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PART II

*Report of the
Exploratory Committee
on Research in the
Capital and Securities Markets*

Scope of the Recommendations

The task of this Committee was to review the progress made in the last eight or ten years in research on the capital and securities markets and on the basis of its review to make two sets of recommendations, one concerning those bodies of information developed in recent studies that should, if possible, be kept up to date and the other looking to additional research on problems of the capital and securities markets.

If the maximum benefit is to be obtained from completed research studies, and from the investigations proposed in this report, provision must be made for keeping key bodies of information up to date, either by maintaining statistical series on a continuing basis or by conducting periodic surveys. Fortunately, much of the necessary work is already being done, either by agencies of the federal government, by the Board of Governors of the Federal Reserve System and the Federal Reserve Banks, or by such private agencies as the New York Stock Exchange. The Committee has sought to identify, however, cases in which additional effort may be necessary if the full value of work already done is to be realized. Recommendations to this end are made in section A, below.

In the Committee's recommendations for new research the object has been to identify those areas in which new research is most needed to fill gaps in information on the capital and securities markets which still exist. Some of the proposed studies, which are presented under eight headings in section B, below, are of a comprehensive nature, contemplating investigations that would cover a wide segment of the capital markets or of the securities business; others are narrower in scope but they all are directed to basic problems of general interest. No attempt has been made to establish an order of priority among them, since no single ranking according to needs in so broad a field could be regarded as definitive. Furthermore, for practical reasons which will perhaps be obvious, the Committee has not presented its suggestions in as much detail as would be necessary if actual research on them were to be undertaken.

The first problem faced by the Committee was to define the limits of its area of interest. This had to be done in terms sufficiently generous to cover broad studies with many ramifications as well as specialized investigations of a more narrow and technical nature, and yet not so inclusive as to cause its efforts to be dissipated over too wide an area. To set such limits is not a simple matter, and there is necessarily an element of arbitrariness to them; they have been defined here as the limits of the financing process in the markets for long- and intermediate-term funds for domestic business and government, with the financing process construed broadly as the issuance and subsequent transfer of stocks, bonds, mortgages, loans, and similar instruments. No attempt has been made to appraise the need for research in the following fields, as such: agriculture, consumption, urban real estate, foreign trade and investment, or the short-term capital requirements of business. But where any one or more of these areas falls naturally within the scope of the broader investigations discussed below, notably in sections 2, 3, and 4 under B, the Committee has not felt constrained to exclude them.

A. PROPOSALS FOR KEEPING BASIC INFORMATION UP TO DATE

1. ESTIMATES OF SAVINGS BY TYPE AND BY PRINCIPAL GROUPS OF SAVERS

Statistics of savings naturally head the listing of materials that should be kept up to date, because of the paramount importance of savings to the institutions of the capital and securities markets. Much progress has been made in recent years in the development of improved data on savings, and several bodies of information are already being compiled and published on a continuing basis. These include the estimates of the volume of savings made regularly by the Securities and Exchange Commission and also by the Department of Commerce, and the Surveys of Consumer Finances that have been taken for the last nine years by the Board of Governors of the Federal Reserve System in cooperation with the Survey Research Center of the University of Michigan.

The SEC series on the volume of savings by individuals is constructed by aggregating estimates of the various components that make up the total: increases in individuals' holdings of currency, bank deposits, and securities, increases in their equities in savings and loan associations and in insurance and pension reserves (public and private), net changes in mortgage and other consumer debt, and additions to nonfarm dwellings and other durable consumer goods. These data are available on an annual basis beginning in 1933 and have been released since 1942 on a quarterly basis (see, for example, the SEC's Release No. 1242, June 30, 1954, on "Volume and Composition of Individuals' Saving, Jan.-March, 1954").

The estimates of savings made by the Department of Commerce are derived by a different approach, namely by subtracting personal consumption expenditures from personal disposable income. They are available annually since 1929 and quarterly since 1950 (see the *Survey of Current Business*, July 1954, pp. 3-9, "National Income: Revised Series, 1929-53").

The Surveys of Consumer Finances provide information on the saving and spending behavior and intentions of consumers. Data are gathered on a sampling basis, the 1954 survey having involved 3,000 interviews during January and February in 66 sampling areas distributed throughout the country and including the twelve largest metropolitan areas (see, for example, the *Federal Reserve Bulletins* for March and June 1954).

In a recent research project sponsored by the Life Insurance Association of America, Raymond W. Goldsmith has developed estimates of savings for the period 1897-1949, by type of savings and by principal groups of savers. Not only does this provide the most comprehensive and longest continuous series on savings presently available but it gives a more detailed breakdown of total savings than was hitherto available. Six groups of savers are distinguished: nonfarm individuals, farmers, unincorporated business enterprises, corporations, state and local governments, and the federal government. The savings of each group, except corporations, are broken down according to the form which they take, such as increases in deposits in particular types of financial institutions, increased holdings of various categories of securities, etc.

Since the trends revealed by the 1897-1949 series have a significant bearing on the institutions of the capital and securities markets, including such practical matters as the shifting competitive relationships among agencies that channel savings into investment, it is perhaps appropriate for the Committee to express the hope that some means will be found for keeping it up to date. Although the movements revealed by a long historical series of this type are not likely to vary widely over short periods of time, year-to-year changes registered in such a way that they can be placed in an adequate historical perspective are advantageous both for the analysis of current conditions and for gauging the probable future direction of broad shifts among savings institutions and in the uses to which savings are put in the economy.

2. ESTIMATES OF THE FLOW OF SAVINGS THROUGH FINANCIAL INSTITUTIONS

One of the major advances in financial research in recent years has been that made in tracing the flow of money through the economy. Moneyflows have an obvious relation to economic conditions and are clearly of interest to financial institutions. A basic step in this work was taken with the publication of Morris A. Copeland's book

entitled *A Study of Moneyflows in the United States* (see Inventory, page 22), a project involving the cooperative effort of the National Bureau of Economic Research, the Committee for Economic Development, and the Board of Governors of the Federal Reserve System. Out of that investigation has already come one set of continuing data, the "Consolidated Condition Statement for Banks and the Monetary System," which is prepared by the Board of Governors and published monthly in the *Federal Reserve Bulletin* (see the January 1948 issue, pp. 24-32, for a description of the statement). A comprehensive system of accounts has been compiled by the Board of Governors for the years 1939-1953 for the ten major sectors of the United States economy: consumers, corporations, unincorporated businesses, farms, the federal government, state and local governments, the banking system (subclassified into commercial banks, Federal Reserve Banks, mutual savings banks and the postal savings system, Treasury monetary funds, and the Exchange Stabilization Fund), insurance companies (subclassified into life insurance companies, self-administered pension plans, and other insurance companies), other investors (savings and loan associations, nonprofit organizations, and miscellaneous financial institutions), and the rest of the world. The accounts encompass all transactions effected by these sectors through the use of money and credit, whether arising in production and trade, in the turnover of such assets as land and other real estate, or in dealings in financial instruments, such as mortgages, securities, and other financial claims.

Further progress in the development of data of this type is contemplated in the suggestion which the Committee makes in section 2 of B, below, for a research project on the holdings of different types of assets by main investor groups and the flow of funds through financial intermediaries into investment uses of different types. Such compilations are an ideal example of material that should be available currently. They would make it possible to follow broad trends in the sources of investible funds, in their flow to various sectors of the capital and securities markets, and in the uses to which they are put by the various investment intermediaries. The figures would also be useful in appraising the current movement and probable impact of factors affecting the volume of activity in financial markets and the levels of interest rates and security prices.

The comprehensive accounts now being carried forward by the Board of Governors would be usefully supplemented by data such as that which would be available if the research suggested in section 2 of B, below, were undertaken. In the event that the proposed

research can be completed, the problem of keeping the information up to date will arise. This is a need, however, which is still relatively far in the future.

3. CORPORATE BOND STATISTICS

The usefulness of the materials on the corporate bond market which were compiled in the National Bureau's Corporate Bond Research Project would be greatly enhanced by their being kept reasonably current. These materials extend back to 1900 and at the present time have been brought forward only through 1943. The project was started in 1939 under the National Bureau's management and with the sponsorship of the Federal Deposit Insurance Corporation; other agencies, including the Securities and Exchange Commission, the Board of Governors of the Federal Reserve System, the Office of the Comptroller of the Currency, and several private investment advisory services, cooperated in its conduct. The data compiled under the project consist of four principal records and two subsidiary records. The Record of Offerings, which is in substance a census of bond offerings since 1900, gives such items as name and industry of obligor, description of security and amount issued, coupon, and term to maturity on every domestic corporate bond (industrial, railroad, and utility) outstanding in 1900 or issued thereafter, about 28,000 in number. The Issue and Extinguishment Record gives for bonds of fixed income and single maturity — about 4,900 in number — additional facts such as price, expected yield, eligibility for savings bank investment, and rating. The Record of Default Experience gives for those bonds covered in the Issue and Extinguishment Record that went into default — some 1,100 in number — the nature of the default, the method by which it was settled, and the experience of the successor securities over the five years following default. The Periodic Record, which covers all bonds in the Issue and Extinguishment groups, gives price, yield, and rating information at the beginning and end of four-year periods, and the changes in yield and in market and agency ratings over those periods. Finally, the Annual and Monthly Records give detailed price, yield, and rating information for a smaller number of bonds.

The primary materials of the Corporate Bond Research Project are available in punchcard form at the National Bureau and at certain of the cooperating agencies. Analytical studies are being made on the basis of them, of which the first — *The Volume of Corporate Bond Financing since 1900*, by W. Braddock Hickman — was published by the Princeton University Press for the National Bureau in

1953. Quite apart from the obvious value of material of this kind for basic studies of bond market activity and investor experience, they have proved useful in several special connections, such as in the development of policies for valuing securities held by life insurance companies and in examining the merits of various proposals for revising the laws regulating trust fund investment. Even as they stand the materials will be useful in additional analytical studies of bond investment experience, but their value would be appreciably increased by extending the Record of Offerings to cover securities issued since January 1, 1944, by completing the Issue and Extinguishment and the Default Records, and by extending the Periodic Record to include securities outstanding at the quadrennial dates January 1, 1948 and January 1, 1952.

4. DATA ON SECURITY OFFERINGS

Several series are compiled currently by public and private agencies on the volume of security offerings. The *Journal of Commerce* has been publishing a series on new securities issues since 1906, the *Commercial and Financial Chronicle* since 1919, Standard and Poor's Corporation since 1924, and the Securities and Exchange Commission since 1934.

The *Commercial and Financial Chronicle* series breaks down total corporate issues according to whether they are for new capital or refunding, according to broad industry groupings, and by class of security. The materials compiled and published by the SEC in its monthly *Statistical Bulletin* cover all new issues of corporate securities offered for cash sale in amounts over \$100,000 and with terms to maturity of more than one year, whether publicly offered or privately placed, and are notable for their detailed breakdown of the industries offering the securities and for the information they provide on the proposed uses of the net proceeds. In addition, quarterly data compiled by the SEC on new issues, retirements, and net change in outstandings of corporate bonds and notes and corporate stocks are published currently in the *Federal Reserve Bulletin*.

Supplementing the foregoing series are data on securities offered via underwriters published monthly by the *Investment Dealers Digest*. These distinguish between issues of various types — bonds, preferred stock, and common stock — handled by competitive bidding and by negotiation, and also include information on issues exempt from registration for reasons of size, on stand-by and exchange offers of securities, and on special and secondary offerings.

The most recent additions to the materials on security offerings

are the *Issuer Summaries* (see Inventory, page 6) developed in connection with the recent antitrust action against certain investment banking firms. For the period July 26, 1933 to December 31, 1949 they give a listing of issues along with date of offering, description of issue, dollar amount, type of transaction, number of underwriters, identity of manager or agent, name of seller in the case of secondary issues, and the contemplated gross spread.

The various series on offerings described above are being maintained on a current basis except for the *Issuer Summaries*. It may be desirable to consider the feasibility and potential value of keeping materials of the latter type on a current basis.

5. STOCK OWNERSHIP STATISTICS

Recent studies have contributed appreciably to information on the distribution of stock ownership in the United States. An extensive analysis of shareholdings and shareholders in publicly owned corporations was made in 1952 by the Brookings Institution at the request of the New York Stock Exchange and with the help of this and other exchanges and numerous companies, firms, and associations (see Inventory, page 27). On the basis of that study, the number of shareholdings of record was estimated at 20.3 million in 3,954 stock issues; holdings were classified according to type and geographical location, the size and industry of the enterprise involved, and other factors. The number of shareholders as distinct from shareholdings was estimated in the Brookings study, by means of sample data taken in a field survey, at nearly 6.5 million as of March 1, 1952. Shareholders were classified according to age, income, occupation, and other pertinent characteristics.

A second recent study, made by the Division of Research of the Harvard Graduate School of Business Administration, deals with the effects of taxation on the investment policies and objectives of individuals (see Inventory, page 27). The materials were gathered by personal interviews, during the summer and fall of 1949, with 746 customers of some 60 investment banking firms or branches of firms. Detailed information was obtained by this intensive survey method both as to security holdings and as to investment attitudes for the high-income segment of the population which holds the great bulk of all marketable stock owned by private investors.

An investigation more limited in geographical coverage but encompassing a wider range of financial assets was made by the National Bureau in 1950 in cooperation with the University of Wisconsin (see Inventory, second item on page 28). This study, which

will shortly be published, gives information for a sample of Wisconsin individuals on holdings of securities and certain other financial assets. The object of the study is to show differences among individuals, when classified according to pertinent economic and social characteristics, with respect to the types and amounts of financial assets which they hold.

There can be little doubt that analyses of individuals' investment choices contribute to a better informed public understanding of the enterprise system and of the securities business, and have many practical uses in the distribution of securities. There can be little doubt, either, that analyses of this kind should be extended into new ground where circumstances permit, and certain suggestions thereto are made in section 4b of B, below. It is also important, however, that broad surveys of stock ownership distribution should be taken along the lines of the Brookings Institution survey or by some alternative method. These will serve not only to illuminate current stock ownership conditions but to reveal trends in this strategically important feature of the enterprise system.

6. ESTIMATES OF TRADING ACTIVITY IN OVER-THE-COUNTER MARKETS

Periodic estimates of the volume of trading activity in the various over-the-counter securities markets — i.e., those for federal, state, and municipal securities, and for corporate bonds and stocks — would usefully supplement the available data of activity conducted on the securities exchanges and should be compiled. They would make it possible to follow trends in the relative importance of the different sectors of the over-the-counter market, and by being compared with the available data on exchange transactions would show shifts in the relative size of the two markets. Substituting reliable facts for incomplete estimates in this area would provide a much improved basis for considering many problems of public and private policies affecting securities markets.

Estimates of trading in the various sectors of the over-the-counter market were made for 1949 in a study of the Wharton School of the University of Pennsylvania, *Activity on Over-the-Counter Markets* (see Inventory, page 17), and for earlier years estimates have been made for the corporate stock sector. There is no present provision for keeping such information up to date, though there are several ways in which estimates might be made. The most reliable method would be to compile data periodically from the records of a sample

of broker-dealers. Alternative approaches would involve the use of material compiled for other purposes, but this is often incomplete or out of date and cannot be expected to give wholly reliable results. Estimates made by recourse to the primary records of broker-dealers would obviously require the unreserved cooperation of many firms, both over-the-counter and exchange and registered and nonregistered, and of the various associations in the industry.

7. CHARACTERISTICS OF SECURITY TRANSACTIONS

Two recent studies have contributed significantly to the information available on the characteristics of security transactions. The New York Stock Exchange has conducted three Public Transaction Studies, of which the most recent is a survey of stock transactions on the New York Stock Exchange on March 17 and March 24, 1954 (see Inventory, page 19). Information was developed on 92 percent of the shares purchased and sold on the exchange on the given days. The survey shows the sources of the volume of transactions, a comparison of shares purchased with shares sold by the various sources of volume, the geographic origin of orders, and distributions of shares purchased and sold for individuals classified by income, age, sex, reason for making purchase, length of time security was held, and price per share, and by a number of cross-classifications of these facts.

As one of the studies in its series on the over-the-counter markets, the Securities Research Unit of the Wharton School has published a monograph on *Characteristics of Transactions on Over-the-Counter Markets* (see Inventory, page 18) and is planning to publish another on *Pricing and Price Differentials on Over-the-Counter Markets* (see Inventory, page 18). In the former study over 25,000 separate transactions, effected during the three-month period September through November 1949, are analyzed in terms of type of customer, type of security, size of issue and of issuer, price of issue, size of broker-dealer, listing status of security, geographic region, and length of time since last change in outstanding issue. The analysis of pricing is based on the same 25,000 transactions plus data from the files of the National Association of Securities Dealers on a sample of firms obtained in the process of examining member dealers. The latter materials include such information as the price at which the transaction was effected, the number of shares traded, the date of the trade, and the cost of the security to the member firm. The study analyzes quoted prices and transaction prices and

the relation between the two in the customer and dealer markets. Its primary purpose is to clarify the spreads characteristic of these markets.

Information of the type obtained in the Public Transaction Study should be obtained periodically and will increase in usefulness as the succession of these surveys is extended. In this way it becomes possible to trace changes over time in significant trading trends. There is no provision, however, for continuing to compile data of the type obtained in the Wharton School studies on the characteristics of over-the-counter transactions and of the price differentials involved in them. Such information should be obtained at intervals, presumably on a sample basis, and over a period of time would cast much light on the operation of this sector of the securities markets.

8. FINANCIAL DATA ON BROKERS AND DEALERS

Data on the resources and liabilities of brokers and dealers have been collected for some time at the Securities and Exchange Commission. The materials were compiled and published by the Commission for 1946-1947 but have not been readily available in comprehensive form since then. It would be useful to have them published regularly. It is perhaps obvious that any exhaustive survey of the structure of the investment banking business would lean heavily on them.

B. PROPOSED AREAS FOR NEW RESEARCH STUDIES

1. THE STRUCTURE AND PROBLEMS OF THE INVESTMENT BANKING AND SECURITIES BUSINESS

There is a distinct need at this time for a clarification of how the investment banking and securities business functions, and for factual studies of certain of its problems. Research so directed would improve public understanding of an essential economic activity, would provide a better basis for evaluating the impact thereon of regulatory

policy, and would improve our knowledge of trends in this sector of the financial system. A number of different types of studies might be made, of which the following seem especially promising.

a) A COMPREHENSIVE SURVEY OF INVESTMENT BANKING

There is no doubt that the investment banking industry has undergone fundamental changes in recent years, but there is inadequate knowledge of the forces that have brought these changes about, and an inadequate basis for judging their probable future course. A broad survey of investment banking facilities today — giving a full, factual account of their nature and how they function in originating and distributing securities — with a review of the changes that have occurred in them since the twenties would fill this gap. Such a survey would attempt also to identify the major economic forces which have produced structural and functional changes in investment banking.

More specifically, a survey of contemporary investment banking facilities should present information on the following, though the list cannot be regarded as complete:

- (1) The number, assets, and capital funds of investment banking firms and securities dealers
- (2) The regional distribution of firms and offices
- (3) The functions performed by different firms, including the origination and distribution of securities, investment counseling, the arrangement of direct placements, etc.
- (4) The structure and operation of facilities for the origination and distribution of securities
- (5) The organization and operation of security syndicates
- (6) The functioning of investment banking facilities in secondary distributions
- (7) The character of the securities — type, industry, and size of issue — originated and distributed by firms of different types
- (8) Differences among firms with respect to type of security buyer served, and
- (9) Costs and returns in the origination and distribution of securities, and the over-all profitability of the business.

So far as data are available, these matters should be examined for representative periods in the twenties and thirties as well as for one or more recent postwar years. Much of the material needed for the

discussion of recent conditions would be available in reports to the Securities and Exchange Commission, and the study would provide an opportunity to employ historical and current data developed in connection with the recent antitrust action against certain investment houses and in earlier hearings and investigations. Those materials would be supplemented by data obtained on direct request from investment banking firms, dealers, issuers, and institutional buyers, and by field interviews with them as well. Primary reliance would have to be placed on secondary sources of information, however, in building an adequate account of the structure and functioning of the industry before World War II.

b) STUDIES OF SPECIAL ASPECTS OF INVESTMENT BANKING

In addition, research should be directed to certain special aspects of investment banking which, while they have in a number of instances been the subject of investigation, are in need of further study. These include the following, though again the list might be extended:

- (1) Experience with competitive bidding, examined from the viewpoints of the investment banking industry and of the issuers and the purchasers of securities
- (2) The use of such techniques as direct (private) placements, sale and leaseback arrangements, and the term or capital loan as made by banking institutions, and their impact on conventional financing methods
- (3) The functioning of investment banking firms in the distribution of certain special classes of securities such as investment company issues, oil royalties, issues of state and local governments (including the revenue obligations of special authorities), and foreign securities (including the obligations of the International Bank for Reconstruction and Development), and
- (4) The functioning of investment banking firms in supplying capital for small and medium-sized firms, and the special problems involved in handling such issues.

In some cases specialized studies of this sort could be made as part of a comprehensive survey of investment banking, as outlined in the previous section. Some or all of them could be handled best, however, as separate investigations, though a broad factual survey of the securities business as a whole would form a desirable and in some cases an indispensable basis for their development.

c) THE ECONOMIC ROLE OF THE SECURITIES EXCHANGES

Fundamental changes have occurred in the economy that have had an important impact on the role and functioning of the securities exchanges. Among them are the forces which in recent years have tended to bring about a reduction in the concentration of income and wealth. These will inevitably affect, though necessarily with some lag, the distribution of security ownership. Important also are the forces which have led to a share increase in that part of the community's savings which flows into productive use through institutional channels. In some respects these changes are tending to broaden the role of the securities exchanges in the transfer of existing financial claims, and thereby in capital formation; in other important respects, however, they may tend to narrow it, even though at the same time the economy may become increasingly dependent on organized exchanges for the provision of liquidity through the ready transfer of securities.

The effect of these trends on the exchanges can be determined only through carefully planned factual studies. Fortunately, much research pertinent to these problems has been completed in recent years, but additional effort is called for. Without attempting to give a detailed outline of a project which would fill research needs in this area, certain points to which a comprehensive study should be directed may be indicated, as follows:

- (1) The types of securities currently listed for trading on the organized exchanges, and changes in the listings in recent years
- (2) The volume of trading in the aggregate and in the various types of securities, and the factors affecting trading activity
- (3) The characteristics and, to the extent that they can be determined, the motivations of buyers and sellers involved in different categories of transactions under varying market conditions
- (4) The ownership composition of corporate equities: origin of holdings; length of time held; age, income, occupation, and other pertinent characteristics of individuals as holders; and
- (5) The effect on the functioning of the organized exchanges of such broad economic trends as the tendency toward a less highly concentrated distribution of income and wealth, the institutionalization of savings, the changing capital requirements and financing methods of business; and of public policies, especially in taxation and securities regulation.

2. ANALYSES OF INVESTMENT HOLDINGS AND FLOWS OF INVESTMENT FUNDS IN THE CAPITAL AND SECURITIES MARKETS

The study next proposed contemplates the development of a detailed set of accounts, covering at least the years since the end of World War II, which would show the flow of investment funds to, from, and among capital market institutions and would reveal shifts in the sources from which funds are obtained, in the particular channels through which they flow, and in the uses to which they are put. The many purposes to which such a system of accounts could be put are perhaps self-evident. They would provide a link between the broad economic movements reflected in data on national income, consumption and savings, and capital formation and the functioning of particular types of financial institutions; they would show changes in the share of the savings flow handled by particular types of institutions; they would reflect changes in investment policies on the part of particular institutions, and of the capital market as a whole, and enable one to relate these to the economic factors which presumably affect and are affected by them. In many respects the compilation and analysis of this system of data is the most challenging current task in the field of financial research.

The basis for such an integrated picture of investment holdings and of the flows of investment funds in the capital and securities markets is now available in the flow of funds accounts developed at the Board of Governors of the Federal Reserve System, which continue the pioneering work of Professor Morris A. Copeland. These accounts have now been completed for 1939 and subsequent years.

The needs of analytical studies¹ suggest extensions and refinements of the data along the following lines:

(a) Supplementation of the data on net flows of funds — the primary subject matter of the moneyflow accounts — by data on holdings of different types of securities and loans (including mortgage loans), wherever necessary and possible on the basis of both book and market values. Some data on holdings are included in the accounts, but these pertain primarily to book values of debt obligations; information on values of equity securities is not available currently.

¹E.g., as in *Postwar Expansion of Private Debt*, Division of Research and Statistics. Board of Governors of the Federal Reserve System, mimeographed, 1953.

(b) Separation of the data on holdings and on flows for corporate bonds, preferred stocks, and common stocks; U. S. government short-term obligations, long-term obligations, and savings bonds; mortgage loans on farms, single family homes, apartment houses, and nonresidential structures; term loans to businesses, and other bank loans. Some of the distinctions are made in the flow of funds accounts, but additional work is required on others.

(c) Segregation of additional types of institutions (the "sectors" of the moneyflow accounts), particularly the break-up of corporate business into at least three subsections (electric and gas utilities, railroads, manufacturing and other), the segregation of trust departments of commercial banks, investment companies, and holding companies, and the splitting of state and local governments.

(d) Adjustment for capital gains and other valuation changes of the figures for net flows, now generally derived as the difference between book holdings at successive dates, in order to bring them more closely in line with the basic concept of the net amount of cash supplied or absorbed as the result of transactions in securities and loans. This can, in general, be done for total portfolios, but it is difficult to apply such adjustments to each type of asset.

(e) The addition, so far as possible, of figures of acquisitions (purchases) and dispositions (sales) of various types of securities and loans to the present data on net changes in the reported holdings of specified assets. In practice the improvement can probably be made only for a limited number of institutions and in most cases only for a few recent years.

The flow of funds accounts, so enlarged and particularized, could be used as a basis for a systematic analysis of developments in the various sectors of the capital and securities markets. Such an analysis would fuse the available statistical data on asset holdings, supply of funds (net or gross sales), and demand for funds (net or gross purchases) in the different sectors of the capital market with information — currently available or to be collected — on interest rates and yields and on costs of portfolio administration, and with material on the investment practices of financial institutions. The goal would be a quantitatively founded description of the operation of the main sectors of the American capital market since World War II, and of the interrelations among sectors.

In view of the nature of such work it would seem best to organize it as a single project rather than as a set of separate studies dealing with different aspects or sectors. The project might well consist of the following principal parts:

(a) An introductory discussion of the relationship between data on the investment holdings of capital market institutions and on the flow of investment funds, and such broad social accounts as national income statements, national balance sheets, measures of flows of funds, and input-output tables.

(b) A presentation of background data on the course of national income, savings, investment, and national wealth since the turn of the century, linking changes in these broad economic measures to the movement of investment holdings and flows since the end of World War II.

(c) An analysis, for the years since World War II, of investment holdings and flows for the main holders of investment assets — commercial banks and savings banks, Federal Reserve Banks, life and property insurance companies, public and private pension and trust funds, investment companies, investment bankers and security dealers, credit unions, savings and loan associations, mortgage bankers, federal credit institutions, private nonprofit institutions, households, governments, and foreigners. Separate analysis should be made of each of the main sectors of the capital market: the markets for federal, state, and local securities, farm mortgages, and the main types of nonfarm mortgages.

(d) Finally, an effort to explain the major shifts that have taken place in the relative importance of various investor groups and in their respective policies, as evidenced by the data on balances and flows of investment funds. To some extent these changes may be traced to shifts in the sources from which savings are derived and in the relative importance of the different major users of investment funds. Changes in the framework of law and custom within which the investment process is conducted and of government policies affecting investment are also operative. However, major importance must probably be attributed to movements in the gross and net yields on different types of investments. An essential part of the investigation, therefore, would be an analysis of the movement of interest rates and yields for the principal types of investments and the associated shifts in the investment holdings of principal investor groups.

3. STUDIES OF SELECTED INSTITUTIONS OF THE CAPITAL AND SECURITIES MARKETS

Certain selected institutions of the capital market need special study, both to assess their importance and probable impact on the savings-investment process and to show how they fit into the capital market as a whole. In some cases they are relatively new, which accounts for the inadequate information concerning them, but in other cases they are long-standing features of the capital market on which, for various reasons, adequate information has never been compiled. Three such institutions are the following:

a) PRIVATE PENSION AND PROFIT-SHARING FUNDS

A factual study of the growth and present functioning of private pension and profit-sharing funds, which now exceed \$10 billion in amount (excluding those administered by insurance companies) and are increasing at a rate of from \$1 billion to \$2 billion a year, is presently needed. Attempts have been made to collect basic data on the nature and magnitude of these funds, and on the methods by which they are administered, but further research is called for. An adequate study of them would provide for the following:

- (1) An account of the growth of private pension and profit-sharing funds before and since World War II, showing the number of funds of different types, the volume of contributions received, the growth of fund assets, and the extent of their coverage (i.e., number and distribution of participants)
- (2) An analysis of shifts in the types of assets held by pension and profit-sharing funds
- (3) An analysis of the gross flow of funds to and from pension and profit-sharing funds (i.e., of the acquisition and disposition of assets)
- (4) A descriptive account of the investment policies of representative funds and analysis of their investment experience
- (5) A factual account of the terms and conditions on which different types of funds are operated, such as eligibility provisions, benefits, and the relation of employer to employee contributions, and
- (6) An analysis of the factors influencing their long-term growth.

Some of the factual materials essential to the completion of such a study could be obtained in present compilations of federal agencies, notably the Internal Revenue Service and the National Income

Division of the Department of Commerce. In addition a project of the Board of Governors of the Federal Reserve System and the Internal Revenue Service, now under consideration, would provide benchmark data on the total assets and main types of investments of private pension funds for 1951. Much of the required historical and current information, e.g., on the composition of funds assets, on the investment policies and experience of various funds, and on the terms and conditions of fund administration, could be obtained in the necessary detail only by means of questionnaire surveys and field interviews.

Closely allied to the above are the various stock option plans which many companies have adopted for key employees. It would be useful to ascertain the nature and magnitude of such plans, the extent to which the options have been exercised, the methods used to finance purchases, and the investor experience with stock so acquired.

b) PUBLIC EMPLOYEE RETIREMENT FUNDS

The retirement funds established for the payment of pensions to state and local government employees have been growing rapidly in recent years and now aggregate some \$9 billion. The net addition to invested assets amounts to more than \$1 billion a year. Material similar to that desired for private pensions funds should be worth gathering, therefore, on a comprehensive basis.

Historically these funds were invested exclusively in federal, state, and local government securities; but investment provisions have been broadened in many cases in order to secure higher returns. Currently close to one-third of the amount invested is in corporate securities and mortgages, and this proportion seems bound to increase further.

While considerable field work would be required to make a complete analysis of public retirement funds, the initial survey of the Municipal Finance Officers Association provides valuable basic information on perhaps two-thirds of the assets. Also, data are already being gathered by the Treasury Department and the Department of Commerce as to the size and composition of these and other public funds.

c) PERSONAL TRUST FUNDS

Although personal trust funds are of long standing and are of considerably greater magnitude than private pension funds, with assets

now in the neighborhood of \$60 billion and an annual rate of increase of several billion dollars, there is a marked dearth of quantitative information concerning them. To be sure, the difficulties of filling this gap in financial information are formidable. It is probably impractical to attempt quantitative estimates of their magnitude prior to 1950, though fragmentary information on that point is available in the reports of state banking authorities. For a more recent date, however, it should be possible to assemble information on the relatively small number of large personal trust departments of commercial banks which account for a considerable fraction of the assets administered by all such trusts; data might also be obtained on a representative sample of smaller trust departments. Research undertaken in this area would attempt to show the following:

- (1) The aggregate size of personal trust funds of different types, at least of those administered by financial institutions
- (2) Distributions of trust assets according to type of security, industry, maturity, etc., and
- (3) The flow of funds through trusts as revealed by data on their gross acquisitions and sales of assets.

In all probability the study would have to be limited to the funds administered by banks and trust companies, and major reliance for factual materials would have to be placed on direct inquiries and field interviews. The possibility of obtaining information on funds administered by individual trustees is probably small, yet an effort might be made to throw some light on the relative importance and policies of such funds by special inquiries in a few leading financial centers.

4. INVESTOR PREFERENCES, POLICIES, AND EXPERIENCE: FINANCIAL INSTITUTIONS AND INDIVIDUALS

a) FINANCIAL INSTITUTIONS

The availability of a study such as that suggested in 2, above, would make it possible to proceed directly to an examination of the investment policies and experience of all, or of selected, financial institutions in the years after World War II. Such a study would require data on (a) holdings of investment assets, grouped according to type of security, maturity, industry, and quality, by the major financial institutions — commercial banks, savings banks, life and property insurance companies, savings and loan associations, investment

companies, pension funds, and personal trust departments — and (b) the flow of investment funds, probably on a net basis only, through these institutions. As was indicated in 2, above, some difficulty would be encountered in obtaining requisite data, particularly for pension funds and personal trusts, but a tolerably adequate account could be pieced together for the postwar years.

With such materials in hand, research could be directed to providing a description of the investment policies of the leading financial institutions, an analysis of the major factors affecting their investment policies, and a measure and appraisal of their actual investment experience. The description of investment policy would be partly in terms of shifts in asset holdings and in net flows of funds into, and out of, assets of different types, but it would be important to supplement that evidence by field interviews with investment officers in which an effort would be made to determine the general lines of policy behind investment decisions.

To a certain degree, the causes behind shifts in investment holdings are to be found in the movement of such quantitative factors as are known to have an effect on investment decisions: notably, interest rates and yields, and changes in the differentials between yields on different types of investment; changes in the availability of certain types of securities; changes in the costs of acquiring and of holding various types of investments; tax influences, and the asset growth and liquidity position of the investing institutions. The importance of law and regulation, investor expectations, and so on, can be taken into account only qualitatively. Analyses of changing patterns of investment, therefore, would be partly statistical, but would also require extensive field investigations and interviews with officers responsible for investment portfolio management.

Finally, extensive primary research is needed to reveal actual investment experience in different categories of assets. Much progress has been made in recent years in formulating the terms in which investment experience can be most usefully stated, and in measuring actual experience on the basis of various concepts of return. Extensive studies of experience with corporate bond and urban mortgage investments have been made, and a number of institutional investors have made careful analyses of their own experience as a guide to future policy. Information is fragmentary at best, however, on certain types of assets, and relatively little material is available publicly on the investment experience of specific types of financial institutions. What is needed is a systematic study of investment experience, with reasonably full coverage of all institutions and types of assets.

b) INDIVIDUALS

Although progress has been made in recent years in improving our knowledge of the motivations, preferences, and actual behavior of individuals in the investment of funds in securities and other assets, much remains to be done in this important field. Possibly the most effective approach to the problem would be by studying the whole range of assets held by individuals — cash, bank deposits, interests in life insurance, retirement, and other funds, real estate, federal and other public securities, bonds and other debt obligations of corporations, corporate equities, interests in unincorporated businesses, etc. A study of this kind, in essence an extension, on a comprehensive and detailed basis, of one aspect of the Survey of Consumer Finances conducted for the Board of Governors of the Federal Reserve System by the Survey Research Center of the University of Michigan, would require extensive field investigations, in which trained interviewers would interrogate a selection of individuals in carefully planned interviews designed to explore the behavior and motivations of the subject. A relatively small selection of interviews would suffice to reveal the variety of individual behavior in these matters. On the other hand, a study capable of providing a basis for generalizations concerning the investment behavior of broad groups of individuals would require considerably more cases. Although the technical difficulties involved would be formidable, the effort would seem justified in view of the varied and important uses to which the results could be put.

The principal objectives of a study of individual investor behavior would be:

- (1) An account of the assets held by American individuals (or households), covering all the major types of assets and giving breakdowns of some — for example, of securities
- (2) An explanation of the differences among individuals with respect to asset holdings, given in terms of the different characteristics of individuals — age, income, occupation, etc. — that may be presumed to have a bearing on the composition of individuals' asset holdings; and
- (3) An analysis of the influence on the investment behavior of individuals of such factors as taxes, expectations as to yield and capital appreciation, investment advice and counsel, the investor's familiarity with particular investment opportunities, his non-investor connection with the obligor or issuer, and the manner in

which the assets were acquired, i.e. whether by purchase, gift, inheritance, etc.

5. THE FINANCING POLICIES AND PREFERENCES OF AMERICAN BUSINESS

Although the problem of adequate financing on appropriate terms for American business has been one of the principal subjects of research interest in recent years, there are certain aspects of it still in need of clarification. Specific lines of study which seem promising include the following:

a) ANALYSIS OF THE FLOW OF CASH FUNDS TO AND FROM AMERICAN BUSINESS

The cash position of American business is constantly being augmented or depleted in response to the balance between cash inflows from various sources and outflows into investment and other uses. Cash funds are acquired from sales and from various financing operations, such as bank borrowings and capital market transactions, and are depleted by current payments for goods and services, by investment expenditures, and by the repayment of borrowings or the retirement of outstanding securities.

At least a proximate explanation of changes in cash balances may be derived from a comprehensive and detailed analysis of the sources and uses of cash funds. This would contribute significantly to an understanding of the factors affecting the demand for business credit and capital and of the relation between business financing and cyclical expansions and contractions. The analysis should be extended back into the twenties if the importance of these relationships to business fluctuations is to be fully exposed, but data limitations would probably limit this effort to the area of large corporations.

b) FACTORS AFFECTING THE EQUITY FINANCING OF BUSINESS

During the postwar period there has been a great deal of discussion of the so-called equity capital problem. Much of the discussion has suffered, however, from lack of precise definition. To some the equity capital problem has meant the difficulty encountered by established business concerns in raising capital through the sale of common stocks. To others it has frequently meant the difficulty experienced by new business concerns in raising venture capital.

Sometimes it has been used to describe more or less chronic problems experienced by small and medium-sized business concerns in raising equity funds. Research focused on the problems which larger business concerns have confronted in raising capital through the sale of common stock would be worthwhile; parallel study of the problems of financing small and medium-sized businesses is discussed in d), below.

A study of the sources and uses of cash funds for business concerns in the postwar period, as described immediately above, would reveal the extent to which business capital has been obtained through the sale of equity securities and thus would contribute to the analysis of stock financing of business, but it should be supplemented by investigations of the special problems associated with the acquisition of capital through the sale of equity securities.

The major point of interest in such studies would be the determinants of the costs of equity funds acquired through stock sale, which would require an analysis of the factors affecting the market prices of equity securities, and of changes in the importance of these factors under different economic and financial conditions. Specifically, what weight does the market assign to the earnings of a company in placing a value on its shares, as distinct from the weight assigned to dividends paid out? How does the rate at which a company's assets are growing affect the value of its securities, and the ratio of a stock's market value to its book value? Likewise, what importance if any does the market attribute to the capital structure of a firm, or to the deviation of a given financial structure from what may be regarded as a more appropriate one?

The field of security valuation offers many hypotheses in this area, and the research suggested here would be no less important for the light it would throw on their validity — on the choice of factors usually considered in security analysis, and the techniques conventionally used — than for the information it would afford on the problems of business concerns in raising equity capital. Some of the factors commonly regarded as important in this connection, such as industry and company growth, have been mentioned above; others of a less readily quantifiable nature, may well be of equal importance. Among them are the operating policies of a concern, such as its emphasis on research and product development, advertising efforts, the diversity of its product lines, its methods of distribution, and the geographical scope of its markets. Not all of these possible dimensions of a firm's financial ability can be expressed in quantitative terms, but to the extent that they can be so stated it

would be interesting to measure their relation to the market's valuation of the securities involved and thus to the ability of business concerns to raise new capital.

**c) THE FINANCING NEEDS AND PREFERENCES
OF AMERICAN BUSINESS**

Increasing our knowledge of how business managements make financial decisions, and of the response of financial management to changing conditions in the credit and equities markets, is important not only to improve the techniques of financial management but also because decisions and responses have an important bearing on economic stability. Although there has been much controversy over the methods by which the needed research can most fruitfully be pursued, it is unlikely that any one approach has a clear superiority over all others. Contributions to a better understanding of financial management can probably be obtained by each of the leading approaches, namely by: (a) case studies of individual companies, involving intensive study of the financial history of representative concerns over a period of years; (b) broad statistical studies of particular industries, supplemented by field investigations of leading units of the industry; and (c) case studies of individual security issues followed from origination through distribution, with special attention to the factors influencing the design of the financing.

**d) THE FINANCING OF SMALL AND
MEDIUM-SIZED BUSINESS**

Although a good deal has been written in recent years on the problem of financing small and medium-sized business, there is insufficient information on the actual sources of external financing for going concerns and newly organized enterprises in these size groups. The role of security issues, bank credit, trade credit, and funds obtained directly from individuals, and the interrelationships among these different forms of financing, should be studied. If possible, the information should be compiled separately for firms in different industries.

Second, reasons should be sought for the indicated patterns of financing by small and medium-sized businesses. It would be especially important to obtain a measure of the relative cost to business concerns of the different types of funds employed.

It is far from clear how these research problems can be most effectively approached. Naturally, the studies that have so far been

made, such as the surveys of financing by new enterprises undertaken by the Department of Commerce, should be exploited to the full. Additional light can be thrown on the problems by data in the *Statistics of Income*, by information developed in the Survey of Consumer Finances, and by certain items from the balance sheet and income accounts of unincorporated businesses prepared by the Department of Commerce and the Board of Governors of the Federal Reserve System in connection with the studies of national income and moneyflows. It is possible, also, that some retabulation of returns filed by small and medium-sized enterprises with the Internal Revenue Service would provide useful data. Similarly, information may be available in the federal tax returns filed by partnerships, though the technical problems of utilizing these data appear rather forbidding. While all of the foregoing materials should be exploited, the most effective way of making progress in this area may be through field investigations of selected industries, in which careful case studies would be made of individual enterprises.

6. THE MARKET FOR GOVERNMENT SECURITIES: FEDERAL, STATE, AND LOCAL

a) FEDERAL SECURITIES

Considering the vast importance of federal obligations in present-day capital markets, relatively little attention has been devoted to the description and analysis of the market for them. U. S. government securities, which now total nearly \$300 billion, far exceed in value the total of all corporate bonds, mortgages, and municipal securities. They constitute the largest single asset for many financial institutions, and have become the principal secondary reserve of most sectors of the economy. Yet little is known of the character, size, and organization of their market, and no comprehensive study has been made of the investment policies of investors who hold them in significant amounts. Nor do we know enough about the effect of changes in the volume of federal securities outstanding, and in their prices, on other sectors of the capital and securities markets.

Research efforts might well be directed to provide the following:

- (1) An analysis of the changing importance of federal securities for financial institutions, for nonfinancial corporate investors, and for individuals
- (2) A factual account of the organization and functioning of the

market in which federal securities are distributed and traded, supported by analyses of the composition of transactions in these securities over selected periods and of the operations of government bond dealers

(3) Analyses of the investment policies of the principal holders of federal securities, including such matters as the extent to which these obligations are purchased on a residual investment basis by institutional investors, and the practices of individuals in investing in U. S. savings bonds; and

(4) An analysis of the impact of changes in the amount of federal securities outstanding, in their yields, and in their maturity distribution, on other obligations.

b) STATE AND LOCAL GOVERNMENT SECURITIES

The need for research on the structure and behavior of the market for the obligations of state and local governments is in one sense even greater than for the study of federal obligations, because of the more pronounced lack of information on them. Furthermore, nonfederal government issues are growing in amount and may well play a strategic role in the near-run development of the economy. Recent studies have thrown considerable light on the ownership distribution of tax-exempt securities; it would be useful to study also the following:

(1) The volume of trading in state and local government obligations

(2) The organization and functioning of dealers in this market

(3) The investment policies and experience of the principal holders of state and local securities

(4) The methods of issuing and distributing these securities, and

(5) The special problems presented by revenue and like obligations.

7. THE IMPACT OF REGULATION ON THE SECURITIES MARKETS

It would seem appropriate, after some twenty years of experience, to study the impact of federal laws affecting securities markets, and of the administration of these laws, on the securities business and on the investor. Research in this area would present problems quite different from those likely to be encountered in any one of the areas discussed above, and would require the collaboration of legal schol-

ars with the economist and the financial analyst. It could be conducted either by a comprehensive survey of regulation and of its impact, or by a series of more narrowly defined but related studies on specific aspects of regulation.

A comprehensive survey should give an account of the status of regulation, and should measure its impact where measurement is feasible. For example, what effect has regulation had on the cost and availability of funds for investors of different types? In what respects, and to what extent, have disclosure requirements aided investors? To what extent has regulation affected the functioning of brokers, dealers, investment banking houses, investment counselors, and other agencies of the securities business? Answers to these questions should be given, to the extent possible, in quantitative and verifiable terms.

A long list of specific investigations having to do with the impact of regulation on the securities markets could be given; the following appear to be the leading possibilities:

- (a) A study of differences in practices as between registered and nonregistered companies, aimed at clarifying the need, if such exists, for extension of federal legislation beyond its present limits
- (b) A study of the impact of margin regulation on security trading and of its effectiveness as a device for curbing inflationary or deflationary credit tendencies
- (c) Case studies of competitive bidding versus negotiated transactions, aimed at showing the effects of the two procedures on the costs of raising capital, and
- (d) A comprehensive study of state blue-sky laws, revealing their diversity and their movement toward uniformity, if there has been such a tendency, in key matters of security regulation.

8. THE RELATION OF THE CAPITAL AND SECURITIES MARKETS TO ECONOMIC GROWTH AND STABILITY

It would be difficult to conceive of a research undertaking more important than an investigation of how the capital and securities markets affect the growth and stability of the economy. Research in this area could be conducted as a single, integrated investigation, but some aspects of the problem would be amenable to separate study. In any case the primary purpose would be to show how the origination, distribution, and subsequent transfer of corporate and government securities affect economic growth and stability and how the institutions engaged in these operations are, in turn, affected by long-

term economic expansion and by short-run fluctuations in business conditions. Such studies would necessarily have a historical slant, examining the relation of capital and securities market institutions to the economic expansion of the twenties, to the expansion after World War II, and to the major and minor depressions that have characterized the economy since the end of World War I.

An adequate study of this problem would fit as a capstone in the whole structure of research in the capital and securities markets. Certainly, it would depend heavily on the completion of studies such as those contemplated in sections 1, 2, and 4, above. Much of the required work would consist of testing hypotheses concerning the relation of capital and securities markets to economic growth and stability and would be essentially experimental. It is impossible, therefore, to indicate in advance the specific lines along which the investigation would move, but certain key questions can be identified, as follows:

- (a) What has been the relation, in past periods of expansion and contraction, between the origination and subsequent transfer of new security issues and other measures of economic activity?
- (b) To what extent have the capital and securities markets merely reflected impulses making for economic expansion or contraction that have originated in other sectors of the economy, and to what extent have forces making for cyclical fluctuations originated in the financial sector, specifically in the capital and securities markets, and been transmitted therefrom to the economy at large?
- (c) In what respects do the capital and securities markets bear most directly and importantly on the growth of the economy, and how may their contribution to economic growth be maximized?

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