with particular emphasis on the composition and ownership of private debt. Analyses of similar information for earlier periods have appeared periodically in the *Survey*.
- e) Charles H. Schmidt – “Analyzing the Effects of Business Size on Sources and Uses of Funds.” *Conference on Research in Business Finance*, National Bureau of Economic Research, 1952
- Reviews the statistical material available on the financing experience of firms of different sizes, and advances suggestions for the improvement of this type of information.
- f) Lawrence Bridge – “The Financing of Investment by New Firms.” In *Conference on Research in Business Finance*, National Bureau of Economic Research, 1952
- An application of the “sources and uses” technique to the problem of new firm financing.
- g) Wilson F. Payne – “Fund Flow Analysis: Industrial Demands upon the Money Market.” National Bureau of Economic Research, Financial Research Program, mimeo September 1952
- A comparative analysis and exposition of alternative ways of measuring the flow of funds.
- h) Howard H. Greenbaum – *Fund-Flow Analysis in Economic Research*. Ph.D. thesis, Columbia University, 1952
- An account of the development of the “sources and uses” technique and its application in various types of research.
- i) William J. Vatter – “The Fund Theory of Accounting and Its Implications for Financial Reports.” *Journal of Business of the University of Chicago*, Vol. 20, Part 2, July 1947
- Examines different uses of the technique in financial reports.
- j) Louis Goldberg – “The Funds Statement Reconsidered.” *Accounting Review*, October 1951
- A critical analysis of the “funds statement.”

- k) Morris A. Copeland — *A Study of Moneyflows in the United States*. National Bureau of Economic Research, 1952  
 An application of fund flow analysis to the economy as a whole. The study gives estimates of cash flows among all sectors of the economy and the characteristics of these flows.
- l) J. Fred Weston — “Norms for Debt Levels.” *Journal of Finance*, Vol. 9, May 1954  
 Discusses criteria used in determining appropriate debt levels for individual companies. The author traces the effect of private debt expansion and contraction on economic activity and raises questions concerning the guides to policy which might be used in controlling the volume of debt.
- m) *Postwar Expansion of Private Debt*. Board of Governors of the Federal Reserve System, mimeo July 1953  
 A study directed mainly to the rise in private debt since the end of World War II. It pictures shifts in the composition of private debt and attempts to measure changes in the burden of the debt.

## 2. FACTORS INFLUENCING THE CAPITAL STRUCTURE OF BUSINESS

- a) David Durand — “Costs of Debt and Equity Funds for Business: Trends and Problems of Measurement.” In *Conference on Research in Business Finance*, National Bureau of Economic Research, 1952  
 The problem of measuring the cost of debt and equity funds is discussed with primary emphasis on the methods of capitalizing expected future earnings.
- b) Franco Modigliani and Morton Zeman — “The Effect of the Availability of Funds, and the Terms Thereof, on Business Investment.” In *Conference on Research in Business Finance*, National Bureau of Economic Research, 1952  
 A theoretical analysis of factors affecting the choice between bonds and equity financing, and an empirical testing of the theory for the period 1921–1949.
- c) Neil H. Jacoby and J. Fred Weston — “Factors Influencing Managerial Decisions in Determining Forms of Business Financing: an Exploratory Study.” In *Conference on Research in Business Finance*, National Bureau of Economic Research, 1952  
 An attempt to list, and to classify in meaningful groupings, the major factors affecting the decisions of business managements in adopting particular forms of business financing.
- d) Homer Jones — “The Investigation of Factors Influencing the Form in Which Funds Are Made Available for Business Invest-

ment." In *Conference on Research in Business Finance*, National Bureau of Economic Research, 1952

Discusses the influence of the habits and preferences of individual savers, the portfolio policies of institutional investors, and the income retention habits of business concerns on the form in which funds become available for business investment, whether as debt or equity.

- e) Roland P. Soule – "Trends in the Cost of Capital." *Harvard Business Review*, Vol. 31, March-April 1953

Sets forth the concepts of the costs of equity and debt capital from the standpoint of the common stockholder. The historical behavior of these costs, and the factors affecting it, are also examined.

### 3. FINANCING BUSINESS THROUGH THE USE OF EQUITY CAPITAL

- a) Sergei P. Dobrovolsky – *Corporate Income Retention, 1915-43*. National Bureau of Economic Research, Financial Research Program, 1951

A factual study of the role of retained earnings as a source of equity funds for business. It attempts to discover the relation of such factors as level of income and rate of asset growth to earnings retention.

- b) Clay J. Anderson – "Trends in the Supply of Equity Capital." *Harvard Business Review*, Vol. 28, September 1950

Examines the relative merits of retained earnings and sales of securities as sources of capital funds. Steps that might be taken to stimulate external financing through equity issues are examined in some detail.

- c) Securities and Exchange Commission – *Survey of American Listed Corporations: Data on Profits and Operations Including Surplus, 1946-1947 and 1948-1949*

Presents selected income and balance sheet data for individual companies and industry groups.

- d) "Stimulating Investment in Equity Securities." *Journal of Finance*, Vol. 5, June 1950

A symposium consisting of four papers: "The Importance of Equity Financing in the American Economy" by Jules I. Bogen; "Investment in Equities by Life Insurance Companies" by Homer Jones; "Can Individual Investors Be Induced to Furnish More Equity Capital?" by Lewis A. Froman; and "Individual Investment Policy and the New Economics" by Paul F. Wendt.

- e) G. Keith Funston – "Wanted – More Shareowners." Dickinson Lectures at the Harvard Graduate School of Business Administration, April 20 and 21, 1954

Two lectures on the need for equity funds for financ-



ing business growth and the possibility of raising an increased part of the required funds by tapping the savings of middle and lower income groups.

- f) Stahrl Edmunds – “Financing Capital Formation.” *Harvard Business Review*, Vol. 28, January 1950

Presents estimates of the future needs for capital and discusses the methods by which the needs may be met, with particular emphasis on ways of increasing the flow of equity funds.

- g) Dan Throop Smith – *Effects of Taxation on Corporate Financial Policy*. Harvard University, 1952

Deals in part with raising capital by the sale of equity issues. The dilution of earnings and the effect on asset value and control likely to result from a new issue are examined in detail. The discussion is based on an extensive analysis of the experience of both widely held and closely controlled corporations.

- h) Harry G. Guthmann – “Dilution and Common Stock Financing.” *Harvard Business Review*, Vol. 23, Winter 1945

Methods which management may use to improve income and induce an appreciation in the market price of the common stock are set forth in this article.

- i) Donald A. Fergusson – “Recent Developments in Preferred Stock Financing.” *Journal of Finance*, Vol. 7, September 1952

Reviews changes in the terms that have been used in new offerings of preferred stocks over the years, and attempts to ascertain trends in those changes.

- j) William F. Butler and Robert P. Ulin – “Business Needs for Venture Capital.” *Harvard Business Review*, Vol. 28, July 1950

Examines the importance of venture capital to the economy and ways of increasing its supply.

#### 4. THE PROBLEM OF FINANCING SMALL AND MEDIUM-SIZED BUSINESS UNITS

- a) A. D. H. Kaplan – *Small Business: Its Place and Problems*. McGraw-Hill Book Company, 1948

A comprehensive discussion, sponsored by the Committee for Economic Development, of the small business problem, dealing with the nature and causes of the problem and steps which may be taken to resolve it.

- b) U. S. House of Representatives, Select Committee on Small Business – *Review of Small Business* (final report) 1952 (82d Congress, 2d Session)

An extensive analysis of the current problems of small business: economic controls, federal taxes, government procurement, the antitrust program, unfair competitive practices, and financing.

- c) Edwin B. George – “Can Small Businesses Get the Capital They Need?” *Dun's Review*, October 1952

A summary and appraisal of the research which has been conducted on this problem and the various proposals that have been made for meeting the capital and credit needs of small business.

- d) U. S. Congress, Joint Committee on the Economic Report, Subcommittee on Investment (O'Mahoney Committee) –

*Volume and Stability of Private Investment*

*Report*, March 1950 (81st Congress, 2d Session)

*Hearings*, Part 1, pursuant to Section 5(a) of Public Law 304 (81st Congress, 1st Session)

The hearings, and the report summarizing the findings, were directed toward the question of how to increase investment in small business.

*Factors Affecting the Volume and Stability of Private Investment*. Materials on the investment problem, 1949 (81st Congress, 1st Session)

The position and problems of small business are discussed in this report. Attention is also given to the debt vs. equity controversy and to the influence of tax policy on business investment.

- e) U. S. Congress, Committee on Banking and Currency – *RFC Act, Amendment of 1951—Hearings* (82d Congress, 1st Session)

The problems of small business were explored in the committee's hearings in an effort to ascertain what aid the government should offer in this connection.

- f) John M. Chapman – *Financing Small Business*. National Association of Manufacturers, Economic Policy Division Series No. 35, December 1950

A survey of current financial requirements, conducted among N.A.M. members. Covers such questions as the extent to which members failed to obtain needed funds during the decade 1939–1949, the purposes for which the funds were desired, the reasons for failure to obtain funds, and the attitude of the concerns toward government aid.

- g) Charles L. Merwin, Jr. and Charles H. Schmidt – “Capital and Credit Requirements of Federal Reserve Bank Industrial Loan Applicants.” National Bureau of Economic Research, Financial Research Program, ms. 1942

A study of the characteristics of firms that sought aid during the thirties from certain of the Federal Reserve Banks.

- h) Robert V. Rosa –

“Some Small Business Problems Indicated by the Industrial Loan

Experience of the Federal Reserve Bank of New York." *Journal of Finance*, Vol. 2, April 1947

"The Industrial Loans of the Federal Reserve Bank of New York." *Proceedings*, Sixth Annual Convention of the Commercial Finance Industry; October 1950

Two articles dealing with the experience of the Federal Reserve Bank of New York in making direct advances to business.

- i) Loughlin F. McHugh – "Financing Small Business in the Post-war Period." *Survey of Current Business*, Vol. 31, November 1951

Traces the methods used since World War II in financing small business.

- j) Charles H. Schmidt – "Meeting the Long-Term Capital Requirements of Small Business." *Journal of Finance*, Vol. 6, June 1951

Explores the steps that might alleviate the problem of long-term capital for small business.

- k) James S. Earley and Francis L. Stubbs – *Post-War Expansion of Small and Medium-Sized Wisconsin Manufacturing Corporations and Its Financing, 1945 to 1950*. University of Wisconsin, mimeo May 1953

Summarizes a survey of the sources of funds, difficulties of financing, and rate of growth of some 650 small and medium-sized Wisconsin manufacturing corporations in the period 1945–1950. Data are presented for companies grouped by industry and by asset size.

- l) Carl A. Dauten and Merle T. Welshans – "Investment Development Companies." *Journal of Finance*, Vol. 6, September 1951

A discussion of one method of supplying venture capital for small business.

- m) Roderick F. McDonald – *Adequacy of Supply of Business Capital for the Formation and Growth of Small Enterprises*. Ph.D. thesis, Northwestern University, 1951

Examines the availability of capital and bank credit to small businesses, the effects on them of income taxes, financial aid to such concerns by governmental agencies, and the financing experiences of several small enterprises.

- n) Daniel Suits – 'Financing of Unincorporated Business'

A study, now in progress at the National Bureau of Economic Research, of the financial behavior of the proprietors of unincorporated businesses, based primarily on data obtained in the Surveys of Consumer Finances.

## E. THE SECURITIES MARKETS AND THE INVESTOR

The ownership of outstanding securities, the experience of investors, and the timing of purchases and sales are the three problems in this area which have received most research attention since World War II. The principal investigations have been the following:

### 1. DISTRIBUTION OF OWNERSHIP OF SECURITIES

- a) Lewis H. Kimmel — *Share Ownership in the United States*. Brookings Institution, 1952

A factual study of the number and geographical location of shareowners in the United States and the size and other pertinent characteristics of their holdings. Attention is also given to the motivations behind investment activity.

- b) J. Keith Butters, Lawrence E. Thompson, and Lynn L. Bollinger — *Effects of Taxation on Investments by Individuals*. Harvard University, 1953

A substantial part of this study is concerned with the distribution of ownership of marketable stock among individuals. Holdings are grouped according to the wealth and income characteristics of the holder.

- c) W. L. Crum — *The Diffusion of Stock Ownership* (mimeographed)

Examines the various ways in which statistics on the distribution of stock ownership might be helpful in developing financial and other policies of corporations and in the formulation of certain public policies related to corporations. Also analyzes the available evidence on the distribution of stock ownership according to size of holdings, both for stocks in general and for those of particular corporations, and the inferences that may be drawn from this evidence. A critique of existing compilations is offered and recommendations are made concerning future compilations.

A summary of the study appeared in the *Harvard Business Review* (May-June 1953) under the title "Analysis of Stock Ownership."

- d) "Survey of Consumer Finances." *Federal Reserve Bulletin*, December 1950 and September 1953

In the Survey of Consumer Finances periodic efforts are made to obtain a picture of the composition of accumulated savings of consumers. In the articles cited, 1950 and 1953 holdings of marketable securities by spending units of various characteristics are compared with holdings of other types of assets. See, also, page 10, entries (d), (e).

- e) George Katona, et al. — "Stock Ownership among American Families." *Michigan Business Review*, January 1953  
 This paper by members of the staff of the Survey Research Center of the University of Michigan extends the analysis of stock ownership information obtained in the Survey of Consumer Finances.
- f) Thomas R. Atkinson — *The Pattern of Financial Asset Ownership of Wisconsin Individuals, 1949*. National Bureau of Economic Research, Financial Research Program, mimeo 1953  
 A study of the relation of individuals' holdings of stock and certain other financial assets to such characteristics of individuals as income and occupation.
- g) United Statistical Associates — *Corporate Holdings of Insurance Companies* (a yearbook)  
 A detailed compilation of the amounts of individual issues held by each insurance company and the activity in individual issues during the year. The material is derived from statements filed with state insurance commissioners.
- h) Ralph L. Westfall — *A Study of the Possibilities of Attracting Individual Savings into Equity Capital*. Ph.D. thesis, Northwestern University, 1952  
 Focuses attention on the narrow distribution of ownership of equity issues. The thesis attempts to estimate the potential market for equity securities and to ascertain the type of equity issues best suited to achieve wider distribution. A number of tests of investment experience under different types of market behavior are conducted, based on the records of mutual funds and various types of insurance companies.

See also page 35, entry (d).

## 2. INVESTMENT EXPERIENCE

- a) W. Braddock Hickman — *The Volume of Corporate Bond Financing since 1900*. Princeton University Press for the National Bureau of Economic Research, 1953  
 This volume, a summary of which was published by the National Bureau as Occasional Paper 37, presents data on bond offerings, extinguishments, defaults, default settlements, and interest payments for a period of almost fifty years. Estimates are given of money flows to and from the corporate sector of the economy arising from transactions in corporate funded debt.  
 A second study dealing with the experience record of bonds of different characteristics over selected periods is now in process.
- b) Harry G. Guthmann and Bion B. Howard — 'A Study of the Record of Common Stock Investment Performance'  
 A study being conducted at Northwestern University

which will bring together the annual dividend and price behavior of various common stock indexes and the portfolio records of the leading fire insurance and investment companies.

- c) Ilse Mintz – *Deterioration in the Quality of Foreign Bonds Issued in the United States, 1920–1930*. National Bureau of Economic Research, 1951

A study of American investment experience with foreign government bonds. The relation between economic conditions at the time the bonds were issued and the ability of the issue to stand the test of a depression is examined. The ratio of the amount of bonds issued in a given quarter that subsequently defaulted to the amount of all bonds issued in the quarter is used as a crude *ex post* measure of quality.

- d) Harry Markowitz – “Portfolio Selection.” *Journal of Finance*, Vol. 7, March 1952

A mathematical formulation and testing of various rules of portfolio selection: specifically, that investors seek (a) to maximize the discounted value of future returns or (b) to achieve the optimum portfolio combination of highest expected return and lowest variance of return.

- e) Walter George Becker – *The Place and Significance of Investment Companies*. Ph.D. thesis, State University of Iowa, 1952

Reviews the growth of investment companies and examines the record to determine how well they have fulfilled their announced purposes. The investment experience of funds is contrasted with that of alternative investment outlets.

- f) Eleanor Bagley Daniel – “Some Observations on Recent Studies of Investment Risk.” *Journal of Finance*, Vol. 8, May 1953

A review of recent studies of factors affecting the realized yield on investments in securities and mortgages.

### 3. THE SELECTION OF SECURITIES

A considerable amount of work has been done in the last decade on plans for the selection of stock investments and on the relative importance of various factors affecting the prices of securities. The most important of the investigations are the following:

- a) C. Sidney Cottle and W. Tate Whitman – *Investment Timing: The Formula Plan Approach*. McGraw-Hill Book Company, 1953

A critical analysis of the major types of formula investment plans. Attention is directed to the fundamental assumptions behind various plans, their operational features, the buying and selling action which they imply,

their yield and capital-appreciation characteristics, and their underlying risks.

- b) Lucile Tomlinson — *Practical Formulas for Successful Investing*. Wilfred Funk, Inc., 1953  
An extension of an earlier book, *Successful Investing Formulas*, with special emphasis on “dollar cost averaging.” The study deals with the procedure, potential results, risks, and special uses of various formula plans.
- c) Robert A. Warren — “Formula Plan Investing.” *Harvard Business Review*, Vol 31, January-February 1953  
A detailed description of this approach to investments, its advantages and disadvantages, and its performance under inflationary conditions.
- d) J. Fred Weston — “Some Theoretical Aspects of Formula Timing Plans.” *Journal of Business of the University of Chicago*, Vol. 22, October 1949  
An examination of some of the implications of formula investment plans.
- e) Wilford J. Eiteman and Frank P. Smith — “Common Stock Values and Yields.” *Michigan Business Studies*, Vol. 11, June 1953  
An analysis of the outcome of demand investment of a fixed sum in common stock over the period 1937–1950.
- f) Marshall D. Ketchum — “Adjustment for the Secular Trend of Stock Prices in Formula Timing Plans.” *Journal of Business of the University of Chicago*, Vol. 21, January 1948  
Discusses two problems involved in the administration of a sliding-scale formula plan for investment timing: the schedule to be used in determining amounts to be transferred from stock to bond investment and vice versa, and the points in the rise or fall of stock prices at which transfers are to be made.

#### 4. FACTORS AFFECTING STOCK PRICES

- a) David Durand — *Bank Stock Prices and the Bank Capital Problem* (National Bureau of Economic Research, Financial Research Program, mimeo 1954)  
A study of the relation of the market value of outstanding stock to the ability of a company to raise funds by the sale of additional shares, devoted mainly to an analysis of factors affecting the market prices of bank stocks.
- b) Lyle R. Johnson, Eli Shapiro, and Joseph O’Meara, Jr. — “Valuation of Closely-Held Stock for Federal Tax Purposes: Approach to an Objective Method.” *University of Pennsylvania Law Review*, Vol. 100, November 1951

Analyzes whether, and to what extent, quantitative relationships exist which account for, and thus can be used to estimate or predict, the price of listed stocks in terms of reported earnings, dividends, or book values on the hypothesis that the relationships observed for listed issues might be used in determining the value of closely held issues. Statistical relationships between earnings and price, dividends and price, and book value and price are examined in four different periods for a sample of listed industrial stocks.

- c) Oscar Harkavy – “The Relation between Retained Earnings and Common Stock Prices for Large, Listed Corporations.” *Journal of Finance*, Vol. 8, September 1953

An analysis of the relationship between dividend payments and retained earnings and the level and behavior of stock prices.

- d) Willard R. Ginder – “How to Use Current Listed Stock Market Prices in Fixing Value of Close Corporation Stock.” *Journal of Accountancy*, Vol. 92, August 1951

An examination of the comparability of publicly owned and privately held corporations and the data pertinent to the problem of determining the market value of stock in a closely held company.

- e) Albert Dehner – *An Analysis of the Price Movements of Securities Listed on the New York Stock Exchange Experiencing Stock Split-ups, Reverse Splits and Stock Dividends*. Ph.D. thesis, Ohio State University, 1950

Traces the development and uses of stock split-ups, reverse splits, and stock dividends, and their influence on common stock prices. Extensive tests are made of the price movements of securities before and after such changes and of the price movements of comparable issues experiencing no similar recapitalization.

- f) C. Sidney Cottle and W. Tate Whitman – ‘Earning-Capital and Capital-Valuation Study’

The primary purposes of this study are to determine and analyze the basic earnings characteristics of the major industries and to compute and compare the market valuations of the invested capital in each.

- g) Thor Hultgren – ‘Corporate Profits and Stock Prices’

A study now in progress at the National Bureau of Economic Research which will compare quarterly price data for common stocks of individual companies for the period 1920–1938 with the profits of the companies concerned.



## F. THE RELATION OF GOVERNMENT TO THE SECURITIES MARKETS

The regulatory activities of both federal and state governments, and the taxes which they impose, have profoundly influenced the volume and character of activity in the securities markets. Also, federal policy in the management of the federal debt, and the policy and operations of the Federal Reserve banks, have had an important bearing upon the functioning of the securities markets. Finally, federal and federally sponsored agencies engaged in lending to business have in some cases competed directly with the agencies of the capital and securities markets and in other cases served as a supplement or spur to the operations of these markets.

### 1. STATE AND FEDERAL REGULATION OF THE SECURITIES MARKETS

- a) Louis Loss – *Securities Regulation*. Little, Brown and Company, 1951

A comprehensive treatment of the development of government regulation of the securities business. It covers the state statutes and the decisional law applicable to securities regulation, the aspects of the SEC statutes which pertain to this problem (i.e., securities regulation proper), special legislation in the securities field administered by other federal agencies, foreign experience, and the common law background in such fields as fraud and civil liability.

- b) E. T. McCormick – *Understanding the Securities Act and the Securities and Exchange Commission*. American Book Company, 1948

Sets forth the background and purposes of federal securities regulation and examines the organization and operation of the SEC under the various securities acts.

- c) Alexander Frey – ‘Regulation of Over-the-Counter Markets’ (to be published in 1955)

This forthcoming study will assess the effects of regulation on the organization and functioning of the over-the-counter markets.

- d) Willard E. Atkins, et al. – *The Regulation of the Security Markets*. Brookings Institution, 1946

The development of investment banking and the federal regulatory acts are traced. In addition many of the problems in this field, such as competitive bidding, private placement, and simplification of procedures, are examined.

- e) U. S. Senate, Committee on Banking and Currency – *Securities Exchange Act Amendments: Hearings* before a subcommittee on

the bill to extend the power of the SEC to cover many issues not registered with the Commission in order to further safeguard investors; February 7-10, 1950 (81st Congress, 2d Session)

- f) U. S. House of Representatives, Interstate and Foreign Commerce Committee – *House Study of the Securities and Exchange Commission: Hearings* before a subcommittee on powers, duties and functions of the SEC, Part 1; January 9–May 21, 1952 (82d Congress, 2d Session)
- g) U. S. House of Representatives, Subcommittee of Committee on Interstate and Foreign Commerce –  
*State and Municipal Securities Regulations: Conference with representatives of state and municipal securities industry and SEC on H.R. 3129 to amend Securities Exchange Act of 1934 so as to limit power of SEC to regulate transactions in exempted securities; March 21, 1946 (79th Congress, 2d Session)*  
*Amendment of Securities Exchange Act of 1934 with respect to the SEC's power to regulate transactions in exempted securities. Report and Minority Views to Accompany H.R. 3129. March 1946*  
These two documents examine the problem of the exemption of state and municipal securities from registration and the absence of any federal regulation over trading in these issues.
- h) Christopher Branda, Jr. – “Manipulation of the Stock Markets under the Securities Laws.” *University of Pennsylvania Law Review*, Vol. 99, March 1951  
Reviews stock market practices and the state and federal legislation relating to the marketing of securities.
- i) F. S. Judson and F. D. Emerson – “The Effect of Regulation T on Cash Transactions in Securities.” *Michigan Law Review*, Vol. 44, June 1946  
A review of experience since the introduction of the Federal Reserve regulation affecting margin purchases of securities
- j) J. B. McFerrin – “Blue Sky Laws of the Southeastern States.” *Southern Economic Journal*, Vol. 17, January 1951  
Reviews and contrasts state statutes governing the registration of securities.
- k) Leroy A. Shattuck, Jr. – “The Recapture of Insiders’ Profits.” *Journal of Finance*, Vol. 8, September 1953  
Reviews and summarizes the experience revealed in court cases arising under the 1934 law regulating the activity of insiders.

1) *Yale Law Journal* –

“The Meaning of ‘Control’ in the Protection of Investors” (Provisions of the various acts designed to aid investors) Vol. 60, February 1951

“Prohibition Against Sales of New Security Issues Prior to Effective Date of Registration Statement.” Vol. 56, November 1946

“The Prospects for Rule X-10B-5” (An emerging remedy for defrauded investors) Vol. 59, May 1950

“Regulation of Stock Market Manipulation.” Vol. 56, February 1947

These articles – based on the securities acts, the various regulatory decisions, and pertinent court cases – trace the evolution of legal concepts relating to securities markets regulation, and operating experience under the relevant statutes.

m) Thomas A. McKay – *Federal Regulation of Trading on the New York Stock Exchange*. Ph.D. thesis, New York University, 1949

Examines the circumstances which led to federal regulation of trading in securities and the provisions of the Securities Exchange Act of 1934 which directly affect trading in securities. It also appraises the impact of regulation of trading on the breadth, continuity, closeness, and stability of the market for securities listed on the New York Stock Exchange.

## 2. TAXATION AND THE SECURITIES MARKETS

a) Dan Throop Smith – *Effects of Taxation on Corporate Financial Policy*. Harvard University, 1952

An appraisal of the influence of taxation on corporate financial policies. Consideration is given to the influence of taxation on the relative costs of different forms of financing. One section of the study is devoted to the problems of the closely controlled corporation (see also page 24, entry (g)).

b) J. Keith Butters, Lawrence E. Thompson, and Lynn L. Bollinger – *Effects of Taxation on Investments by Individuals*. Harvard University, 1953

An analysis of the effect of taxes on investments in common stock and other forms of risk capital. Consideration is given to the effect of taxes on the ability of individuals in the upper income tax brackets to accumulate new investable funds, and to the basic investment policies of individuals (see also entry (b) on page 27).

c) J. Keith Butters, John Lintner, and William L. Cary, assisted by Powell Niland – *Effects of Taxation on Corporate Mergers*. Harvard University, 1951

Investigates the effects of taxation on merger activity and on the possibility of continued existence for small and medium-sized companies. The alternatives to merger and the nontax motivations for the sale or purchase of a company are examined in detail.

d) George E. Lent –

“Major Trends in the Market for Tax-Exempt Securities.” *Journal of Finance*, Vol. 9, May 1954

Discusses trends in the institutional and individual ownership of state and local government securities. Particular attention is directed to the effects of tax exemption upon the yields of securities and to the factors that have contributed to the relative decline in the ownership of tax-exempts by individuals.

*The Ownership of Tax-Exempt Securities, 1913–1952* (National Bureau of Economic Research, Occasional Paper 47, in press)

A detailed account of the history of tax exemption for securities and the market for investment in them. The study also analyzes the effect of the availability of tax-exempt securities on the supply of equity capital.

e) Paul L. Howell – “The Effects of Federal Income Taxation on the Form of External Financing by Business.” *Journal of Finance*, Vol. 4, September 1949

A paper exploring the effect of federal taxes on the investment activity of individuals and on corporate financial policies.

f) W. L. Crum – “The Taxation of Stockholders.” *Quarterly Journal of Economics*, Vol. 64, February 1950

An examination of effective rates of taxation on corporate income from the standpoint of the stockholder and the implications of these rates for public and corporate financial policies.

g) *Taxes – Equity Capital – and Our Economic Challenges: A Study of Selected Aspects of Federal Tax Policy* (prepared under the direction of G. Keith Funston). New York Stock Exchange, March 1953

Examines the problem of providing equity funds to finance capital formation and makes certain recommendations, mainly for changes in the tax laws, for stimulating the flow of capital funds into equity investment and increasing the use of equity in the financial structure of American business.

h) R. F. Ericson – *The Taxation of Investment Companies in the United States*. Ph.D. thesis, Indiana University, 1952

Reviews the tax problems of investment companies. The study also develops a different tax treatment for investment companies acquiring “venture-type” issues.

### 3. MONETARY AND PUBLIC DEBT POLICIES AND THE CAPITAL AND SECURITIES MARKETS

An extensive literature on federal financing policies has been produced in recent years, reflecting the importance and urgency of the policy issues which have arisen in this area. The questions involved here have an obvious bearing on the functioning of the capital and securities markets, though the connection is in many instances relatively indirect. A comprehensive listing of the work done in the field of fiscal and debt management policy has not been attempted. Only the leading investigations in this area and selected articles indicative of the range of ideas encountered are listed below.

- a) U. S. Congress, Joint Committee on the Economic Report, Subcommittee on General Credit Control and Debt Management (Patman Committee) —

*Monetary Policy and the Management of the Public Debt*

*Report*, July 1952 (82d Congress, 2d Session)

*Hearings*, March 10–31, 1952 (82d Congress, 2d Session)

*Monetary Policy and the Management of the Public Debt: Their Role in Achieving Price Stability and High-Level Employment.*

Replies to questions and other material for the use of the Subcommittee, Parts 1 and 2, 1952 (82d Congress, 2d Session)

These reports and record of hearings represent a comprehensive variety of points of view on issues of monetary policy and the management of the public debt.

- b) U. S. Congress, Joint Committee on the Economic Report, Subcommittee on Monetary, Credit and Fiscal Policies (Douglas Committee) —

*Monetary, Credit, and Fiscal Policies*

*Report*, January 23, 1950 (81st Congress, 2d Session)

*Hearings*, September 23–December 7, 1949 (81st Congress, 1st Session)

*A Compendium*, 1950 (81st Congress, 2d Session)

Reports and hearings on the problem of coordinating monetary, credit, and fiscal policies.

The *Compendium* is a collection of statements on monetary, credit, and fiscal policies submitted to the subcommittee by government officials, bankers, economists, and others.

- c) Henry C. Murphy — *The National Debt in War and Transition.* McGraw-Hill Book Company, 1950

A review of the problems encountered in the management of the federal debt during the World War II and

early postwar periods, and a defense of the policies followed.

- d) Charles Cortez Abbott — *The Federal Debt: Structure and Impact*. Twentieth Century Fund, 1953

Examines the problems implicit in the size and structure of the federal debt. Suggestions for the management of the debt to facilitate steady economic growth are advanced and analyzed.

- e) *Refunding the Public Debt*. Institute of International Finance of New York University, Bulletin No. 181, May 1953

The refunding problems encountered in the present structure of the federal debt are analyzed in this study. The impact of refunding on the money market, bank deposits, business activity, and interest rates is examined.

- f) Richard A. Musgrave — "Credit Controls, Interest Rates, and Management of Public Debt." In *Income, Employment and Public Policy: Essays in Honor of Alvin H. Hansen*, W. W. Norton & Company, 1948

Sets forth the broader economic effects of monetary and debt management policies.

- g) Lester V. Chandler — "Federal Reserve Policy and the Federal Debt." *American Economic Review*, Vol. 39, March 1949

Examines problems and conflicts in monetary and debt management policies.

- h) Harry G. Guthmann — "Financial Institutions as a Factor in Fiscal Policies." In *Fiscal Policies and the American Economy*. Prentice-Hall, 1951

- i) B. U. Ratchford — "The Monetary Effects of Public Debts." *Public Finance*, No. 4, 1949

An examination of the monetary effects and problems arising out of the federal debt.

#### 4. ACTIVITIES OF FEDERAL LENDING AND RELATED AGENCIES

- a) Harold G. Halcrow, Neil H. Jacoby, and R. J. Saulnier — *Federal Programs of Lending, Loan Insurance, and Loan Guarantees* (National Bureau of Economic Research, Financial Research Program, mimeo 1953)

This study will survey and appraise the activities of federal and federally sponsored agencies in the credit market, covering all programs of direct lending, loan insurance, and loan guarantee.

- b) Douglas R. Fuller — *Government Financing of Private Enterprise*. Stanford University Press, 1948

A study of the role of government in business financing. The basis for government financial assistance to busi-

ness is set forth and the historical experience in numerous areas is traced and appraised in some detail. An attempt is made to identify the need for government assistance to business, to outline the various problems and hazards encountered, and to present policy suggestions.

- c) Beryl W. Sprinkel — *Debt and Economic Stabilization*. Ph.D. thesis, University of Chicago, 1952

An analysis focused upon the economic effects of loans made by, or guaranteed by, various federal agencies.

## G. THE FUNCTIONING OF THE SECURITIES MARKETS IN THE AMERICAN ECONOMY

No work of a comprehensive nature has been done recently in this field. Special studies of recent developments in the functioning of the securities markets — notably of direct placements and of investment companies — include the following.

### 1. INSTITUTIONAL DEVELOPMENTS IN THE CAPITAL AND SECURITIES MARKETS

- a) "Institutional Investments." In *Law and Contemporary Problems*, Duke University, Vol. 17, No. 1, Winter 1952

A collection of papers on the programs, policies, and problems of the major institutional investors. The investment activities and problems of life insurance companies, commercial banks, mutual savings banks, trust funds, pension funds, and endowments are covered.

- b) Sidney M. Robbins — "Competitive Bidding in Sale of Securities." *Harvard Business Review*, Vol. 27, September 1949

The article traces the development of, and the problems encountered in, this method of selecting the underwriter and determining the price of new issues.

- c) David McCahan, editor — *Investment of Life Insurance Funds*. University of Pennsylvania Press, 1953

See also section A(3), page 7f.

### ON PRIVATE OR DIRECT PLACEMENTS

- a) E. Raymond Corey — *Direct Placement of Corporate Securities*. Harvard University Press, 1951

- b) U. S. House of Representatives, Interstate and Foreign Commerce Committee – *House Study of the Securities and Exchange Commission: Hearings* before a subcommittee, Part 2; January 9–May 21, 1952 (82d Congress, 2d Session)
- c) Donald L. MacDonald – *Economic Aspects of Direct Placement of Securities with Special Reference to the Life Insurance Industry*. Ph.D. thesis, University of Pennsylvania, 1951
- d) George T. Conklin, Jr. – “Direct Placements.” *Journal of Finance*, Vol. 6, June 1951
- e) H. G. Fraine – “Direct Sale of Security Issues.” *Journal of the American Association of University Teachers of Insurance*, March 1949
- f) S. C. Badger – “Direct Placement and Sale of Securities: An Expanding Method of Financing.” *Journal of the American Society of Chartered Life Underwriters*, Vol. 7, December 1952
- g) O. Ely – “Direct Placement of Securities with Insurance Companies.” *Public Utility Fortnightly*, November 9, 1950  
 These articles deal with the growth of this method of financing and the reasons for its adoption, and examine its advantages and the problems which result from it.
- h) Securities and Exchange Commission – *Privately-Placed Securities – Cost of Flotation*. September 1952  
 Covers the initial costs entailed in the direct placement of securities in the years 1947, 1949, and 1950, including the fees paid investment bankers and others for arranging private sales, as well as the payments to attorneys, accountants, and other expenses usually incurred in marketing securities. The costs involved in direct placements are compared, where possible, with similar costs incurred in public offerings.
- i) *Yearbook of Private Placement Financing*, E. V. Hale & Co. (5th annual ed.), 1953  
 An annual compendium of all issues placed privately. Information is presented on size of issue, the intermediaries in the transaction, and the identity of the purchasers and amount purchased.

## 2. INVESTMENT COMPANIES AND THE SECURITIES MARKETS

- a) James A. Close – “Investment Companies: Closed-End versus Open-End.” *Harvard Business Review*, Vol. 29, May 1951  
 A comparison of the organization and operations of the two major types of investment companies.
- b) George Wilber Moffitt, Jr. – “Management Achievement of



Open-End Investment Companies." *Journal of Business of the University of Chicago*, Vol. 25, April 1952

Attempts to construct and apply an adequate and accurate method of computing management performance of open-end companies. Other methods or tests which have been used are critically examined.

- c) William D. Carter – "Mutual Investment Funds." *Harvard Business Review*, Vol. 27, November 1949

Reviews the development and role of mutual investment funds.

- d) Harold Stanley Oberg – *The Mutual Investment Company*. Ph.D. thesis, New York University, 1951

Mutual fund operations and problems are examined in this study. Administrative techniques and regulatory and tax problems are examined along with sales and investment problems of the funds. Criticisms of certain aspects of fund operations are developed.

See also page 35, item (h).

### 3. SECURITIES MARKETS AND ECONOMIC FORECASTING

- a) V. Lewis Bassie – 'Stock Market Trends as an Indicator of Speculative Psychology' (a project being conducted at the University of Illinois)

The objective of the study is to develop indexes which will measure the state of speculative psychology as a factor affecting the direction and magnitude of price changes at various stages of the business cycle.

- b) Geoffrey H. Moore – *Statistical Indicators of Cyclical Revivals and Recessions*. National Bureau of Economic Research, Occasional Paper 31, 1950

Examines the record of stock market prices, along with a number of other economic series, as an indicator of turns in economic conditions.