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# INSTITUTIONAL INVESTOR STUDY REPORT OF THE SECURITIES AND EXCHANGE COMMISSION

## VOLUME 1

---

CONSISTING OF

LETTER OF TRANSMITTAL OF MARCH 10, 1971, FROM THE SECURITIES AND EXCHANGE COMMISSION, LETTER OF MARCH 1, 1971 FROM THE STUDY ADVISORY COMMITTEE TO THE COMMISSION AND THE FOLLOWING CHAPTERS:



OF THE INSTITUTIONAL INVESTOR STUDY REPORT, BEING A STUDY AND INVESTIGATION OF THE PURCHASE, SALE, AND HOLDING OF SECURITIES BY INSTITUTIONAL INVESTORS OF ALL TYPES, PURSUANT TO SECTION 19(e) OF THE SECURITIES EXCHANGE ACT OF 1934 (PUBLIC LAW 90-438, 91-410)

MARCH 10, 1971.—Referred to the Committee on Interstate and Foreign Commerce and ordered to be printed

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CHAPTER I.—BACKGROUND, SCOPE AND DESIGN OF THE STUDY

CHAPTER II.—DEVELOPMENT OF FINANCIAL INSTITUTIONS AS INVESTORS IN CORPORATE STOCK, UP TO THE POSTWAR PERIOD

CHAPTER III.—ROLE OF FINANCIAL INSTITUTIONS AS INVESTORS IN CORPORATE STOCK IN THE POSTWAR PERIOD

OF THE INSTITUTIONAL INVESTOR STUDY REPORT, BEING A STUDY AND INVESTIGATION OF THE PURCHASE, SALE, AND HOLDING OF SECURITIES BY INSTITUTIONAL INVESTORS OF ALL TYPES, PURSUANT TO SECTION 19(e) OF THE SECURITIES EXCHANGE ACT OF 1934 (PUBLIC LAW 90-438, 91-410)

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# LETTER OF TRANSMITTAL

SECURITIES AND EXCHANGE COMMISSION,
*Washington, D.C., March 10, 1971.*

*The President of the Senate.*
*The Speaker of the House of Representatives.*

SIR: We have the honor to transmit the Institutional Investor Study Report. The Report is submitted pursuant to Section 19(e) of the Securities Exchange Act of 1934 (Public Laws 90–438, 91–410), which directs the Commission to conduct an economic study of institutional investors and their effects on the securities markets, the interests of the issuers of securities, and the public interest.

## A

The Congressional joint resolution authorizing the Study directed the Commission "to make a study and investigation of the purchase, sale and holding of securities by institutional investors of all types * * * in order to determine the effect of such purchases, sales and holdings upon the maintenance of fair and orderly securities markets * * * the stability of such markets * * * the interests of the issuers * * * and upon the interests of the public * * *"

The legislative background of the Act makes clear that the Congress sought an economic study rather than an enforcement oriented investigatory proceeding. Accordingly, the Study was designed to provide a basis for understanding the underlying economic trends evidenced by growing participation by institutions in equity investment and their impacts on both securities markets and corporate issuers. As the Commission had not previously undertaken studies of this type, the Study was directed and staffed by professional economists and other personnel who, with few exceptions, were drawn from outside its regular staff. The Study also benefited from the views of a panel of knowledgeable persons having backgrounds in government and the financial community who, in accordance with the authorizing legislation, formed its Advisory Committee.

The Study's basic task was to collect fundamental economic data in an area where large informational gaps have existed. To do this, data were developed and analyzed relating to the number, types, size, growth and distribution of assets in accounts managed by the many varieties of institutions, as well as other types of data not heretofore collected about trading activity, market impacts and effects upon portfolio companies. The Study's data were obtained primarily from detailed questionnaires, supplemented by interviews. Sizable data files were developed and analyzed from responses to 200 separate versions

of 54 basic questionnaires which, in turn, were distributed to as many as 14 respondent types, several of which contained 1,000 or more firms.

The magnitude of the project is immediately apparent from an inspection of the Report itself, including supplements. The Report, of course, represents only a distillate. The size and scope of the data collection effort may be appreciated by examining Supplementary Volume II which describes the Study's questionnaires. The large data collection, editing and processing efforts undertaken by the Study could not have been accomplished in so short a period of time without heavy reliance on electronic data processing techniques and capacity.

As a result of the time involved in collecting, editing, processing and analyzing the data, drafts of important sections, and indeed of some chapters, were not completed and therefore were not available for review by the Commission and the Advisory Committee until late in 1970. Final versions of each of the Study's substantive analytical chapters were completed only during the final weeks of 1970. The Commission has required additional time since the Report was completed to review and consider its contents and formulate initial conclusions and recommendations. In submitting its Report and initial recommendations the Commission is affording others an opportunity to review and comment upon the Report and to determine their own conduct in light of its content and findings. As the Commission, other governmental units and the financial community continue to review the Report and to analyze further the wealth of data collected by the Study, we anticipate that it will serve as a basis for further conclusions and additional recommendations not only by the Commission but also by other governmental, and self-regulatory, bodies.

## B

The Study's contributions are numerous and varied. In some areas its analyses establish the existence of, or suggest a spectrum of possible solutions for, structural and regulatory problems. In other areas the analyses tend to dispel previously expressed concerns over suspected problems or to identify problems not previously appreciated. In still other areas, of course, definitive analyses could not be conducted, or the results of such limited analyses as could be undertaken within available time, resource and data limitations proved to be inconclusive. Even in the last of these instances, however, the Study did in certain cases develop and test methodology whose application to improved data or related problems in the future may be of value to the Commission and to others.

The Commission's initial conclusions and recommendations regarding problems analyzed by the Study may be grouped according to the degree of their specificity into three general categories, as follows:

1. Areas where specific sets of conclusions and recommendations can be and are presented. These include recommendations regarding offshore funds, standards for measuring and disclosing portfolio volatility, and appropriate measures of investment performance for the purpose of calculating incentive fees. Conversely, in other areas the Study is able to rule out for the present certain types of recommendations, such as generalized restrictions on the

volume of institutional trading or the size of institutional transactions;

2. Areas, such as those dealing with securities market structure, where the basic ingredients of possible long-range solutions are suggested, but whose eventual content and form must be developed over time; and

3. Areas where only the problem itself can be identified, and then only in the broadest of terms; for example, questions regarding the impact of institutional investors on the distribution of corporate power.

Policy considerations in some areas are affected importantly by actions in other areas. The most fundamental and pervasive problems considered by the Study often defy simple compartmentalization. For example, incentives for the responsible exercise by institutions of their franchise as shareholders (considered in Part Four of the Study) are affected by the liquidity of secondary trading markets (considered in Part Three) and by competitive pressures on institutional investors to achieve superior investment "performance" (considered in Part Two). Similarly, incentives toward the bundling of certain services or toward the integration of firms in formerly distinct lines of business (considered in Part Two) often are affected by regulatory actions in totally different areas, such as the level and structure of brokerage commission rates (considered in Part Three). To comprehend many of these a reading of the entire Report, rather than isolated sections, will be necessary. Even then, a considerable spectrum of possible solutions may remain. Economic analyses can and ordinarily do narrow but not eliminate the range of policy options available.

The Study has been conducted during a period of rapid and deep-seated changes both in the character of institutional investing and in the structure of the nation's securities markets. As will be apparent from the recurrent references to brokerage commission rates below and throughout the body of the Report, the Commission regards non-competitive, fixed minimum commission rates on securities transactions of institutional size as the source of a number of difficulties in the development of institutional investing and the trading markets for equity securities. The clear conclusion from the Study Report is that competitive brokerage rates should be required at least on such transactions.

Under date of February 10, 1971, in conjunction with the pending commission rate structure proceeding, we advised the New York Stock Exchange that

> The Commission believes the Exchange should take immediate action to implement, by April 1, 1971, the Commission's finding that fixed minimum commissions on institutional size orders are neither necessary nor appropriate.[1]

We have thus taken initial steps to require competitive rates—on at least that portion of institutional transactions in excess of $500,000—which we believe will have ameliorating effects on future developments in a number of the areas studied. Assuming that the step called for is timely implemented by the Exchange, the Commission's subsequent steps in this and related areas must necessarily be guided to a considerable extent by its experience with the initial step. The Study provides

[1] Securities Exchange Act Release No. 9079. Among other things we have also requested the Exchange, by June 30, 1971, to present "a plan for reasonable economic access to the New York Stock Exchange for nonmember broker-dealers." Letter of October 22, 1970, Security Exchange Act Release No. 9007.

an analysis of interrelationships between various aspects of institutional investment and the structure of the securities markets and a basis for evaluating many of the issues and actions that necessarily will result from both initial and subsequent regulatory actions in these and related areas. In this situation we believe the sound regulatory course is to proceed with caution on any further concrete recommendations concerning the structure of the securities markets.

In directing the Commission to undertake the Institutional Investor Study, the Congress necessarily required the examination of areas and activities which could have significant effects upon the markets and individual corporate issuers, but which traditionally have come under the primary jurisdiction of other regulatory bodies. Although our recommendations relate principally to those areas in which the Commission has statutory jurisdiction, the Study's analyses may prove useful to those who are concerned with other aspects of institutional investment or with the activities of the institutions examined. The Commission has not, however, consulted with other regulatory bodies on policy issues arising from its analyses or initial recommendations. The views set forth below are those of the Commission. We do intend in the coming months to discuss with other regulatory agencies aspects of the Report that relate to financial institutions under their jurisdiction.

In order to place its economic and other analyses in perspective and to afford insight into the existing pattern of governmental regulation, the Study contains summary discussions of applicable laws and rules. While an attempt has been made to indicate accurately the actual and potential impact of the legal provisions discussed—and to set forth such provisions in accurate summary form—the summaries do not purport to contain a comprehensive exposition of the laws involved, nor are they intended to indicate the applicability of such laws to any particular factual circumstances. In addition, it should be recognized that the summaries include some discussions of legal matters outside the Commission's particular expertise and regulatory oversight.

With these considerations and qualifications in mind, the Commission's initial conclusions and recommendations are set forth below, organized to the extent possible around the major analytic areas covered by the Study. These are Part One: *Background Studies of Institutional Investors and Corporate Stock;* Part Two: *Institutions as Investment Managers;* Part Three: *Impacts of Institutional Investing on Securities Markets;* and Part Four: *Impacts of Institutional Investors on Corporate Issuers.*

## C

### Part One (Chapters I–III) *Background Studies of Institutional Investors and Corporate Stock*

### Initial Conclusions and Recommendations

The Commission contracted with the National Bureau of Economic Research, a pioneer in the development of flow of funds statistics and the system of national accounts, to prepare for the Study a *Background Report on Institutional Investors and Corporate Stock* (transmitted in its entirety as Supplementary Volume I of the Report). The substantive analyses contained in the full NBER Report

and summarized in chapters II and III of the Study Report were designed to place in historical perspective later detailed studies in Part Two of the recent behavior of financial institutions as equity investors. An important result of these analyses is to allay fears expressed in many quarters of imminent domination by institutional investors of ownership of the nation's industry—without ruling out such a longer-term eventuality. Institutions as a group have increased their share of outstanding equity securities, partly through the relative growth of institutions more heavily dependent on the equity markets and partly from shifts toward increased equity investment by other types of institutions. However, the increase has been relatively slow-paced over time.

Institutions as a group—excluding endowments, foundations, investment counselling accounts and various minor types of institutionally managed portfolios for which data are not available prior to 1952—increased their share of total stock outstanding from less than 7 percent to approximately 19 percent between the turn of the century and 1952 (chapter II). A more comprehensive definition of financial institutions places estimates of institutional holdings at approximately 24 percent of outstanding corporate stock in 1952, a figure that increased to 26 percent by 1958 where, with some fluctuations, it remained throughout the following decade (chapter III). Individual holdings, net of institutional and foreign, amounted to 71.7 percent of all outstanding equity securities (including stock in closely held corporations) in 1958 and 71.8 percent a decade later, in 1968.

Institutional holdings, however, have not been distributed uniformly across all types of equity securities, but tend to be concentrated in the shares of larger, publicly traded corporations. The extent of this concentration is analyzed in chapters IX and XV of the Study Report. In this area the pace of institutionalization has continued even during the decade of the 1960's. Three successive Census of Share-ownership surveys conducted by the New York Stock Exchange of the ownership of securities listed on that Exchange show that from 1962 to 1965 and 1970, institutional holdings increased from 31.1 percent to 35.5 percent and 39.4 percent, respectively.

Analyses in the NBER Report summarized in chapters II and III indicate that institutional investors have been net purchasers on a cash basis of corporate stock from individuals over most of the post-war period, including the decade of the 1960's. Reconciliation of this fact with the fact noted earlier that institutions did not perceptibly increase their share of the value of all equity securities during the last decade, suggests that institutional investors have concentrated their purchases and holdings in the more stable securities of larger corporations while individual investors sought and obtained the higher returns available on somewhat riskier securities during the generally rising markets of the last 20 years.

As indicated in the NBER Report, during this period the rate at which corporate assets were valued and earnings capitalized generally increased and a significant portion of returns to equity investors over the period was accounted for by these increases. Should returns over the next few decades be less than those since 1950, more rapid future increases in the fraction of institutionally held corporate shares could be expected.

The NBER Report also points out that individual investors have become increasingly conscious of the "performance" of their investments, demonstrating a willingness to shift their savings out of certain types of the more conservative institutions into potentially more profitable—and consequently more risky—investment media. Financial managers of such institutions, confronted with increased mobility of funds, became more performance conscious themselves in order to retain or redirect the savings flows.

### IMPROVED REPORTING

The past and likely future growth of institutional investors in the equity markets makes the collection of timely information about institutional holdings and activity in securities essential for an agency responsible for the administration of the federal securities laws. Difficulties encountered by the Commission, the Federal Reserve Board and the National Bureau of Economic Research in the development of aggregate data for the Study on institutional holdings and net purchases of corporate shares over the post-war period point up strongly the need for improvements in the collection of information about institutional investors and their activities in the equity markets.

The appendix to chapter I of the Report discloses significant shortcomings in existing patterns of institutional reporting. The scope of information reported often is limited, particularly with respect to holdings of and transactions in the securities of specific companies; information often is supplied to more than one agency, resulting in unnecessary and costly duplicative efforts; and in some cases data is supplied only on a voluntary or confidential basis, limiting both the comprehensiveness and usefulness of the data supplied. Furthermore, the burdens of disclosure fall unevenly on institutional respondents. Extensive reports currently are provided by registered investment companies and most large insurance companies; banks, investment advisers and self-administered foundations, endowments and employee benefit funds, however, do not now for the most part provide information on holdings and trading in particular securities to any public agency. Gaps in information about the activities of such major classes of institutional investors in the securities markets provided a primary reason for the conduct of the Institutional Investor Study.

The importance of a regularized, uniform and comprehensive, scheme of institutional reporting cannot be minimized in light of the demonstrated growth of institutional investment and its impacts on the structure of securities markets, corporate issuers and individual investors. An effective program of government regulation of institutional investors and the securities markets must emanate from empirical analyses of institutional behavior, weighed on the scales of competing policy considerations. The Study represented an attempt to gather relevant data for such analyses on a one-time basis. However valuable that data may be and whatever conclusions it may suggest at the present time, the course of future developments cannot be accurately gauged nor can reasoned regulatory policies be plotted without a continuing flow of such information.

The Commission believes that gaps in information about the purchase, sale and holdings of securities by major classes of institutional

investors should be eliminated, and recommends that the Securities Exchange Act of 1934 be amended to provide the Commission with general authority to require reports and disclosures of such holdings and transactions from all types of institutional investors. Such authorization would permit the Commission, by rules adopted in conformity with the Administrative Procedure Act, to obtain continuing data for public disclosure and for the production of statistical data or aggregates, to the extent that it deems such data necessary or appropriate.

The Commission is cognizant of the need to balance the benefits of increased disclosures against the burdens imposed by such reporting on respondents. These considerations have long been recognized and reflected in the Commission's administration of disclosure requirements regarding corporate issuers under the federal securities laws. Thus, upon passage of enabling legislation, the Commission would consult with other regulatory bodies and interested persons on the form, frequency and content of reports to be required, and arrangements by which all affected regulatory bodies can share the data reported.

It is anticipated that disclosure would encompass only securities beneficially owned by institutional investors or for which institutions provide investment management. Such disclosures would include information regarding the fraction of shares held over which institutional respondents have differing degrees of investment and voting authority. Should this recommendation be adopted by the Congress, the Commission would reconsider its recommendations with respect to amendments to existing reporting provisions of the Securities Exchange Act, discussed in Part Four below.

### ECONOMIC RESEARCH CAPABILITY

Experience with the Institutional Investor Study reinforces the conclusion reached by the Special Study of Securities Markets in 1963 that studies of this kind should not be, simply, "once-in-a-generation affairs, but should be a major part of the Commission's regular and continuous activities." [2] Special studies are disruptive of the ongoing activities of the host agency, are expensive in terms of the time, energy and money required to create quickly not only the professional staff but also all parts of the infrastructure of personnel, facilities and data required for a major research undertaking. If the Commission is to be fully cognizant of the economic implications of developments in the securities markets under its jurisdiction, including those that result from its own actions, a substantially larger internal economic research capability, fully staffed and supported, is required. Such needs will be especially acute if, in addition to existing statistical programs and analysis of presently available data, there are expanded reports by institutional investors to be processed and analyzed in a manner that contributes significantly to the Commission's policy deliberations. The Commission intends to seek the budgetary and personnel resources needed to obtain the required expansion of its economic research capability.

In addition, a great deal of worthwhile research by outside economists, financial analysts and others into basic economic developments

[2] *Securities and Exchange Commission, Report of the Special Study of Securities Markets,* H.R. Doc. No. 95, 88th Cong., 1st Sess., Pt. 1, at XIV (1963–1964).

in the equity markets could be stimulated by enabling the Commission to facilitate the distribution of non-confidential, machine processable information collected routinely during the course of its administration of the various securities statutes. This information, although publicly available in theory, has not been accessible in usable form in the past to persons outside the Commission. In an effort to stimulate needed outside research in the area of its statutory responsibilities, the Commission is reviewing administrative and budgetary barriers to the more effective dissemination of this growing and increasingly important body of information. Such efforts are necessary if the Commission is to adapt its traditional information gathering and dissemination functions to modern technological methods and capabilities.

## Part Two (Chapters IV–IX) *Institutions as Investment Managers*

### Initial Conclusions and Recommendations

The "institutions" portion of the Study was designed with two primary objectives in mind. The first was, simply, fact finding. The Study was to collect data never before available on the size and activity of institutional investors and the equity oriented portfolios under their management. The second, however, was to focus atttention and analyses on two fundamental forces believed to be at work during the last half of the 1960's, whose effects were to change in important ways both the character of institutional investing and its effects on the economy. These were:

(1) The rapid growth of relatively exotic, aggressively managed investment vehicles—such as the more speculative types of registered investment companies, hedge funds and offshore funds—and the increased willingness by most major classes of institutional investors as well, to adopt more aggressive investment strategies and trading practices in search of investment "performance," and

(2) An accelerating trend toward the combination of firms in formerly distinct areas—such as brokerage, investment management and insurance—into integrated, multi-purpose enterprises.

#### INVESTMENT RISK, DISCLOSURE

Competitive pressures on portfolio managers for improved investment performance are examined most closely in chapter IV, which deals with investment advisory and mutual fund complexes. They are also dealt with in other chapters of Part Two, which examine other types of managerial complexes and major types of institutional portfolios.

Different classes of institutional investors formerly competed with one another for the saver's dollar only weakly. Bank trust departments, insurance companies and investment companies each offered relatively distinct types of financial services aimed at largely non-overlapping classes of customers and markets. Shifts toward increased equity investment by most major types of institutions, however, have tended to erode traditional differences between their respec-

tive markets and heighten the degree of competition not only within but also across institutional categories for the management of various types of portfolios. Competition for the management of pension funds has become especially intense during the last decade as has competition for the management of educational endowments and other forms of pooled investment vehicles. Performance consciousness by the managers, sponsors and increasingly, the beneficiaries of many types of professionally managed portfolios is an expectable consequence of an increasingly competitive environment. Although the search for investment performance ordinarily is associated with hedge funds, offshore funds and relatively speculative types of mutual funds, the Study's Report makes it apparent that performance consciousness has spread far beyond exotic portfolios and portions of the investment company industry into most major types of institutional managers and competitively managed portfolios.

One disquieting result of these pressures has been to provide an incentive for investment managers to assume higher and higher levels of investment risk in many of the competitively managed portfolios under their administration, a result that often is not apparent to the portfolios' sponsors or beneficial owners. In the past, most persons or firms have tended to equate "performance" with "price action" without adjusting in any way for the risk borne by the portfolio. The Study utilized econometric techniques to measure portfolio volatility, which often is interpreted as a proxy for the degree of investment risk displayed by managed portfolios, and to adjust total return on such portfolios (price appreciation plus distributions) so that the portions of the return attributable to general market movements and to the portfolio's particular volatility can be separately identified. The incentive for institutional managers to assume higher levels of investment risk exists whether or not the manager is compensated on a "performance" or "incentive fee" basis, although its severity is aggravated by the manner in which existing incentive fee contracts typically are constructed.

The Commission concludes that improved disclosure of investment returns, portfolio volatility, and short-term trading (that tends to accompany high volatility portfolios) is needed from the managers of most types of professionally managed portfolios. One method of measuring portfolio volatility is developed in chapter IV of the Report; it is anticipated that other measures can and will be developed in the future to accomplish this purpose. Such disclosures would not only better inform portfolio beneficiaries of the risks to which they may be subjected, but also can moderate existing pressures on portfolio managers to assume more aggressive investment postures than otherwise would be warranted by the investment objectives of the accounts under management.

The Commission believes that disclosure of investment returns, portfolio volatility and short-term trading is both practicable and desirable for many types of competitively managed institutional portfolios at the present time. In the case of funds required to register under the Investment Company Act, such disclosure can be achieved within existing statutory authority through prospectuses and periodic reports. The Commission believes that it would also be desirable for

such disclosures to be made for other classes of professionally managed portfolios and will consult with other regulatory bodies toward this end.

PERFORMANCE FEES

In addition to disclosure of investment returns, volatility and short-term trading, which the Commission considers desirable whether or not managers are compensated on an incentive fee basis, the Commission believes that when incentive fees are present a second step is necessary to reduce disparities between the interests of portfolio managers and beneficial owners. In general, an "incentive" or "performance fee" (as used here) is compensation to a portfolio manager that varies according to investment results rather than solely the amount of assets under management. The second step is to structure penalties for sub-standard investment performance that are symmetrical with rewards for superior performance in order to deter the assumption of excessive risk in managed portfolios. It should be noted that in the Investment Advisers Act of 1940, Congress in effect had prohibited the use of any performance fees by registered investment advisers except for the fees charged to registered investment companies by their advisers. In the Investment Company Amendments Act of 1970 Congress required that any performance fees charged to registered investment companies be symmetrical as outlined above and then authorized the use of such performance fees for other accounts (but not most qualified employee benefit plans) where the assets under management exceed $1 million.

Although the Commission believes that symmetry in the calculation of performance fees is desirable and important for any portfolio managed on an incentive fee basis, it does not now request legislation extending coverage of these provisions to types of institutional portfolios or managers not covered by the Investment Company Amendments Act of 1970. Should competitive pressures not lead after a reasonable period of time to the more general adoption of symmetrical compensation bases for other classes of institutional portfolios utilizing such fees, the Commission will review its determination not to seek such legislation.

When an adviser is compensated on the basis of total return or return relative to an index having a lower volatility than the portfolio itself, an incentive is created for the manager to assume greater risk. Thus, when incentive fees are present, a third step appears desirable to eliminate as fully as possible the realization of compensation by investment managers based in part on risk borne by portfolio beneficiaries. To accomplish this end the Commission intends to give serious and prompt consideration to requiring that incentive fees be based only on volatility adjusted investment returns. Incentive compensation would thus be permitted only on that portion of total investment return that is in excess of what general market movements affecting securities displaying equivalent volatility would produce on an unmanaged basis. Technical methods for basing incentive fees on such risk or volatility adjusted returns were adopted for analytic purposes by the Study. Although the techniques employed are of relatively recent origin, it appears that measures of risk adjusted investment "performance" such as employed in the Study are feasible. Their use, as well as other

methods for accomplishing this end that may be developed, can provide appropriate and unbiased methods of calculating managerial compensation that would discourage the assumption of excessive risk in managed portfolios, permit superior advisers to obtain additional compensation and permit the profitable operation of smaller economic units not having access to large and efficient sales organizations.

The Commission now has authority under the Investment Advisers Act of 1940 as amended by the Investment Company Amendments Act of 1970 to determine an appropriate index or other measure of investment performance for incentive compensation purposes that reflects the degree of volatility displayed by managed portfolios. As experience is gained with volatility adjusted incentive fees authorized for the expanded types of accounts permitted under the Investment Company Amendments Act of 1970, the Commission will also review the desirability of requesting legislation to extend such provisions to other types of institutional managers and portfolios utilizing incentive fees.

### HEDGE FUNDS

The Study examined the activities of hedge funds. These investment vehicles generally are organized as limited partnerships having fewer than 100 partners. With the exception of survey material gathered for the Study and more detailed information assembled by the Commission's regular staff, there has been a dearth of hard information about both individual hedge funds and hedge funds as a group.

The Study found hedge funds to be volatile investment vehicles. Many are highly leveraged; short selling and other speculative techniques play an important part in their market strategy. During the period studied, hedge funds as a group were actively engaged in the new issue market and turned over their portfolios at extremely high rates.

Often the hedge funds' managing partners have other significant advisory functions, such as the management of registered investment companies. In most instances the compensation arrangements provided by unregistered hedge funds are far more favorable to the investment manager per dollar of assets managed than the compensation provided for similar services by registered investment companies or other classes of accounts within an advisory complex. Here, as in other situations where differing compensation arrangements exist, there are potentially serious conflicts of interest.

Although hedge funds bear attributes of investment companies and their general partners perform many of the same functions as investment advisers, neither the funds nor their general partners ordinarily are registered under either the Investment Company Act or the Investment Advisers Act of 1940. The hedge funds' activities might also be construed to bring them within the statutory definition of "dealer" contained in the Securities Exchange Act of 1934.

As a result of the Study's review of hedge funds' operations, it now appears practicable to clarify the applicability to hedge funds of registration requirements under one or more of the Investment Company Act of 1940, the Investment Advisers Act of 1940 and the Securities Exchange Act of 1934, and to formulate any necessary rules regarding such funds under the appropriate securities laws. The Commission

does not believe that new legislation is required and will take the steps necessary to accomplish this purpose.

### OFFSHORE FUNDS

The Study also examined a relatively new and dramatic type of institutional investor, the offshore fund. The capital inflow of such funds has aided the United States' balance of payments and stimulated new sources of equity capital in the countries in which they are sold. At the same time, their operations raise substantial questions of investor protection. In many cases sales practices have been aggressive and disclosures inadequate. Independently audited reports of operations often are not available, and the structure and operation of many offshore funds should be strengthened to provide greater protections against possible overreaching of investors by fund managers. These and other factors have led some countries where shares of the funds are sold to enact legislation designed to regulate—or even eliminate—the activities of offshore funds.

In the present climate of concern fostered by the well publicized difficulties experienced by certain offshore funds and their sponsors, the Commission believes that foreign investor confidence in offshore funds that invest in American securities could be bolstered significantly if they were to become subject to Commission regulation under the federal securities laws. Offshore funds currently receive treatment under the Internal Revenue Code which provides them with competitive advantages over domestic, registered investment companies seeking to sell in offshore markets. Equalization of these advantages would enable U.S. registered investment companies to compete more effectively with unregulated offshore funds. The net result would be beneficial both to foreign investor protection and the United States securities markets, as well as to the United States balance of payments.

One means of accomplishing this goal would be to establish entities through which nonresident foreign investors could receive the same tax advantages by investing in domestic registered funds as they currently obtain through the purchase of shares in an offshore fund. This might be done through the creation of Foreign Portfolio Sales Corporations which would be used as vehicles to distribute to foreign investors shares of funds registered under United States law. The sponsors of a registered fund could establish such a sales corporation, sell its shares of the U.S. registered investment company without additional layering of sales charges or management fees. Similar arrangements—unit investment trusts—frequently are employed in the United States for the sale of mutual funds.

Foreign Portfolio Sales Corporations would be based in the United States and required to register with the Commission as registered investment companies. As such, they would be subject to Commission regulatory and disclosure requirements and Federal Reserve margin requirements. If such companies were free of United States capital gains taxes and if foreign investors in them were free of United States estate taxes, comparability would be achieved. Taxes on dividends and interest paid by Foreign Portfolio Sales Corporations still would be withheld and any related management company or investment adviser

owned by United States persons could be fully subject to United States taxes.

Alternatively, a separate registered investment company could be created and designed to appeal specifically to foreign investors. Because such an investment company would be managed exclusively for nonresident foreign investors, and its shares offered only to such investors the fund and its investors would be granted the tax treatment described above. Moreover, it would appear appropriate to exempt purchases of foreign securities by such a company from the Interest Equalization Tax.

Whichever investment vehicle is chosen, sales promotion would, of course, remain outside the United States. As is the current practice for most offshore funds, initial purchasers or agents would be required to sign a statement that they are not U.S. persons and were not acquiring the securities for distribution to U.S. persons. In addition, securities could be redeemable by the company if acquired at a later date by Americans.

The Commission recommends that a high level governmental task force be organized to explore and develop the possibility of the establishment and regulation of Foreign Portfolio Sales Corporations as well as registered offshore investment companies. We would expect such a task force to consider appropriate tax treatment for such funds and nonresident foreign investors, and methods of gathering data with respect to foreign institutional investors in order to facilitate further study of developments in this area.

The rapidly growing internationalization of the securities markets indicates the need for national regulatory agencies such as the Commission to participate in the international development of common elements of securities regulation. Efforts by international organizations to identify international regulatory norms and establish acceptable international standards governing mutual fund operations should be encouraged, and the Commission will accelerate its own efforts towards this end.

## FINANCIAL INTEGRATION

The second major area of concern reflected in the Study's treatment of institutional investors and the portfolios under their management, is an accelerating trend during the last half of the 1960's toward the integration (or diversification) of formerly specialized functions into multi-purpose financial service organizations. The integration of such functions creates both regulatory and competitive problems. Regulatory problems result from the potential conflicts created by such combinations between financial managers and their various classes of clients; competitive problems result from barriers to the separate provision of specialized products or services. Ultimately, certain types of combinations among financial institutions may have important implications for concentration of power in the American economy.

Incentives for the integration of financial services derive from both economic and regulatory sources: economies of scale, including economies derived from the combination into larger units of joint products or services, diversification and judgments regarding the profitability of entering new and unrelated areas all are economic

in origin; regulatory incentives for the combination of separable products or services ordinarily can be traced either to direct regulatory limitations on the provision of specialized products or services unless provided in combination with others, or to indirect inducements toward that end resulting from the maintenance of regulated prices at non-competitive levels or prohibitions on the charging of direct rates or fees for certain services.

To the extent that integration is induced by economic incentives, and especially by economies obtained through the provision of joint products or services, decisions to limit such combinations should be made only reluctantly by regulatory or other public authorities, and then only on the basis of demonstrated regulatory necessity. The Commission also believes, however, that integration should not be artificially induced or compelled by governmental action in the absence of overriding regulatory objectives. Thus, direct limitations on the granting of corporate trust powers only to firms that also offer commercial banking services, and actions by regulatory authorities to permit the maintenance of noncompetitive rates or prices on various types of financial services should be reviewed, and justified only on the basis of compelling regulatory needs. The Study's analyses indicate that banks enjoy important competitive advantages over other types of investment managers derived both from their possession of corporate trust powers and from the indirect compensation (permitting them to charge lower direct advisory fees) that they obtain from the link between trust and commercial operations.

An important stimulus to the recent wave of combinations between equity management and brokerage functions, however, is the fixed, minimum brokerage commission. Efforts to maintain brokerage commissions at noncompetitive levels for large, primarily institutional investors, have had profound effects on the structure of the nation's securities markets, discussed in Part Three. They also have conferred important competitive advantages, again reflected in part in lower direct fees, on institutional managers who are either directly affiliated with brokerage firms or who benefit from well developed reciprocal practices involving the use of brokerage to purchase a number of other services provided by the brokerage industry.

The Commission does not presume to speak with authority on the desirability of, or regulatory purposes served by, regulated rates or prices in areas beyond its statutory jurisdiction. Having completed extensive reviews of the economic and regulatory effects of fixed minimum brokerage commissions, however, the Commission has concluded that such rates cannot be justified on orders above $500,000 in value and will review the desirability of requiring competitive rates on smaller institutional-size transactions as experience is gained with competitive rates on larger transactions.

### MANAGEMENT FEES

Actions by regulatory authorities that result in the unbundling of certain services currently provided in combination with others under an umbrella of regulated rates or prices can have a variety of beneficial results. One is to remove artificial barriers to competition in the separate provision of specialized functions or services; another is to

bring into the open for evaluation by portfolio beneficiaries, regulatory authorities and institutional managers themselves both the services obtained and the prices paid for many of the services currently obtained by institutional managers and paid for indirectly, through reciprocity. It is entirely possible that some of these services would not, in fact, survive public disclosure and the market test of separate pricing. To the extent that this occurs, the full cost to portfolio beneficiaries of management services would be reduced. At the same time it should be recognized that many of the services currently provided and paid for indirectly, in combination with brokerage or other services, may be of considerable value to portfolio beneficiaries, may be obtained more economically by institutional managers from external than from internal sources and would, therefore, survive both disclosure and economic tests.

Current levels of direct fees charged by investment managers for their services have developed over time in cognizance of a manager's ability to obtain external services on a reciprocal basis. This ability is especially important for the smallest types of institutional managers whose internal staffs often are minimal and whose reliance on "The Street" for research and other services traditionally obtained through reciprocity has been greatest. To preserve the ability of specialized firms to offer legitimate services to institutional customers and the ability of institutional managers to obtain these services externally, in an economical manner, it may be necessary for such firms to adjust direct charges to clients or to change contracting arrangements between themselves, their clients and external suppliers of research or other financial services.

### MUTUAL FUND DISTRIBUTION

One area within the Commission's traditional jurisdiction in which competitive brokerage commissions are likely to have a direct and substantial impact is the distribution of mutual fund shares. A combination of circumstances—including existing levels of direct sales charges, retail price maintenance on such charges, noncompetitive brokerage commission rates and restrictions on the use of advertising and other mass merchandising techniques—have intersected to create and perpetuate a relatively expensive distribution system for investment company shares. Fixed minimum brokerage commissions allocated to support fund sales have provided an important source of income for the distribution of mutual fund shares. As we have noted, the Commission believes that fixed rates on orders above a given size can no longer be justified. To the extent that this action eliminates a significant source of revenue to the distributors of fund shares, it can be expected to lead to one or more of three possible results: increased direct sales charges or payments to fund sellers, reductions in the extent of the distribution system for fund shares, or the development of lower cost distribution systems for the industry. The latter result is to be desired and the Commission expects that as part of the study of mutual fund distribution now being conducted by the National Association of Securities Dealers pursuant to Section 22(b) of the Investment Company Act of 1940, the NASD survey will focus not only on costs inherent in existing methods of fund distribution, but also on ways in which

these costs can be reduced and savings passed on to fund purchasers. In addition, the Commission will consider the feasibility of achieving this result in connection with its own pending study of the impact of eliminating Section 22(d)—the so-called retail price maintenance provision—from the Investment Company Act of 1940.

### INSTITUTIONAL MEMBERSHIP

The Commission expects that its recent decision on competitive rates on large orders will have the effect of reducing artificial inducements to the combination of management and brokerage functions, and that this in turn will tend to reduce but not eliminate economic pressures toward institutional membership on stock exchanges. Further actions to increase the fraction of institutional transactions subject to competitive rates, of course, could be expected to further reduce such pressures. The Commission realizes, however, that issues relating to institutional membership are at least partially separable from questions regarding the level and structure of brokerage commissions and would not be disposed of entirely even by fully competitive rates on all securities transactions.

The essential problem faced by the Commission at this juncture is whether to deal with institutional membership now as a combination of problems involving both commission rates and the integration of management and brokerage functions, or to reserve judgment on this important issue pending additional steps by the various exchanges to eliminate fixed minimum commissions on orders of institutional size.

The Commission realizes that combinations of management and brokerage functions once made cannot be easily reversed. It also realizes that desires to maintain viable competition in the provision of specialized financial services, to avoid undue concentrations of economic power and to abate potential conflicts and regulatory problems inherent in combinations of management and brokerage functions may militate against the removal of remaining barriers to membership by institutions on national securities exchanges. Certainly those fiduciaries who feel their long-term interests lie in the effective management of their clients' funds, unencumbered by either the diversions or potential conflicts incident to simultaneous operation of brokerage activities, should not be forced to apply for membership in order to meet what they may feel are shorter term obligations to avoid excessive transaction charges.

At the same time, the Commission cannot ignore indefinitely the asymmetry that results from some persons who manage institutional portfolios at the same time belonging to major exchanges while others so engaged are prohibited from belonging. Institutions affiliated with exchange members enjoy important competitive advantages over other institutions by virtue of this fact. Elimination of remaining barriers to such membership might provide additional incentives for securities exchanges to move more rapidly toward the rationalization of brokerage commission rates. The Commission believes that the Study's admittedly limited analyses of regulatory problems resulting from the combination of management and brokerage functions, as well as the accumulation of its experience to date with existing combinations of these functions by members of major exchanges, has not revealed

unique, additional regulatory problems whose severity justifies sweeping prohibitions of such combinations.

The Commission will withhold its final determination regarding the desirability or necessity of prohibiting membership by otherwise qualified institutional investors on national securities exchanges, pending actions by the exchanges to eliminate artificial inducements to such membership by compliance with the clear intention of the Commission's recent releases regarding the abolition of noncompetitive fixed commissions on orders of institutional size.

## Part Three (Chapters X–XIII) *Impacts of Institutional Investing on Securities Markets:*

## Initial Conclusions and Recommendations

Part Three of the Study was designed to assess the impact of institutional investing upon the stability of prices in the secondary equity markets, upon the structure of those markets and upon the securities industry that services the markets.

### STABILITY OF PRICES

The preponderance of data collected by the Study on monthly net institutional trading imbalances, on institutional position changes, on block trades and on day-to-day price changes analyzed in chapters X, XI and XII indicate that institutional trading in the aggregate is related to or coincident with relatively few of the large price changes that occur in the securities markets. For example, although price changes in excess of 3 percent occurred more often on days when block trades took place during the 15 months studied (July 1968 to September 1969), block trades in stocks listed on the New York Stock Exchange occurred on only 9 percent of the stock days in which prices changed relative to the market by such an amount. In addition, analyses performed on monthly net institutional trading imbalances over a 20 month period (January 1968 to September 1969) indicate that most monthly stock price changes (relative to the market) were unrelated to aggregate institutional trading imbalances in the particular stock over the time span. Other analyses of random large position changes by institutions indicate that, even on an interday basis, institutional trading appeared to offset price movements about as frequently as it appeared to contribute to them. Furthermore, from the data on market makers it appears that during stock months in which institutions were more active, large close-to-close price changes were less frequent.

The Study could not and did not individually examine institutional transactions. Consequently, the data collected by the Study do not negate the possibility that one or more institutions trading at particular times in particular securities did impair price stability or otherwise act in a manner contrary to the public interest. This limitation does not, however, put in question the validity of the important finding that institutional trading overall has not impaired price stability in the markets. Thus, the Study has not discovered any basis in terms of price stability for imposing generalized limitations on the volume of institutional trading or on the size of institutional transactions.

MARKET STRUCTURE

It is clear that the securities markets are changing in rapid and significant ways. There are a number of reasons for these changes; among the most important are the greatly increased volume of trading by institutions, the negotiated nature of many institutional transactions, the fixed minimum commission rates that stock exchanges impose on such transactions and technological advances in communications and data processing. The evolution of the securities markets has been, and many continue to be, affected and distorted by barriers to competition. Among the most significant of these are minimum commission rates and rules that insulate markets, market makers and broker-dealers from each other. The combination of fixed minimum commission rates and barriers to access have tended to cause institutions to choose market places, in part at least, for the purpose of reducing the commission they pay or taking advantage of opportunities to purchase various services with "soft" commission dollars by means of reciprocal practices. These appear to be the most important explanations for the accelerating growth of institutional trading on the regional stock exchanges and in the third market. Because the assembly of many block trades takes place primarily over the upstairs communications systems of broker-dealers rather than on the floor of any stock exchange, such transactions can be executed wherever the participants select, and markets have therefore been selected on the basis of these considerations.

The fixed minimum stock exchange commission on large orders has led to the growth of complex reciprocal relationships between, on the one hand, institutions (particularly mutual fund managers and banks) and, on the other, broker-dealers. This has had the effect of making commission rates for institutions negotiable but limiting the extent to which the ultimate investor rather than the money manager has benefited from such negotiation. As noted earlier, these relationships tend to aggravate potential conflicts of interest, to be anticompetitive in nature and to impede the development of a central market system for securities trading. Elimination of fixed commission rates for institutional size transactions should go some distance toward dealing with these problems. The Commission will closely observe the extent to which competitive commission rates lead toward these results.

The Study has found that all types of market makers tend to stabilize prices by trading to offset temporary imbalances in supply and demand. In view of the size and "lumpiness" of institutional transactions it becomes increasingly important that all market makers be encouraged and strengthened in the performance of their dealer function. The Study has also found, however, that a market maker's willingness to offset temporary imbalances depends in large part upon the volume of trading to which it is exposed. This function, of course, is impeded if the market maker's opportunity to participate in the total volume of trading is limited by rules which artificially restrict its exposure to that volume.

The data collected by the Study indicate that New York Stock Exchange specialists, who are exposed to the greatest volume of trading, presently offset temporary imbalances to a much greater absolute extent than other market makers. The data also indicate that despite

self-regulation, there are substantial differences among New York Stock Exchange specialists in the extent to which they participate in their markets in depth, with specialists who do not so participate nevertheless earning high returns on their capital.

Institutional investors and individual investors tend to trade in different ways and by the use of different procedures. This raises a question regarding the degree to which markets used by institutional investors and by individual investors could or should be separated. Without expressing a definite conclusion on this question, it should be noted that institutional investors and individual investors presently trade with each other either indirectly through the intermediation of dealers or, to a lesser extent, directly through the matching of orders by brokers. Any effort to eliminate trading between these two investor groups would require a rather drastic change in the pattern of trading for both of them. For example, as shown in chapter X, in the average stock month in which major institutions traded stocks listed on the New York Stock Exchange, at least two-thirds of this trading was with dealers, smaller institutions or individual investors. Even respecting a typical block trade of $1 million or more on the New York Stock Exchange, it appears that almost 30 percent of the shares eventually found new owners, largely individual investors, through the regular round lot market on the floor of that Exchange. Any attempt to deprive individual investors of the opportunity to participate directly or indirectly in trades with institutions would deprive them of the advantageous discounts and premiums which often result from such trading.

There are, however, as the Study has found, certain questions and difficulties with respect to the interaction of large and small orders in the same market. Examples are the prices at which some limit, stop and odd lot orders triggered by block trades are executed, and the price effects in the aftermarket of inventory positions acquired by market makers in block trades and disposed of in small lots. These questions require and will receive the attention of the Commission.

As pointed out above, the markets are changing, and the question is therefore presented as to the extent to which regulatory authorities, including the Commission, should attempt to direct and structure the future development of the markets. We believe that because of modern communication and data processing facilities it is possible to preserve geographically separated trading markets while at the same time tying them together on a national basis. We also are satisfied that the Commission and other regulatory authorities should endeavor to prevent the evolution of the market place from being distorted by unnecessary restraints on competition. We do not believe, however, that it is either feasible or desirable for the Commission or any other agency of the government to predetermine and require a particular structure, and still less to specify now particular procedures for the markets of the future. It is better to observe and, if necessary, to modify the structure which evolves through the ingenuity and response of the marketplace to the extent changes occur that appear inconsistent with the public interest. Nevertheless, to guide the industry in this evolutionary process certain goals and principles may be stated. In stating these we do not mean to endorse them as absolutes. Further study

is required to determine their technical and practical feasibility and their consistency with each other as well as with other accepted goals and principles. Nevertheless, on the basis of the Study and our general experience, these goals and principles appear to us to be both worthwhile and important.

A major goal and ideal of the securities markets and the securities industry has been the creation of a strong central market system for securities of national importance, in which all buying and selling interest in these securities could participate and be represented under a competitive regime. This goal has not as yet been attained. Recent developments appear to make it possible to accomplish this purpose, while at the same time other developments create difficulties in doing so.

Until comparatively recently there were serious technological limitations on creating a system where all interests of investors could be represented in a central market. This is no longer the case. Recent advances in communications and electronic data processing make such representation technically feasible if the necessary systems are developed and used. While the creation of this capability is a development of major importance, this is not to say that markets operated unsatisfactorily in the past. The major markets in the United States have been stronger than any in the world. The capability for a central market system having within it a sustained capacity for innovation can assist in a successful adjustment to changing conditions. In light of the rise of institutional investment and the resulting increase in large so-called "block" securities transactions, certain practices such as fixed non-competitive commission rates and barriers to market access have tended to work against the development of a central market and to foster the use of competing markets. These often compete imperfectly, as where they seek to attract business on the basis of relative willingness to facilitate reciprocal practices, some of which are described in chapter XIII. Under a more competitive regime such markets can function in a much more useful way.

Aside from technological problems and competitive barriers, there have been two principal obstacles to the development of a strong central market system. These are, first, the fact that there has been no market which was strong enough and liquid enough to serve as a major central market for the entire United States. Institutional investment and the resulting strains which it has thrown upon the market mechanism have aggravated this difficulty. A second and related obstacle has been the fact that prior efforts to develop a central market have included the creation of a certain amount of monopoly power, particularly with respect to the dealer function. This has been accompanied by certain restraints on competition. There has been an effort to control potential abuses of such monopoly power by regulation. Such efforts are necessary but have not been wholly successful, primarily because regulation is more effective in prohibiting misconduct than it is in motivating and causing regulated persons to take affirmative action and to assume risks in order to create and perfect a central market.

It will not be easy to overcome these obstacles but we believe it can be done and that certain guiding principles can be used for this pur-

pose. It may or may not be possible for the central market to be largely an auction market, although the values of the agency auction market must be preserved. Under present conditions it appears that such a market will also require strong dealers. These may perform the traditional function of offsetting temporary imbalances in supply or demand or they may have a more limited function such as block positioning. To provide for dealer functions, all responsible market makers should have access to the central market. In this connection it should be noted that, given present technology, it is neither necessary nor desirable that all such dealers be present in any one geographical location, since any such requirement would among other things prevent the regional exchanges from having the meaningful role in the market system which they could have.

The participation of competing dealers in the central market will also reduce the element of monopoly power which has accompanied past efforts to establish a central market and will make it possible for potential abuses of such monopoly power to be controlled not only by regulation but to an increasing degree by competition. An essential characteristic of such a system would be the prompt reporting of all securities trades to the public on a comparable basis.

In summary, our objective is to see a strong central market system created to which all investors have access, in which, all qualified broker-dealers and existing market institutions may participate in accordance with their respective capabilities, and which is controlled not only by appropriate regulation but also by the forces of competition. We propose, in consultation with all interested persons, to seek the furtherance of these general objectives as we perform our reviewing function over proposed changes in market structure.

Part Four (Chapter XIV–XV) *Impacts of Institutional Investors on Corporate Issuers:*

Initial Conclusions and Recommendations

Part Four analyzes certain aspects of the impact of institutional investors on portfolio companies. For the purposes of this Study, a portfolio company is one whose equity securities are held by institutions or held for the benefit of persons whose investments are managed by institutions. The part contains two chapters: one deals with institutional participation in primary equity financing; the other deals more broadly with institutional-corporate relationships.

Chapter XIV is essentially an economic and statistical analysis of the extent of institutional participation in corporate financing through purchases of equity securities from issuers. This kind of participation is to be distinguished from institutional participation in the secondary markets—the subject of Part Three of the Study. Direct purchases of equity securities from corporate issuers (or from underwriters of the new issues) provide the companies involved with additional capital and are thus of particular economic significance. While institutional purchases of outstanding equity securities in the secondary markets tend to involve securities of larger companies, institutional participation in purchases of the new issues studied here tended to involve financing for smaller enterprises.

The analyses in chapter XIV, while adding light to the role of institutions in new financing, do not at this time demonstrate a need for wide-reaching legislative action. While there may be particular problems regarding certain types of institutional participation in first time new issues, it does not appear that institutions as a group have been receiving significant preferential treatment in the primary equity market for such issues or that their participation in that market has been so limited as to cause concern regarding a scarcity of access to capital by newer, smaller enterprises. Subject to compliance with the investment objectives of the institution, institutional financial managers should be able to determine whether to purchase securities directly from the issuer or in the secondary markets. While there is continuing concern that such purchases should reflect investing rather than merely trading decisions and that they conform to the interests and objectives of institutional beneficiaries, it does not appear feasible to devise an all-encompassing regulatory approach that will ensure that result with absolute precision. At the same time, the Commission will continue to evaluate problems created by the new issue market, including substantial price rises in the aftermarket which have frequently resulted in large gains to institutions and other investors who dispose of new issues within a short time after purchase.

RESTRICTED SECURITIES

As noted in the chapter, institutional participation in non-public offerings is a significant factor in enabling companies, particularly smaller, less well established companies, to secure financing. However, securities purchased in such offerings ordinarily cannot be resold without registration under the Securities Act of 1933. Accordingly, these securities are ordinarily not equal in value to securities of the same class which are freely tradable. This fact has two important consequences for corporate issuers of restricted securities and for the institutions which purchase them.

*First*, restricted securities generally are issued at a substantial discount from the market value of freely tradable securities—the average discount for the 278 private placements examined by the Study was about 23 percent, although variation in practice was considerable. Some portion of these discounts represent an additional cost to corporate issuers of obtaining financing through the sale of equity securities in private placements.

*Second*, it is often difficult for institutional holders of restricted equity securities to place an appropriate valuation upon them. Valuation has important impacts on the investment performance of institutional financial managers and may also affect the computation of advisory fees based upon the value of investment assets under management. Difficulties are exacerbated in the case of open-end investment companies which are required to sell and redeem their own securities at net asset value and whose portfolios, accordingly, are expected to be comprised of securities which can be both accurately valued and which are sufficiently liquid to meet redemptions.

The Study's findings indicate that institutions have used a variety of methods to value restricted securities. The diversity of methods uti-

lized, at the least, makes investor comparison of various alternative investment media offered by different types of institutions—and by different institutions within each type—more difficult to the extent that restricted equity securities are included in one or more of the institutional portfolios compared. In general, however, the portfolio proportions of such securities have not been large.

The Commission has recognized that valuation of restricted securities by institutions and their managers raises difficult questions for which there is at present no simple or mechanical solution. During the past several years, the Commission has focused on the problem of valuing restricted securities held by registered investment companies. Several releases have been issued which call attention to the problem and suggest appropriate considerations to be taken into account.[3] In those releases the Commission pointed out that the Investment Company Act of 1940 requires restricted securities to be carried at "fair value as determined in good faith by the [company's] board of directors"; and that, as a general principle, the current fair value would appear to be the amount which the owner might reasonably expect to receive for such securities upon their resale. The discussion set forth in these releases as to methods of valuation of restricted securities is, in the Commission's view, equally applicable, under authority of the antifraud provision of the Investment Advisers Act of 1940, to an investment adviser (as defined in that Act) irrespective of whether or not it is required to register as an adviser. Further, the Commission believes that other persons acting as trustees or managing agents with respect to portfolios of equity securities (including securities with equity features) should consider the principles enunciated in these releases when valuing securities in good faith at fair value.

As has been previously observed, some portion of the costs of obtaining financing through the sale of securities in private placements reflects the restrictions on resale of these securities without registration under the Securities Act of 1933. As a result of recommendations of the Commission's disclosure policy study (*The Wheat Report*, April 14, 1969), the costs in time and money of the registration process would be somewhat reduced for certain classes of issuers, primarily those which have a class of equity securities registered under the Securities Exchange Act of 1934. Moreover, the circumstances under which purchasers of restricted securities may resell such securities would be more clearly defined. *The Wheat Report* recommended improvements in the disclosures provided by the continuous reporting process under the Securities Exchange Act of 1934 and the enhancement of the degree of coordination between the disclosure under that Act and the disclosure required under the Securities Act of 1933.

The Commission has implemented those recommendations through (1) adoption of a new quarterly financial report and amendments to reporting forms under the Securities Exchange Act designed to provide on an annual basis, information which will furnish a reasonably complete and up-to-date statement of the business and operations of registered companies; (2) adoption of a new short form for registration under the Securities Act of 1933 and the amendment of another short

[3] See Investment Company Act Release Nos. 5847 (October 21, 1969), 6026 (April 13, 1970), 6121 (July 20, 1970) and 6295 (December 23, 1970).

form to broaden its availability; and (3) proposals to adopt rules relating to the resale of unregistered securities pursuant to conditions designed to protect public investors as well as replace subjective with objective standards for interpretation of the registration provisions of the Securities Act of 1933.

To the extent that institutional purchasers may avail themselves by contractual right or otherwise of the new short forms for registration of securities under the Securities Act of 1933 or may take advantage of rules relating to objective standards for interpretation of the registration requirements of that Act, the cost to issuers of obtaining financing through the sale of restricted securities may be reduced. In addition, the improved reporting requirements recommended in *The Wheat Report* and adopted by the Commission may, to some extent, provide information which will serve as a basis for more adequate consideration of the fair value to be placed on restricted securities by institutional holders.

Chapter XV indicates that (1) limited numbers of institutions, particularly banks, have the potential economic power, were they to act together, to exercise control or influence over a number of portfolio companies, particularly large companies, and (2) except in the case of transfers of corporate control, where the expectation of benefits to institutions or their managers is relatively clear, institutions generally report that they do not participate in corporate policy, decision making or other corporate affairs, preferring instead to dispose of their holdings in a company if its management pursues policies with which they disagree. There are two important qualifications to these findings.

*First*, it is rare that a single institution will have holdings in a company large enough to give it a position of clear economc power over the company. Therefore, influence over the portfolio company will depend upon either (1) the existence of other types of relationships, such as creditor relationships, or (2) the aggregation of institutional power emanating from concerted action by a group of institutions. It often is difficult to ascertain whether institutional power is enhanced or limited by the existence of business and other relationships aside from shareownership. At the same time, the Study found relatively little evidence of concerted action to influence corporate management except in its case studies on transfers of control. Concerted action, of course, requires an accommodation of interests among the institutions participating in a joint endeavor and may, therefore, not enhance the economic power of any one institution.

*Second*, where institutions are able to perceive relatively clear and substantial benefits—or the alleviation of difficult problems they may face—through participation in corporate affairs, their influence and participation may be both substantial and critical. This is so in the case of transfers of control, where institutions can benefit from market action. It may also occur where institutions are "locked in" to stock holdings because they are restricted, are too large to be disposed of through ordinary market mechanisms or would generate unfavorable tax consequences if sold.

A fundamental question confronting institutional, corporate and governmental policy-makers is whether the existence and use of the potential economic power held by institutions can be reconciled with

the obligations of institutional financial managers to their own beneficiaries and with the rights and interests of other investors in portfolio companies. This question is not susceptible of a simple response because the possible uses or misuses of institutional economic power do not remain static.

There are, nevertheless, two conclusions that flow initially from the chapter's findings. The first is that questions of institutional influence over portfolio companies cannot be assessed intelligently without adequate information about the continuing growth and management of institutional stock holdings. The second is that institutions or their managers, by reason of their ability to influence the outcome of efforts to transfer corporate control, appear in a number of cases to receive preferential treatment as compared with individual investors. This preferential treatment appears to have taken two principal forms. First, the acquiring company may afford special treatment to institutions in the form of premium prices, guaranteed profits and other incentives in order to attract their support. Second, institutions may receive nonpublic advance information concerning takeover efforts which may be utilized in purchasing securities either of the target company or the acquiring company with a view to profiting from the market impact of the takeover effort once its existence is publicly disclosed.

In view of these conclusions, the Commission believes that additional disclosure requirements with respect to institutional equity holdings and management, as suggested in our comments in connection with Part One, are warranted, and additional regulatory requirements dealing with transfers of corporate control as indicated below.

### DISCLOSURE OF HOLDINGS

The potential or actual impact of institutions on portfolio companies cannot be assessed by institutional beneficiaries, corporate investors or government policymakers without full and fair disclosure of institutional equity holdings and management policies. The federal securities laws have consistently recognized the special status of corporate "insiders" and "affiliates"—persons having special access to the centers of corporate authority or the power, actual or presumed, to influence the exercise of that authority. Thus, the securities laws and Commission rules require disclosure of large share holdings and relationships between affected companies and large shareholders.

In practice, however, many large institutional share holdings are excluded from disclosure under existing law; Sections 13(d) and 16(a) of the Securities Exchange Act of 1934 require the disclosure only of large holdings of shares which are *beneficially owned.* As the Study found, institutions frequently hold and manage large amounts of a company's shares, but do not themselves have beneficial ownership of such shares. The limitation of disclosure to beneficial ownership means that the holdings of a complex of institutions or accounts under common management by a single financial manager are not aggregated in determining whether there must be any disclosure, except to the extent that the complex constitutes a group of persons within the meaning of Section 13(d) or 14(d). The Study found that it is common, for ex-

ample, for a group of investment companies or other types of accounts under common management to invest, on occasion virtually simultaneously, in the same securities. Under existing laws, even if the aggregate holdings of these accounts exceed 10 percent, no disclosure would be required under Section 16(a); disclosure under Sections 13(d) or 14(d), which under recent amendments is at the 5 percent level, would be conditioned upon a finding that members of the complex alone or with other institutions or complexes constitute a "group" for the purposes of those sections.

Because not all situations can be reached through interpretation of the "group" concept in Section 13(d), the Commission believes that it would be appropriate to amend the Securities Exchange Act of 1934 to the extent necessary to require disclosure of holdings of equity securities in excess of 5 percent of the outstanding issue, whether under investment management or beneficially owned. Thus, the test of reportable holdings and transactions would include *either beneficial ownership of or investment management* over the securities in question. A bank trust department, for example, would report the number of shares which it managed (not including those for which it provided solely custodial services), aggregating shares held in various investment or trust accounts. An investment adviser would report the shares held by various investment companies and counselling accounts managed by the same adviser. Disclosure should further be broadened to require an indication of the voting authority of the shares under management, whether sole, partial or none.

In connection with this proposal to expand shareholder reporting provisions of the Securities Exchange Act, it should be recognized that certain other modifications of existing requirements under Sections 13(d) or 16(a) would appear to be in order. Section 13(d) was enacted in the context of transfers of corporate control and it consequently provides for disclosures concerning such matters as the investor's plans for the portfolio company and its sources of financing which may not be appropriate in the context of an institutional holding where no takeover is contemplated. Similarly, a purpose of Section 16(a) was to provide information concerning possible liabilities under Section 16(b) and consequently, fairly prompt reports of any change, no matter how small, in a holding are required. This might well not be needed in the present context. The choice of Section 13(d) or Section 16(a) or a new section as a vehicle for the type of disclosure here proposed would depend upon whether it was concluded that disclosure of information in addition to the mere existence of the holding and the identity of the institution is needed. General rulemaking authority such as requested in connection with Part One above would be the preferable and most flexible and comprehensive approach.

The Commission does not at this time recommend that Section 16(b), dealing with the recovery of short-swing profits, should be modified in any way.

### DISCLOSURE OF POLICIES TOWARD CORPORATE MANAGEMENT

While it does not appear appropriate for the Commission to attempt to advise institutions how or whether to become involved in the

affairs of portfolio companies, it would be desirable for both portfolio companies and institutional beneficiaries, including investment company shareholders, to be informed of the policies of the institutional financial manager on such matters. Presently, most investment companies disclaim in their statement of policy that it is their intention to become involved in management of portfolio companies. Consideration should be given to requiring all institutions to state their policies on involvement in corporate affairs and with more specificity than now required of investment companies, including: their procedures for considering proxy materials, any general policy regarding supporting management, any general policy of abstaining from voting, any general policy on voting for or against (or not voting on) certain types of proposals, any general policy of participating or not participating in corporate transfer situations, and any policies regarding other business relationships, personnel relationships and informal participation or consultation with portfolio companies in corporate affairs.

This type of public disclosure would focus the obligation of institutions to act in the interests of their beneficiaries and lead to their setting up procedures for systematic attention to questions of stockholder voting. As a number of institutions responding to the Study's questionnaires indicated, the beneficiary should be able to choose the institutional manager whose policies on investment management appear to him most appropriate. The only way in which this can be done is to give beneficiaries full information about the policies followed, including policies regarding relationships with portfolio companies. The public nature of such information would also serve to inform corporate management and other shareholders of any general policies of the institution.

Because the Commission believes such disclosure should be generally applicable to all institutions, it wishes to consult with other regulatory agencies to develop guidelines for disclosure to portfolio beneficiaries, portfolio companies and regulatory agencies of policies pursued by institutional managers regarding relationships with actual or potential portfolio companies. This may lead to legislative proposals. In the meantime the Commission will also proceed with drafting of rules for comment with respect to investment companies for which its present legislative authority is adequate.

### INSTITUTIONAL INVOLVEMENT IN CORPORATE TAKEOVERS

The takeover area is one where the need for additional regulation is indicated by the Study's findings. Some institutions have received both preferential economic benefits and preferential informational benefits in connection with transfer efforts. As to the receipt of preferential economic benefits—such as premium prices or other special inducements—the Commission believes that regulatory action is appropriate to prevent powerful institutions from being treated more favorably than individual investors. (The Commission has already taken some steps in this area by promulgating Rule 10b–13.)

The problem of preferential informational benefits is more difficult. The Study found that in some cases companies and broker-dealers intending to make or induce a takeover bid privately advised certain in-

stitutions of this fact, enabling such institutions to make purchases of the target company shares in anticipation of the market impact of a subsequent public announcement of the bid. While there may be some similarities between the nondisclosure of information regarding an intention to make a takeover bid for another company and the nondisclosure of material information about a company's business affairs, the two situations involve somewhat different considerations and different underlying principles. With respect to the latter, material undisclosed corporate information, the relevant principle has been developed as an interpretation of Rule 10b–5 and other antifraud provisions. Persons who have acquired material undisclosed information about a company by reason of their relationship with that company (and usually for a corporate purpose) may not utilize this information for their own benefit either by trading themselves or by giving the information to favored investors in order that the investors may use it in their trading.

With respect, however, to passing on information about a prospective takeover effort to favored institutions, the persons who do so usually are the persons who plan the takeovers and ordinarily have no relationship to the target company, nor do they usually have any fiduciary duty to that company or its shareholders. This difference in relationships does not necessarily mean that such passing on of information concerning takeovers should be permitted, but it may well mean that if such activities are to be prohibited, this should be done by a rule specifically directed to that situation rather than by an expanded interpretation of Rule 10b–5 resting on a somewhat different theory than that underlying that rule as to the obligations and duties of those who receive material undisclosed information.

There are also practical differences. Where trading by insiders or by their tippees on material undisclosed corporate information is prohibited, the corporation and its insiders have a choice either to make the information public or else, if the business interests of the corporation require a postponement of public disclosure, to refrain from trading and keep the information entirely secret. In the case of a prospective takeover, a requirement of immediate public disclosure as soon as the effort is contemplated would be likely to abort the takeover. This consideration was recognized by the Congress in the Williams Act (Section 13(d)) which postpones public disclosure of a takeover until the persons planning the takeover have either acquired over 5 percent of the target company's shares or make a tender offer for more than that amount. A person planning a takeover usually cannot, however, keep his plans completely secret. He may, for example, have to consult commercial banks or investment bankers with respect to financing for the effort, and if he is proceeding responsibly he will wish to obtain as much information as he can from bankers or otherwise as to whether the proposed target is a desirable acquisition and, if so, how high a price can properly be offered. Thus the persons planning a takeover do not have the same option of public disclosure or complete secrecy as is available in the case of undisclosed corporate information.

The Commission will, accordingly, consider the possibility of developing appropriate rules to deal with misuse in the market of undisclosed information concerning corporate takeovers. It presumably will

be necessary in such rules to distinguish between persons who receive information on this subject for a legitimate purpose related to the proposed takeover and those who are given a "tip" for some other purpose. It may also be necessary to distinguish between, on the one hand, persons who in fact are part of the group attempting the takeover, who should be permitted to communicate among themselves and to purchase shares of the target company subject to the requirements of the Williams Act and, on the other hand, those who are not part of the group but who are given the information for other purposes.

D

The Institutional Investor Study, with its heavy emphasis on the application of quantitative, mathematical techniques to the analysis of economic and regulatory problems, has carried the Commission into new and often unfamiliar territory. No member of the Commission is a professional economist and, as indicated in our recommendations for Part One, the size of the Commission's regular economic staff is relatively small. As a result, the Study's special staff necessarily operated with a great deal of professional autonomy.

The Commission, of course, has reviewed the Study's Report from its own perspective as a regulatory body. The resulting product, therefore, represents a unique and, we believe, a constructive blend of the disciplines and the perspectives of the professional economists and the regulatory agency that collaborated in its development. While the Commission's ability to review in the time available certain of the more technical aspects of the Study's quantitative analyses may be limited, and further external review of the data and analyses may be desirable, we are confident that the Report constitutes a valuable contribution to our understanding of this important and rapidly changing sector of the nation's capital markets.

The Commission is deeply indebted to Donald Farrar, the Study's Director, Lawrence Jones and Seymour Smidt, the Study's Associate Directors, Donald Feuerstein and James Halpern, its Chief Counsels, Keith Johnson, the Study's Assistant Director, and their staff of economists, attorneys, computer specialists and support personnel. They brought to the work not only talent but devotion. They made possible the conduct of a large undertaking on a comparatively short time schedule. We also are grateful for the contributions of many persons in the regular divisions and offices of the Commission. In addition, the Commission wishes to express its appreciation to the Advisory Committee, [4] members of the financial community, the self-regulatory agencies, the Federal Reserve Board, the Federal Deposit Insurance Corporation, the National Bureau of Economic Research and the numerous private institutions and firms who gave so generously of their time and resources in assisting the Study in this important effort.

During the coming months the Commission will proceed along the lines indicated in this letter. We have not attempted to state conclusions and recommendations here as to relatively minor matters or details that follow from the initial conclusions and recommendations

[4] A copy of the letter dated March 1, 1971 of the Advisory Committee to the Commission is attached to this letter of transmittal.

stated above. The Commission will submit specific proposed legislative language to carry out those initial recommendations that require legislation. As the Commission gives further consideration to the results of the Study and such supplementary and additional inquiries and analyses as we determine to conduct, we expect to reach additional conclusions and may make additional recommendations in further communications to the Congress.

By direction of the Commission:

RICHARD B. SMITH, *Commissioner.*

# ADVISORY COMMITTEE TO THE INSTITUTIONAL INVESTOR STUDY

MARCH 1, 1971.

SECURITIES AND EXCHANGE COMMISSION,
*Washington, D.C.*

DEAR SIRS: The Joint Resolution of Congress dated July 29, 1968 which authorized the Institutional Investor Study provided that "The Commission shall also consult with an advisory committee which it shall establish for the purpose of advising and consulting with the Commission on a regular basis on matters coming within the purview of such Study."

The Commission appointed the members of the Advisory Committee on January 21, 1969 and the Committee held its first meeting with the Commission on March 27, 1969. Subsequently, alternate members were selected in order to provide continuity as well as a broader base of experience for the Commission and its staff to draw upon.

The Committee met monthly and, in the later stages of the Study, more frequently with the Study's special staff and Commissioner Smith in Washington. During the early months the Committee discussed with the staff the question of appropriate areas for the Study's inquiries and participated in the review of various drafts of the Study outline.

Subsequently, the Committee advised on the composition of an extensive series of questionnaires used to gather the data which provided the basis for many of the Study's findings. At the request of the staff, separate industry technical committees were formed and met frequently with staff members to assist in making the questionnaires clear and precise and in avoiding excessive burdens on respondents.

Many Committee members then assisted in urging the thousands of institutional investors and broker-dealers who were questioned to respond promptly and completely to the questionnaires. Respondents did cooperate, providing the staff with data representing the equivalent of more than 800,000 IBM cards. Throughout this period the Committee also assisted the Study staff, who had been chosen largely from the academic community, in arranging interviews with a broad cross-section of the industry leaders.

As chapter drafts began to emerge from the Study staff, the Committee organized itself into sub-committees of two or three members to advise individual chapter authors. During the final weeks of preparation and review these sub-committees met with members of the Commission, as well as with the Study staff, to discuss the content of the individual chapters.

Finally, during the week of February 15, 1971, the Committee was given the opportunity to review and comment to the Commission on a tentative draft of the Commission's letter of transmittal of the report to Congress.

Unfortunately, the time pressures on the staff, the Commission and the Committee were very great. It was not possible for the full Committee, or in some cases the assigned sub-committee, to study the final text of most chapters before the deadline for comment. Because of the time-consuming process of gathering, collating, and analyzing the vast amounts of statistical data, there has also been relatively little time for assessing the nature and extent of problems or considering solutions.

Under the circumstances, although the sub-committees are believed to have been helpful in avoiding inaccuracies and misinterpretations, the Committee members cannot now either accept or reject all the descriptions, statements and inferences set forth in the Study. Although most members would probably find themselves in agreement with many of the major findings, some or all might disagree with certain inferences and conclusions drawn from the data.

The Study has represented an interesting and useful approach involving interaction among a regulatory agency, a research team drawn largely from the academic community and an outside advisory group experienced in the areas being studied. There is no question that the Study had been a very worthwhile undertaking. A great void of statistical data has previously existed in areas to which the Study addressed itself. New data now are available to support further study and policy recommendations.

The Committee wishes to emphasize its conviction that time is now required to analyze fully the extensive data produced by the Study, to appraise its findings properly and judiciously and to give considered judgment to possible courses of action.

The Committee particularly supports what it understands to be the Commission's view that it should be empowered to require institutional investors to submit significant information on their holdings and transactions in securities over which they have investment authority on a regular, continuing basis, with due regard, of course, to duplication and burden. Such information will make possible the continuing identification of potential problems and the analysis of possible solutions.

The Advisory Committee would like to make it clear that, while its advice was freely sought and freely given, the Study was a Securities and Exchange Commission study and the final report is a Commission report and does not bear the Advisory Committee's unqualified stamp of approval. This is not to say that the Committee disapproves of the report. Any study of this magnitude cannot be either approved or disapproved as a whole.

We are grateful for the opportunity to have assisted the Commission in the Study so far, and we look forward to participating in the future. The Committee is pleased to have been asked by the Commission to continue in existence and to be available to offer its advice as further policy recommendations are considered in the months ahead.

Very truly yours,

JOHN C. WHITEHEAD, *Chairman*,
(For the committee).

| MEMBERS | ALTERNATES |
| --- | --- |
| Mr. Charles W. Buek, President,<br>U.S. Trust Company,<br>New York, New York. | Mr. Robert Maller, Sr. Vice President,<br>U.S. Trust Company,<br>New York, New York. |
| Mr. Milton H. Cohen, Partner,<br>Schiff, Hardin, Waite, Dorschel, and Britton,<br>Chicago, Illinois. | Mr. Scott Davis, Chairman,<br>Ralph W. Davis & Co., Inc.,<br>Chicago, Illinois. |
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| Mr. Alfred P. Johnson,<br>Vice President & Economist,<br>Investment Company Institute,<br>Washington, D.C. | |
| Mr. Robert M. Loeffler,<br>Senior Vice President-Law,<br>Investors Diversified Services, Inc.,<br>Minneapolis, Minnesota. | Mr. Jerome H. Grossman,<br>Executive Vice President,<br>Jefferies & Co., Inc.,<br>Los Angeles, California. |
| Mr. Fred H. Merrill,<br>Chairman of the Board,<br>Fireman's Fund Insurance Company,<br>San Francisco, California. | Mr. Francis Van Orman,<br>Senior Vice President,<br>Fireman's Fund Insurance Company,<br>Newark, New Jersey. |
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| Mr. Phil E. Pearce, President,<br>R. S. Dickson, Powell, Kistler & Crawford,<br>Charlotte, North Carolina. | Mr. Ralph E. Burgess,<br>Chief Economist,<br>National Association of Securities Dealers, Inc.,<br>Washington, D.C. |
| Mr. George L. Shinn,<br>Vice Chairman of the Board,<br>Merrill Lynch, Pierce, Fenner & Smith,<br>New York, New York. | Mr. John Donovan,<br>Vice President,<br>Goodbody & Co., Inc.,<br>New York, New York. |
| Mr. Davidson Sommers,<br>Chairman of the Board,<br>The Equitable Life Assurance Society of the United States,<br>New York, New York. | Mr. Wilbur J. Strauss,<br>Vice President in Charge of Equity Investment Activities,<br>The Equitable Life Assurance Society of the United States,<br>New York, New York. |
| Honorable Byron D. Woodside,*<br>Haymarket, Virginia. | |
| Mr. John C. Whitehead,<br>Partner, Goldman, Sachs & Co.,<br>New York, New York. | Mr. Alexander Tomlinson,<br>Partner, Morgan Stanley & Company,<br>New York, New York. |
| | Executive Assistant:<br>Mr. William T. Dailey, Jr.,<br>Goldman, Sachs & Co.,<br>New York, New York. |

*Resigned in January 1971 upon his appointment as Chairman of Securities Investor Protection Corp.

# SUMMARY AND CONCLUSIONS OF THE INSTITUTIONAL INVESTOR STUDY

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# CHAPTER I

## BACKGROUND, SCOPE AND DESIGN OF THE STUDY

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# CHAPTER I

## BACKGROUND, SCOPE AND DESIGN OF THE STUDY

### A. BACKGROUND OF THE STUDY

### 1. Authority for the Study

The Institutional Investor Study was authorized by Joint Resolution of the Congress and approved by the President as Public Law 90–438, on July 29, 1968. The Law's effect is to add Section 19(e) as an amendment to the Securities Exchange Act of 1934.[1] The Congress' premise in establishing the Study is set forth in the Act's preamble:

> Whereas there has been a very significant increase in the amount of securities held and traded by institutional investors both in absolute terms and in relation to other types of investors; and Whereas such an increase may have an impact upon the maintenance of fair and orderly securities markets, upon the issuers of securities traded in such markets, and upon the interests of investors and the public interest. . . .

The Act then goes on to state in its operative provisions that

> The Commission is authorized and directed to make a study and investigation of the purchase, sale, and holding of securities by institutional investors of all types (including, but not limited to, banks, insurance companies, mutual funds, employee pension and welfare funds, and foundation and college endowments) in order to determine the effect of such purchases, sales, and holdings upon (A) the maintenance of fair and orderly securities markets, (B) the stability of such markets, both in general and for individual securities, (C) the interests of the issuers of such securities, and (D) the interests of the public, in order that the Congress may determine what measures, if any, may be necessary and appropriate in the public interest and for the protection of investors. The Commission shall report to the Congress, on or before September 1, 1969,[2] the results of its study and investigation, together with its recommendations, including such recommendations for legislation as it deems advisable.
>
> (2) For the purposes of the study and investigation authorized by this subsection, the Commission shall have all the power and authority which it would have if such investigation were to be conducted pursuant to section 21 of this Act [the Securities Exchange Act of 1934]. The Commission is authorized to appoint without regard to provisions of [the Civil Service Act] such personnel as [it] deems advisable to carry out the study. . . .
>
> (3) In connection with [this] study . . ., the Commission shall consult with representatives of various classes of institutional investors, members of the securities industry, representatives of other Government agencies, and other interested persons. The Commission shall also consult with an advisory committee which it shall establish for the purpose of advising and consulting with the Commission on a regular basis on matters coming within the purview of [the] study.

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[1] 15 U.S.C. § 78s.

[2] Pub. L. No. 91–94 (October 20, 1969) extended the reporting date to September 1, 1970, and Pub. L. No. 91–410 (September 25, 1970) further extended the reporting date to December 31, 1970.

(4) There is authorized to be appropriated not to exceed $875,000 for the study and investigation authorized by this subsection.[3]

## 2. Earlier Studies

Since its origin the Institutional Investor Study has attracted attention from persons in government, the financial community and the press. This interest, presumably, does not arise from novelty in the establishment of governmental studies to analyze problems arising out of either institutional investment or its impacts on the nation's securities markets, for commissions, investigations and studies of both have been a virtually constant element of the financial scene throughout most of the twentieth century. Even a brief—and not exhaustive—chronological enumeration of such studies helps to illustrate both their variety and the time span of interest:

(1906)—The Armstrong-Hughes investigation of the life insurance industry (*Report of the Joint Committee of the Senate and Assembly of the State of New York*, appointed to investigate the affairs of life insurance companies, New York, 1906).

(1911)—The Merritt Committee's investigation of property and liability insurance companies (*Report of the Joint Committee of the Senate and Assembly of the State of New York*, appointed to investigate corrupt practices in connection with legislation, and the affairs of insurance companies other than those doing life insurance business, New York, 1911).

(1912)—The Aldrich Commission's examination of the nation's banking and monetary system (*Report of the National Monetary Commission*, Committee on Finance, U.S. Senate, 62d Congress, Washington, D.C., 1912).

(1913)—The Pujo Committee's investigation of the nation's banking and securities industries (*Money Trust Investigation*, pursuant to H.R. 429 and H.R. 504, Subcommittee of the Committee on Banking and Currency, U.S. House of Representatives, 62d Congress, Washington, D.C., 1913).

(1934)—The Pecora Committee's investigation of the same industries and many of the same issues 20 years later (*Report on Stock Exchange Practices*, pursuant to S. Res. 84, 72d Congress and S. Res. 56, 97, 73d Congress, Committee on Banking and Currency, U.S. Senate, Washington, D.C., 1934).

(1940)—The Securities and Exchange Commission's first major study of the investment company industry (*Report on Investment Trusts and Investment Companies*, Securities and Exchange Commission, Washington, D.C., 1940).

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[3] The basic documents comprising the legislative history of the Study are the following:
(1) Original legislation enacted by Pub. L. 90–438 (July 29, 1968); *Hearings on S. 1299 and S.J. Res. 160, Before the Senate Comm. on Banking and Currency*, 90th Cong., 2d Sess. (1968) ("1968 Hearings"); *Hearings on H.R. 7696 and H.J. Res. 946, Before the Subcomm. on Commerce and Finance of the House Comm. on Interstate and Foreign Commerce*, 90th Cong., 2d Sess. (1968) ("1968 House Hearings"); S. Rep. No. 1237, 90th Cong., 2d Sess. (1968); H.R. Rep. No. 1665, 90th Cong., 2d Sess. (1968).
(2) Extension of reporting date to September 1, 1970, enacted by Pub. L. No. 91–94 (October 20, 1969); *Hearings on H.R. 11608, H.J. Res. 754 and S.J. Res. 112, Before the Subcomm. on Commerce and Finance of the House Comm. on Interstate and Foreign Commerce*, 91st Cong., 1st Sess. (1969) ("1969 House Hearings"); S. Rep. No. 206, 91st Cong., 1st Sess. (1969); H.R. Rep. No. 501, 91st Cong., 1st Sess. (1969).
(3) Extension of reporting date to December 31, 1970, enacted by Pub. L. No. 91–410 (September 25, 1970); H.R. Rep. No. 1418, 91st Cong., 2d Sess. (1970).

(1941)—The Temporary National Economic Committee's numerous hearings and monographs on concentration of economic power, conducted during the late 1930's (*Monographs 1–43, and Final Report and Recommendations*, Temporary National Economic Committee, Washington, D.C., 1941).

(1956)—The Senate Banking and Currency Committee's study of institutional investors and their impacts on stock market prices (*Institutional Investors and the Stock Market, 1953–55*, Staff Report, Committee on Banking and Currency, U.S. Senate, 84th Congress, 2d Session, 1956).

(1962)—The Wharton Report to the Securities and Exchange Commission on the mutual fund industry (*A Study of Mutual Funds*, Securities Research Unit, The Wharton School of Finance and Commerce, University of Pennsylvania, Committee on Interstate and Foreign Commerce, 87th Congress, 2d Session, Washington, D.C., 1962).[4]

(1963)—The Securities and Exchange Commission's first major study of the nation's securities markets (*Report of the Special Study of Securities Markets*, Securities and Exchange Commission, Committee on Interstate and Foreign Commerce, U.S. House of Representatives, 88th Congress, 1st Session, Washington, D.C., 1963).

(1965)—Study by a Presidential Committee of the vesting, funding, portability, insurance and investment practices of corporate and other private pension and welfare funds (*Public Policy and Private Pension Programs*, President's Committee on Corporate Pension Funds and Other Private Retirement and Welfare Programs, Washington, D.C., 1965).

(1966)—The Securities and Exchange Commission's report and recommendations on investment companies (*Public Policy Implications of Investment Company Growth*, Securities and Exchange Commission, Committee on Interstate and Foreign Commerce, 89th Congress 2d Session, Washington, D.C., 1966).

(1968)—The Patman Committee's report on concentration of power in commercial bank trust departments (*Commercial Banks and Their Trust Activities: Emerging Influence on the American Economy*, Staff Report for the Committee on Domestic Finance, Committee on Banking and Currency, U.S. House of Representatives, 90th Congress, 2d Session, Washington, D.C. 1968).[5]

The list is far from complete. In addition, a number of sizable nongovernmental studies, including the 20th Century Fund's study of the securities markets following the stock market crash of 1929 and the well known Commission on Money and Credit of the early 1960's[6] have contributed to the area. Together, these studies have covered every major class of institutional investor, most major types of institutionally managed portfolios and have repeatedly examined the securities markets in which they operate. Events since the Institutional

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[4] For a recent study by the Director of the Wharton Report, see I Friend, *et al.*, *Mutual Funds and Other Institutional Investors: A New Perspective* (1970).

[5] For a recent commentary on the Patman Report see Carter H. Golembe and Associates, *The Economic Power of Commercial Banks* (1969).

[6] *The Security Markets*, Findings and Recommendations of a Special Staff of the 20th Century Fund, New York (1935).
*Money and Credit*, Report of the Commission on Money and Credit, Prentice-Hall, Englewood Cliffs, New Jersey (1961).

Investor Study was authorized during the summer of 1968 demonstrate that studies of financial institutions and securities markets have not yet come to an end. A Presidential Commission on Financial Institutions was instituted during 1970 and studies of the securities industry by both the House Interstate and Foreign Commerce Committee and Senate Banking and Currency Committee were proposed late in 1970.[7]

### 3. Developments in the Securities Markets

Public Law 90–438, establishing the Study, can be said to have originated during hearings on the Mutual Fund Legislation of 1967.[8] The Act was passed by the Congress and approved by the President during the summer of 1968, as the stock market moved into the final phase of a period of rising prices and volume. Dramatic changes in the character of institutional investing and the securities markets began during the last half of the 1960's. Institutional investors were widely assumed at the time to have contributed to the speculative atmosphere believed to characterize the time. William McChesney Martin, then Chairman of the Federal Reserve Board, articulated these thoughts in his widely-quoted remarks on the occasion of the 175th Anniversary of the New York Stock Exchange ("NYSE"):

> . . . some institutional investors are creating a new problem which poses a potentially more serious risk to the future well being of stock markets. Increasingly, managers of mutual funds, and portfolio and pension fund administrators, are measuring their success in terms of relatively short-term market performance. . . .
>
> Given the large buying power of their institutions, there is an obvious risk that speculative in- and out-trading of this type may virtually corner the market in individual stocks. And in any event, activity of this kind tends to create undesirably volatile price fluctuations. I find this trend disquieting.
>
> However laudable the intent may be, it seems to me that practices of this nature contain poisonous qualities reminiscent in some respects of the old pool operations of the 1920's. I suggest that the stock exchange . . . watch these activities carefully and make certain that this new cult of short-run . . . performance does not once again result in a tarnishing of stock exchange wares."[9]

Congressman John Moss (D. Calif.) and Congressman Hastings Keith (R. Mass.) and others echoed these concerns in urging a study of institutional investors by the Commission to "find out what is causing the current wave of speculation."[10]

Concern over increased aggressiveness on the part of performance conscious institutional investors, however, was not limited to possible contributions to the presumed speculative atmosphere; neither was it limited to dramatic instances of price fluctuations associated with aggressive institutional trading.[11] Institutional trading also was assumed to generate considerable pressure on the securities industry and on the structure of the nation's securities markets.

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[7] Congressional Record (December 1, 1970) S19969. Congressional Record (December 10, 1970) H10920.

[8] *Hearings on S. 1659 Before the Senate Comm. on Banking and Currency*, 90th Cong., 1st Sess. 657, 658 (1967) ("1967 Senate Hearings"); *Hearings on H.R. 9510 and H.R. 9511 Before the Sub. Comm. on Commerce and Finance of the House Comm. on Interstate and Foreign Commerce*, 90th Cong., 1st Sess. 174, 175, 190, 191, 740–48 (1967) ("1967 House Hearings").

[9] Quoted in 1967 House Hearings 182.

[10] 1967 House Hearings 174–190.

[11] Although price swings in stocks such as Motorola, which dropped 20 points during a single day under presumed institutional selling pressure, gained considerable attention in the financial press and were mentioned during Congressional Hearings on the Mutual Fund Legislation. See, *e.g.*, 1967 House Hearings 174.

As demonstrated during hearings conducted by the Commission during the summer of 1968 on the structure of brokerage commission rates [12] a variety of occasionally circuitous reciprocal practices by some types of institutional investors called into question the basic concept as well as the existing level and structure of fixed minimum brokerage commissions, assumed vital by many to the operation and regulation of exchange markets. The growth of institutional trades on regional exchanges, as well as the rapid growth of over-the-counter trading in listed securities, also appeared to constitute a serious challenge to the primacy of the NYSE and, perhaps, a more fundamental challenge to the concept of a central auction market for securities trading. Concern was expressed in and out of Congress over possible degradation in market liquidity resulting from any (or all) of the following: economic difficulties leading to the failure of brokerage firms, the inability of stock exchange specialists alone to provide the degree of liquidity required in markets dominated increasingly by institutions, and by dispersion in the location of trading.[13]

Early references to the Study, or to the desirability of conducting such a study, focused attention primarily on the institutions themselves [14] and on their market impacts. As the Study's legislative background developed, however, its scope was broadened successively. Contested acquisitions of major corporations by rapidly emerging conglomerates, often with institutional assistance, then was approaching peak intensity, raising questions in many quarters regarding both the phenomenon's economic desirability and the propriety of institutional participation in such efforts. Then Chairman of the Commission, Manuel F. Cohen, articulated the basic questions bound up in these phenomena in his testimony on the proposed Study before the Congress:

> The relationship of institutional investors to the companies in which they invest is also significant and to some degree controversial. According to one school of thought, institutional investors should not concern themselves with the management policies of portfolio companies, except to sell if they do not like the policies of the particular company. . . . According to another school of thought, institutional investors, with their knowledgeable professional managers and the influence which they can exert by reason of the size of their holdings, can serve as spokesmen for stockholders generally and protectors of their interests against management.
>
> There is the further question of whether it is or is not proper or economically or socially desirable for institutional investors holding large blocks of securities to participate in efforts to take over a company or dislodge its management. To some this may appear as an effective means of getting rid of a management which does not produce results, while to others it could be viewed as providing an opportunity for exercise of economic power in ways which may be detrimental to American industry. Institutional investors, it appears, are themselves unsure and divided as to what role they can or should play as stockholders. The study will provide a means to explore what institutions actually do in this area, why they do it, and what the effect is upon corporations and their managements." [15]

And finally, many persons, both in and out of the Congress, expressed a hope that the proposed Study would be broad in character

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[12] *In the Matter of SEC Rate Structure Investigation of National Securities Exchanges,* File No. 4–144 (1968) ("SEC Rate Hearing").
[13] 1967 Senate Hearings 643, 644; 1967 House Hearings 189–193; SEC Rate Hearings.
[14] Especially, the more performance oriented institutional types.
[15] 1968 Senate Hearings 16.

and focused on basic economic questions raised by the growth of institutional investors in the equity markets.[16]

### 4. Character of the Study

An extensive list of prior studies should not convey a sense of "sameness." Just as each of these has been affected in important ways by its personnel and its setting, so has the Institutional Investor Study.

The language and the legislative background of Public Law 90–438 make clear the Congress' expectation and intent that the Study would provide a comprehensive, economic analysis of institutional investing and its impacts on the economy. The Chairman of the Commission, and others, reiterated on many occasions that the Study was to be objective and fact finding in nature; its first task would be to close very substantial gaps in information about the activities of institutional investors and their impacts on both securities markets and corporate issuers. The Study was to be directed and staffed largely by professional economists drawn from outside the Commission, was to have associated with it a statutory, industry Advisory Committee, be conducted in cooperation with the various industries studied, and was to be studiously noninvestigatory in character. Although each of these points was dealt with explicitly during hearings on the proposed legislation, the absence of investigatory or enforcement overtones was emphasized strongly by the Chairman in his appearances before the Congress.

> First and foremost . . . this is to be an economic study, not an investigation. It is intended to produce information concerning basic economic trends that will be helpful to the Commission, to the self-regulatory agencies, to the industry and to everyone else concerned with the role of institutions in the securities markets; it is not intended to produce disciplinary proceedings or other enforcement actions against any firms, persons or institutions. Nor will it be used to conduct investigations for any such purpose. . . .
>
> Most prior studies made by the Commission pursuant to Congressional direction were initiated because Congress was concerned about the possibility that serious malpractices existed in some area or that existing regulatory controls were inadequate. Such studies, therefore, necessarily focused upon determining the extent and nature of improper practices which might exist and upon determining whether or not regulatory objectives were being evaded or controls were otherwise ineffective. The purpose of the present study, by contrast, will be to obtain more information about, and better understanding of, an economic phenomenon—"institutional investing"—and to determine its impact upon individual investors, . . . corporate issuers, . . . securities firms, and the public capital markets.[17]

The Study was not, however, to be either an industry product or an academic exercise. Both the Act and its legislative background emphasize that the Study and the Report were to reflect the views of the Commission rather than its staff, were to be conducted with the power and authority for the conduct of investigations conferred on the Commission by Section 21 of the 1934 Act,[18] and were to develop recommendations including recommendations for legislation, as deemed advisable.

Merging the different backgrounds and potentially disparate in-

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[16] See, *e.g.*, H.R. Rep. No. 1665, 90th Cong., 2d Sess. (1968); Letter from William McChesney Martin, Jr., 1968 House Hearings 11.

[17] Letter by Manuel F. Cohen to Robert W. Haack, President of the New York Stock Exchange, February 14, 1968; reproduced in 1968 Senate Hearings 30.

[18] These include the power "to administer oaths and affirmations, subpoena witnesses, compel their attendance, take evidence, and require the production of any books, papers, correspondence, memoranda, or other records which the Commission deems relevant or material to the inquiry." 15 U.S.C. § 78u.

terests and views of a largely academic outside staff, an industry Advisory Committee and a federal regulatory Commission in the conduct of a massive, economic study constituted a unique challenge for the Institutional Investor Study—a challenge that necessarily was aggravated by the severe limitations of time under which the Study operated.

### B. STUDY DESIGN

#### 1. Basic Structure

A study of institutional investors not limited to a single class of institution, a single type of portfolio or a relatively narrow set of public policy issues must recognize and deal with interrelationships among competing types of institutions, with important customers and suppliers and with the markets in which both institutions and individuals operate. Otherwise, such a study would be too narrowly confined to provide a basis for understanding the more fundamental economic developments raising policy issues before regulatory and legislative bodies.

Balance, of course, is required. Greater extensiveness or comprehensiveness can be obtained within given resource limitations only at the cost of lessened depth in some of the areas covered. As the current Study's legislative background indicates, all initial pressures were toward greater coverage and comprehensiveness. Conscious decisions by the Study were necessary, therefore, to focus attention primarily on equity rather than debt markets and on the larger types of institutional investors such as banks, insurance companies and investment advisers rather than on smaller, but occasionally more colorful types of funds. Some relaxation in these self-imposed restrictions was, of course, possible. Institutional activity as holders of debt securities is considered at least tangentially, and both hedge funds and offshore funds do receive separate treatment. By far the greater portion of the Study's resources remains concentrated, however, on the role of the *largest* types of financial institutions as *equity* investors.

Given these basic limitations, an attempt was made to design as comprehensive a study as possible of institutional investors and their impacts on securities markets and corporate issuers. Toward this end a number of alternative conceptual structures could be envisioned. One could, for example, focus on *institutions* and treat savings flows channeled through institutional hands as the raw material out of which transactions are translated into market impacts, and holdings into a basis for influence or control over portfolio companies. Alternatively, one could focus on the *savings-investment process*. The process begins with savers as sources of capital and ultimate holders of wealth and ends with portfolio companies as appliers of this capital and operators of the resulting physical assets. In between institutional investors act as agents for the holding and management of intermediate (financial) assets, providing diversification and certain legal and administrative services, while markets serve as the place where assets are valued, trading is facilitated and capital is allocated (ultimately) among alternative uses through the pricing mechanism.

Neither of these perspectives is entirely without merit. Both emphasize the primary importance not of the institutions or markets themselves, but their impacts on the manner in which savings are mobilized,

applied and controlled in a highly developed and increasingly institutionalized market economy. Each is comprehensive in that it covers each of the links between institutional investors and households, secondary markets, primary markets and corporate issuers.

In a practical sense either can be decomposed into four major sectors for separate, analytic treatment:

(1) Aggregate analyses of national savings and wealth, highlighting flows of funds to and through the financial sector and its component institutional categories.

(2) Analyses of institutional investors themselves, emphasizing their role and behavior as managers of large, equity oriented portfolios.

(3) Analyses of institutional trading and its impacts on the nation's securities markets and securities industry.

(4) Analyses of direct impacts by institutional investors on corporate issuers, as sources of new equity financing, and as large and influential shareholders.

Each of these major areas can, of course, be further broken down into specific research objectives. The chapters of the Study follow this pattern.

## 2. Detailed Study Design

### Part One: Background, Studies of Institutional Investors and Corporate Stock (Chapters II, III)

An attempt is made to place in historical perspective later detailed studies of the recent behavior of financial institutions as equity investors. Long-term trends in the savings behavior and asset holding preferences of households, growth in the financial sector as a whole, growth in the size and portfolio composition of major types of institutional investors, as well as trends in the financing patterns of nonfinancial corporations, are all traced in varying degrees of detail back to the turn of the century and before.

Substantial improvements in the sectorization of National Accounts are provided for the period following 1952, permitting more detailed analyses of factors that affect the supply and demand for corporate securities, and relationships between the market value of these securities and that of underlying physical assets.

Chapter II considers long-term trends from the turn of the century until 1952; chapter III continues and expands upon these themes through the richer body of data available for the period following 1952 to 1968.

### Part Two: Institutions as Investment Managers (Chapters IV–IX)

This portion of the Study begins with an effort to distinguish between institutional investors or institutional managers and the funds they administer. This distinction, which seldom has been recognized in the past, is maintained throughout. Thus, investment advisers, bank trust departments and insurance companies are considered as major classes of institutional managers, while mutual funds, personal trust

funds, personal agency or counseling accounts, employee-benefit funds, college endowments and foundations are considered as accounts or portfolio types to be managed. Primary focus is on institutional managers and the aggregates of funds under their management, although separate chapters also deal with certain of the portfolio types managed and with characteristics of portfolio holdings across managerial and account categories.

An attempt is made to obtain uniformity of treatment across chapters for such basic elements of information as the size distribution of firms within institutional categories, the number, size, types, growth and distribution of assets in accounts managed by each institutional type, as well as in fees charged and portfolio turnover for the various types of accounts and managers studied. Surveys of legal, regulatory or tax considerations that affect the growth and operation of financial institutions and portfolio types also are provided when such factors appear to be of special importance.

The effect on behavior as portfolio managers of affiliations between specific types of financial institutions and other types of firms also is examined; thus, relationships between bank trust and commercial operations, insurance company separate accounts and general accounts, or affiliations by investment advisers with various types of financial institutions and securities firms are examined.

Chapters IV through VI consider the major types of institutional managers, investment advisers, bank trust departments and insurance companies, respectively. Chapter VII examines offshore funds and chapter VIII major types of institutional portfolios, while chapter IX focuses its attention on the distribution of portfolio holdings across major categories of institutional managers and portfolios.

Part Three: Impacts of Institutional Investing on Securities Markets

(Chapters X–XIII)

This portion of the Study attempts to determine the impact on price volatility, market structure and the securities industry of absolute increases in the total volume of institutional trading and changes in its character during recent years. It contains four chapters.

Chapter X deals with two major topics: the extent and price impacts of net trading imbalances (sometimes referred to as parallel trading) among institutional investors as a group, and the volume, characteristics and price impacts of institutional position changes over periods of up to three months in duration.

Chapter XI studies the growth of block trading over time, its mechanics on various exchanges and in the over-the-counter market, its price impacts and day-to-day variations in its frequency. Particular emphasis is placed on dealer participation by NYSE specialists, block positioning firms and third market makers, as well as public participation in blocks traded.

Chapter XII examines the effects of institutional trading on the market-making function, by relating the volume and composition of both total and institutional trading to dealer inventories, price volatility and the profitability of market-making. Economic incentives by NYSE specialists to assume or refrain from assuming the large positions resulting from institutional activity are analyzed in some depth.

Chapter XIII considers the impact of institutional trading on the securities industry. It examines the services offered to banks, investment advisers, insurance companies and other institutional investors by securities firms and the manner in which business is allocated to these firms by the various types of institutions. The period following 1968 is examined to assess the impact on both institutions and broker-dealers of recent changes in commission rates and Exchange rules. Differences in the profitability of securities firms serving institutional investors and the general public, as well as incentives for the integration of brokerage and management functions are examined.

Part Four: Impacts of Institutional Investors on Corporate Issuers

(Chapters XIV, XV)

This portion of the Study deals with two avenues through which institutional investors may have direct impacts on the companies whose shares they hold. The first is through participation in new issues of the companies' securities, the second is through the role of institutional investors as large and influential shareholders in portfolio companies. Each is treated in a separate chapter.

Chapter XIV considers institutional participation in the financing of corporations through direct participation in first public offerings by new issuers and through private placements of corporate securities. The amounts of such securities purchased, the characteristics of issuing corporations and the circumstances under which purchases take place are all examined; analyses also are conducted of the types of accounts for which new issues are purchased, their holding periods and rates of returns.

Chapter XV considers the legal and regulatory environment governing relationships between institutional investors and portfolio companies, the extent to which the shares of particular companies are concentrated in the largest institutional portfolios, the nature and extent of institutional participation in corporate affairs through voting, consultation and personnel ties, the extent to which institutions are linked to portfolio companies through other business relationships and the role of financial institutions in transfers of corporate control.

### 3. Alternative Structures

Emphasis throughout the Study is on the functions of institutional investment and its impacts on the savings-investment process rather than on specific, public policy issues. An attempt is made to gain a factual understanding of the broad economic forces underlying recent trends in and stresses on the nation's securities markets rather than to probe these issues separately, in isolation from the many other issues and pressures to which they are intimately related.

Alternative structures could, of course, have been envisioned (and were). For example, issue-oriented task forces could have focused their attention on questions such as fixed versus competitive brokerage commission rates, institutional membership on national securities exchanges, the desirability of adapting existing market mechanisms to accommodate institutional transactions, or restricting institutional trading to accommodate market structures. The list could be expanded

indefinitely; most are interrelated with one another, and all require an understanding of the economic environment within which they are set for their consistent resolution.

The Study, as designed, attempts to provide a comprehensive, factual examination of this environment.

### C. CONDUCT OF THE STUDY

#### 1. Data Collection

The Study's first task, from the beginning, was to serve as a fact-finding vehicle. Even the most basic types of information regarding the numbers, types and sizes of accounts managed by various types of institutional investors, as well as more detailed information about asset holdings, trading activity, market impacts, fees, expenses, affiliations with other types of firms, and relationships with portfolio companies were largely unknown for all types of institutions other than mutual funds as the Study began. A summary of existing reportings by institutional investors is contained in the appendix to this chapter.

With virtually complete cooperation and substantial assistance from industry respondents, a massive data-collection effort was mounted. Fifty-four questionnaires in some 200 separate versions, tailored to each respondent group's recordkeeping practices and data retrieval capabilities, were developed and distributed during the course of the Study. An indication of the magnitude and intensity of the data gathering effort may be gained from Supplementary Volume II, documenting the Study's questionnaires, and from the fact that nearly 660,000 machine-readable punched card records were produced by respondents and analyzed by the Study during its data-collection and analytical phases. The Study produced an additional 800,000 cards in the course of correcting and completing data files and developing programs for this analysis. Extensive editing, correction and follow-up of late respondents, of course, were necessary. Computations alone required a staff of 12 to 15 full-time computer specialists and consumed an average of more than 100 hours per week of high-speed computer time over several consecutive months.[19]

Data alone, of course, however massive and comprehensive, cannot provide a full picture of the activities of institutional investors and their impacts on the economy. Extensive interviews by members of the staff were required in virtually all the substantive areas covered, and case studies provided the primary vehicle for analyses of institutional participation in transfers of control.

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[19] Specifically, 40 hours per week of machine time was consumed on the Securities and Exchange Commission's in-house IBM 360/40 computer; 50 hours per week on considerably more powerful IBM 360/50 equipment provided by the Federal Deposit Insurance Corporation; and 20 hours per week on the Federal Reserve Board's even more powerful IBM 360/65 computer. The intensive machine use is best summarized by the hours of "clock time" used by the Study from January 1, 1970 through August 31, 1970. On the Models 40, 50 and 65 the total hours of clock time for this period were: (40) 1,270; (50) 1,043; and (65) 184. Lower levels of usage on both SEC and FDIC computers were maintained throughout the Study; peak levels summarized here persisted over a six-month period of time, from March through August of 1970. Both the Federal Deposit Insurance Corporation and the Federal Reserve Board provided their computational facilities for the Study's use without cost to the Commission.

## 2. Advisory Committee

The existence of a statutory Advisory Committee to consult with the Commission and the staff on all matters coming within the purview of the Study was an unusual, if not unique, characteristic of the Institutional Investor Study. The Committee's existence reflected the broad base of concern in the financial community as well as in government over changes in institutional investing and the securities markets set in motion during the last half of the 1960's. It also reflected the confidence of persons in government and the various industries studied that a broadly based economic study of forces at work in the marketplace could be conducted with the advice and assistance of the financial community without, in turn, being dominated by their particular interests.

The Advisory Committee, from the beginning, was expected to play an active role in assisting the Commission in shaping the Study's scope and conduct, consulting during its progress and reviewing preliminary versions of its Report. It was expected that the Committee would be accorded an opportunity to spell out in the final Report any irreconcilable differences they may have with its findings, conclusions and recommendations.[20] It always was understood, of course, that the Study Report would be a product of the Commission and not the Advisory Committee.

The Committee's membership was chosen by the Commission in an effort to obtain as broad a base of representation and experience as possible from among the various classes of institutional investors and securities firms, as well as from a variety of governmental backgrounds. Most Committee members chose an alternate. The Committee chose its own chairman from among its membership.[21]

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[20] 1968 House Hearings 55, 56; 1968 Senate Hearings 30, 31.

[21] An indication of the range of backgrounds and interests represented on the Committee can best be summarized by an enumeration of its membership: John C. Whitehead (Chairman), Partner, Goldman, Sachs & Company, New York (Alternate: Alexander Tomlinson, Partner, Morgan Stanley and Company, New York; Executive Assistant: William T. Dailey, Jr., Goldman, Sachs & Company, New York); Charles W. Buek, President, U.S. Trust Company, President, Trust Division, American Bankers Association (Alternate: Robert Maller, Sr., Vice President, U.S. Trust Company, New York); Milton H. Cohen, Partner, Schiff, Hardin, Waite, Dorschel and Britton, Chicago, Special Counsel, Midwest Stock Exchange, formerly Director of the Commission's *Special Study of Securities Markets* (Alternate: Scott Davis, Chairman, Ralph W. Davis and Company, Inc., Chicago); Walter N. Frank, Partner, Marcus and Company, New York, former Chairman, Board of Governors, New York Stock Exchange (Alternate: Donald Stone, Partner, Lasker Stone and Stern, New York); William C. Freund, Vice President and Economist, New York Stock Exchange, New York (Alternate: Donald Calvin, Vice President for Civil and Governmental Affairs, New York Stock Exchange, New York); Alfred P. Johnson, Vice President and Economist, Investment Company Institute, Washington, D.C.; Robert M. Loeffler, Senior Vice President—Law, Investors Diversified Services, Inc., Minneapolis (Alternate: Jerome H. Grossman, Executive Vice President Jefferies and Company, Inc., Los Angeles); Fred H. Merrill, Chairman of the Board, Fireman's Fund Insurance Company, San Francisco (Alternate: Francis Van Orman, Senior Vice President, Fireman's Fund Insurance Company, Newark, New Jersey); Lewis G. Odom, Jr., Attorney, Montgomery, Alabama, formerly Staff Director and General Counsel of the Senate Banking and Currency Committee (Alternate: Dr. Cecil Mackey, Vice President for Administration, Florida State University, Tallahassee); Phil E. Pearce, R. S. Dickson, Powell, Kistler and Crawford, Charlotte, North Carolina, formerly Chairman of the Board of Governors, National Association of Securities Dealers, Inc. (Alternate: Ralph E. Burgess, Chief Economist, National Association of Securities Dealers, Inc., Washington, D.C.); George L. Shinn, Vice Chairman of the Board, Merrill Lynch, Pierce, Fenner and Smith, New York, Governor, Association of Stock Exchange Firms and American Stock Exchange (Alternate: John Donovan, Merrill Lynch, Pierce, Fenner and Smith, New York); Davidson Sommers, Chairman of the Board, The Equitable Life Assurance Society of the United States, New York, Joint Legislative Committee of the Life Insurance Association of America and the American Life Convention (Alternate: Wilbur J. Strauss, Vice President, Equity Investment Activities, Equitable Life Assurance Society of the United States, New York); and Byron D. Woodside, Haymarket, Virginia, former staff member and Commissioner, Securities and Exchange Commission (resigned upon appointment as Chairman, Securities Investor Protection Corporation).

Full meetings of the Advisory Committee with the staff occurred at roughly monthly intervals throughout the Study's duration. On a less formal basis interaction between individual members or subcommittees of the Committee and members of the Study staff could, and on many occasions did, occur on a more frequent basis. The Committee's advice and support throughout the planning, interviewing and data collection phases facilitated the Study's work; chapter-by-chapter reviews of various drafts of the Study Report by subcommittees were constructive. The Study's staff was not, however, in any way limited to the Committee's membership for its contact with the various industries studied. Extensive interviews were conducted with hedge funds, offshore funds and other smaller types of institutional investors, as well as with non-financial "corporate issuers" and with over-the-counter "third market" dealers in listed securities, not represented on the Committee itself. In this way an attempt was made to insure that all points of view would be heard and that balanced interpretations of the Study's findings could be obtained.

### 3. Organization, Staffing and Acknowledgements

The conduct of a large-scale economic study within the Securities and Exchange Commission required the organization of a special staff recruited largely from outside the Commission. This fact was recognized in the hearings preceding the Study's authorization and in special dispensation for the Study staff from Civil Service requirements contained in the Act itself.[22]

Most of the Study's economists were obtained from university faculties. Most of its lawyers, on the other hand, came from within the Commission. There are, of course, exceptions in each case. One of the Study's 13 economists did come from the Commission, two came from other government agencies and two from nonuniversity positions outside the government. Two of the Study's attorneys also came from outside the government.

The Study group operated as a special division outside the Commission's regular framework, but subject to its continuous oversight. The Study's Director and two Associate Directors are professional economists; its two Chief Counsels both have experience in private practice as well as in government, with the Commission's legal staff. Commissioner Richard B. Smith was designated as the Commission's personal representative on all matters coming within the purview of the Study.

As the Study was located physically in the Commission's principal offices in Washington, D.C., contact between members of the special and regular staffs was both convenient and frequent. Several significant portions of the Study were prepared largely by persons or groups from regular divisions of the Commission. For example, section H of chapter IV dealing with the management of speculative funds was prepared jointly by members of the Study's staff and the Division of Corporate Regulation; all the fieldwork and initial drafting for section F of chapter XV dealing with institutional participation in transfers of control were conducted by a special group of attorneys

[22] 1968 Senate Hearings 31; 1968 House Hearings 56. 15 U.S.C. § 78s(3)(2).

drawn from the Commission's regular Divisions; the appendix to this chapter, dealing with institutional reporting, was prepared by the Commission's Office of Policy Research.

Cooperation between regular and special staffs was not limited to these specific areas, but was forthcoming at every level (from clerical to Division Director) in most portions of the Study. Each of the Study's preliminary draft chapters received useful and constructive review from divisions, offices or simply individual members of the Commission's regular staff. In addition to substantive matters, an attempt also was made during these reviews to clarify exposition for nontechnical consumers of the Report.

The Study's internal structure was quite simple, and decentralized. Each Associate Director was responsible for one of the Study's major areas. Lawrence Jones provided necessary oversight for Part Two (chapters IV–IX), dealing with institutions themselves; Seymour Smidt provided this oversight for Part Three (chapters X–XIII), the markets area. James Halpern served as Chief Counsel for the institutions area (Part Two); Donald Feuerstein served as Chief Counsel for the markets area (Part Three). All other portions of the Study received such formal direction as required from the Director.

The Study's research effort was organized into chapter and section teams. Each team was led by one or more senior economists or attorneys having drafting responsibilities for the area covered. Some persons enjoyed the relative luxury of single, undivided responsibility for a single chapter of the Report, others were responsible for discrete portions of several chapters. Despite frequent changes in the topical organization of the Report itself, team leadership assignments tended to remain relatively stable throughout most of the Study's duration. Financial analysts and data processing specialists, on the other hand, did rotate on occasion from one team to another as data collection, editing, follow-up, correction and computer processing needs peaked in different areas. Earlier peaks, unfortunately, seldom subsided; thus, transfers to meet new requirements ordinarily constituted additional rather than simply different responsibilities. Familiarity with specific data sets and particular areas of the Study, of course, grows cumulatively. Thus, most members of the staff, including financial analysts and data processing specialists, tended to specialize in and identify themselves with one or more chapter teams. An attempt is made to reflect these areas of concentration in the staff roster, below.

## Senior Staff

| | | Primary Responsibilities |
|---|---|---|
| Director | Donald E. Farrar | General, Ch. I |
| Associate Director, Institutions | Lawrence D. Jones | Part 2, Ch. VI |
| Associate Director, Markets | Seymour Smidt | Part 3, Ch. XII |
| Chief Counsel, Institutions | James B. Halpern | Part 2, Ch. V |
| Chief Counsel, Markets | Donald M. Feuerstein | Part 3, Ch. XI |
| Assistant Director, Data Processing Coordinator | Keith B. Johnson | Ch. VI, S. Vols. II, III |
| Administrative Officer | Marion F. Knight | S. Vol. II |
| Senior Economists | James E. Ammerman | Ch. VII |
| | Stanley Diller | Ch. XIV |
| | Bernard H. Garil | Ch. XIII |
| | Harry Grubert | Ch. V |
| | Alan D. Kraus | Ch. X |
| | Gerald A. Pogue | Ch. IV |
| | Marvin Rosenberg | Ch. IX |
| | Hans R. Stoll | Chs. X, XI, XV |
| | Helen S. Tice | Chs. II, III |
| Senior Counsel | Hurd Baruch | Ch. XV, Sec. F |
| | William F.M. Hicks | Ch. VIII |
| | Richard S. Kraut | Ch. XV, Sec. F |
| | Richard S. Seltzer | Ch. XV |
| Consultants | Robert H. Mundheim | Ch. XV |
| | Noyes Leech | Ch. XV |
| | William T. Lifland | General |

## Professional Staff

| | | |
|---|---|---|
| Financial Analysts | I. Townsend Burden,III | Part 2 |
| | Edith F. Crammatte | Part 3, General |
| | David S. Curry | Ch. XIV |
| | Karnig Ekizian | Ch. V |
| | Thomas A. Feeney | Part 3, Ch. XIII |
| | Mark A. Kearns | Part 2, Ch. VIII |
| | James C. Nelson | Ch. XIV |
| | Harriet A. Roessler | Ch. IV, VII |
| | Robert B. Roller | Ch. IV, VII |
| | Eric M. Scheuer | Part 3, Ch. XV |
| | Karen B. Stephens | Ch. V |

| | | |
|---|---|---|
| Attorneys | Samuel M. Feder | Ch. XV, Sec. F |
| | Guy B. Maseritz | Ch. XV |
| | John T. Smathers | Ch. XV, Sec. F |
| | Kenneth S. Spirer | Ch. XV, Sec. F |
| | Richard Steinkamp | Ch. XV, Sec. F |
| Editorial | Michael E. Don | Chs. VI, VIII |
| | Robert C. Lewis | Chs. XI, XII, XIII |
| | Harvey L. Pitt | Chs. IX, X |
| | Harvey A. Rowen | Chs. IV, V, VII |
| Computer Specialists | George A. Strasser | Model 50, 65, Mark IV Coordinator, S.Vol.III |
| | Richard B. Hunt | Model 40,Editing Coordinator |
| | Richard H. Fields | Senior Systems Consultant |
| | Donald R. Bailey, III | Ch. XIV |
| | Susie T. Baldwin | Ch. X |
| | Richard A. Derbes | Ch. IV |
| | William Henry Haile, II | Ch. X |
| | D. Ross Hunter | Ch. XII |
| | Jay A. Jupiter | Part 3 |
| | Albert Madeoy | Ch. XIII |
| | Albert A. Marshall | Editing, General |
| | Charles M. Ransom | Part 2 |
| | Paul H. Rohrkemper | Part 3, Ch. XIV |
| | Susannah C. Rosenberg | Part 2 |
| | James M. Tolmach | Part 3 |
| | Bert D. Tyler | Part 2, General |
| | Peter J. Vanica | Ch. IV |
| | Richard Q. Wendt | Ch. XII |
| | Lois M White | Part 2 |
| Secretarial | Diane C. Martin | Sec'y to Director |
| | Arlene S. Bernstein | |
| | Patricia M. Connor | |
| | Joyce L. Daves | |
| | Sandra F. Dickerson | |
| | Patricia M. Hardy | |
| | Victoria J. MacBryde | |
| | Shirley A. Milburn | |
| | Julia E. Pricci | |
| | Patricia M. Richards | |
| | Shirley E. Thompson | |
| Clerical | Van J. Bynum | |

Greater precision than can be conveyed by a roster is required, however, in acknowledging contributions by members of the Study's staff, as well as others, to specific portions of the final Report.

Chapter I was prepared by Donald Farrar, the Study's Director. The appendix on existing reporting requirements for institutional investors was prepared by a team of analysts from the Office of Policy Research, led by Robert Menke, and was edited by Richard S. Seltzer.

Chapters II and III were prepared by Helen Tice of the staff of the Federal Reserve Board, as a summary of the *Background Report on Institutional Investors and Corporate Stock* prepared for the Study by the National Bureau of Economic Research.[23] The full NBER study was directed by Raymond W. Goldsmith with the collaboration of an able team of researchers from the staff of the National Bureau itself, the Federal Reserve Board and the academic community. John Bossons, Virginia Duff, Peter Eilbott, Lewis Lippner, John McGowan, Grace Milgram, Ralph Nelson, Mahlon Straszheim, Helen Tice and Leo Troy all made significant contributions to the National Bureau's effort, which is gratefully acknowledged.

Chapter IV on investment advisory complexes was prepared by Gerald Pogue. Lewis Mendelson and Alan Rosenberg of the Division of Corporate Regulation collaborated with Dr. Pogue on section H and portions of section F of the chapter; Alan Rosenblat of Corporate Regulation and W. Bruce McConnel of the Office of the General Counsel assisted Dr. Pogue on section J.

Chapter V on bank trust departments was prepared jointly by Harry Grubert and James Halpern.

Chapter VI's treatment of life insurance companies was prepared by Lawrence Jones; Keith Johnson prepared sections H–K of the chapter dealing with property and liability insurance companies.

Chapter VII on offshore funds was prepared largely by James Ammerman of the U.S. Treasury Department; Joel Matcovsky and James Akers of the Division of Corporate Regulation prepared the portion of section F dealing with analyses of offshore fund prospectuses. Mr. Ammerman was released by his Department to work on the study. The views expressed, of course, are those of the Commission rather than the Treasury Department.

Chapter VIII on pension-benefit plans, endowments and foundations was prepared by William Hicks, with assistance by Mark Kearns in section F dealing with educational endowments.

Chapter IX on characteristics of institutional portfolio holdings was prepared by Marvin Rosenberg.

Chapter X on characteristics of institutional trading was prepared jointly by Alan Kraus and Hans Stoll. Dr. Kraus contributed section B on net trading imbalances and associated price impacts; Dr. Stoll contributed section C, dealing with large position changes and their price impacts.

Chapter XI on block trading was prepared largely by Donald Feuerstein; Hans Stoll contributed section D on the price impacts of NYSE block trades.

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[23] Contract No. SE–951. The full *NBER Report* is transmitted as Supplementary Volume I.

Chapter XII on impacts of institutions on market making was prepared largely by Seymour Smidt; Donald Feuerstein contributed section I on block positioning.

Chapter XIII on the securities industry was prepared by Bernard Garil.

Chapter XIV on new financing was prepared by Stanley Diller, with the assistance of James Halpern and Richard Rowe.

Chapter XV on relationships with portfolio companies was prepared by Richard Seltzer from materials developed by Donald Farrar, Richard Kraut, Guy Maseritz and Hans Stoll. Guy Maseritz prepared early drafts of Section B on the legal framework governing relationships between institutional investors and corporate issuers and section E on voting behavior and other contacts between institutions and portfolio companies. Hans Stoll prepared drafts of section C dealing with concentration of stockholdings. Donald Farrar and Hans Stoll prepared drafts of section D on multiple business relationships between institutions and issuers. Hurd Baruch and Richard Kraut led a team of attorneys from the Division of Trading and Markets, including Samuel Feder, John Smathers, Kenneth Spirer and Richard Steinkamp, in the series of case studies on institutional participation in transfers of control summarized in section F. Milton Strom of the Division of Corporation Finance, Harold Sweetwood of the Division of Corporate Regulation, and David Glickman, Charles Hartman and Charles Lerner, all of the Division of Trading and Markets, also participated in the development of case study materials. Robert Mundheim and Noyes Leech served as consultants to the Study on chapter XV and provided special assistance in the preparation of section B dealing with the state of the law in this area. W. Bruce McConnel assisted Mr. Seltzer on section E.

Supplementary Volume I contains the full NBER Report to the Commission.

Supplementary Volume II documenting the Study's numerous questionnaires and respondents was patiently organized, collected and prepared by Marion Knight and Keith Johnson.

Supplementary Volume III documenting the Study's magnetic tape data files, was prepared by George Strasser. This volume which will be of use primarily to computer specialists, has been prepared for use within the Commission and for limited outside distribution. Due to its considerable bulk and relatively narrow audience, Supplementary Volume III will not be printed for general distribution with the final Report.

While the senior staff of the Study are largely responsible for the content of the Report, it could never have been produced without the wholehearted support of *every* member of the Study's staff and *many* members of the Commission's regular staff. The Study's staff of computer specialists deserves a special note of commendation for their dedication to the effort. Most of the computations required for the Study were conducted after regular working hours on the Commission's Model 40 computer, between 8:00–10:00 p.m. on the Federal Reserve Board's Model 65 computer and between midnight and dawn on the Federal Deposit Insurance Corporation's Model 50 installation. Yet this band of highly motivated specialists also made themselves available during regular working hours and the early

hours of the evening for necessary consultations with other members of the Study's staff. This pace was maintained over many consecutive months.

The Study also depended heavily on Marion Knight for her efforts to manage its often unconventional administrative needs, and on Diane Martin, the Director's secretary, and Sandra Dickerson, assistant to Commissioner Smith, for their skillful and unfailing support.

Special commendation also is deserved by members of the editorial team from the Commission's regular staff, who attempted during the last few months to translate the Study's often hurried and technical writing into the "clear" for consumption by the wider audience for whom it is intended. Although the resulting document necessarily remains technical in many areas, it is apparent to anyone exposed to earlier drafts that the clarity of exposition for general readers has been improved substantially by their efforts.

It would be impossible to give separate recognition to all the members of the Commission's staff who contributed to this undertaking, and would be invidious to try to do so. Some persons, however, must be recognized. Harry Pollack, Director of the Commission's Personnel Office, Frank Donaty, the agency's Controller, and Ernest Dessecker, the Commission's Records and Service Officer, always were supportive when needed, and almost always were needed. Philip Loomis, the Commission's General Counsel, gave generously of his time and considerable talents. Irving Pollack, Director of the Division of Trading and Markets, Sheldon Rappaport, Associate Director (Regulation), Nicholas Wolfson, Assistant Director (Regulation), and Charles Curtis, Special Counsel (Regulation) of the Division; Solomon Freedman, Director of the Division of Corporate Regulation, Allan Mostoff, Associate Director, Alan Rosenblat, Chief Counsel, Lewis Mendelson, Senior Special Counsel and Sidney Cimmet, Assistant Chief Counsel of the Division; Alan Levenson, Director of the Division of Corporation Finance, Ralph Hocker, Associate Director, and Richard Rowe, Assistant Director (Administrative Proceedings) of the Division; Gene Finn, the Commission's Chief Economist, and Charles Bryson from his Office, all contributed substantial amounts of their own time and that of their staffs to the Study's work. William Becker, the Commission's Chief Management Analyst, and Ralph Bell, Director of the Office of Data Processing, also made available their own services as well as those of their offices to the Study.

The final typing, proofreading, correction and production of a 6,000 page manuscript was managed during the last few weeks of December 1970 by Velta B. Kitchen, Betty Lear, and William Benny. Printing of the report was coordinated by Harry Brady and Roxanne Fischetti.

Support for the Study's efforts did not end at the Commission's door. Both the Federal Reserve Board and the Federal Deposit Insurance Corporation contributed directly and substantially to the Study's data processing and analytical staff as well as to its computer capabilities (described earlier). The Treasury Department released a valuable employee for the study of offshore funds. The New York Exchange, the American Stock Exchange and the National Association of Securities Dealers also contributed directly to the Study's data proc-

essing effort, as did the hundreds of respondent institutions and securities firms who often incurred substantial expense to retrieve and return the data required by the Study in machine-processable form.

### 4. Chronology of the Study

Of the standard array of resource limitations under which the Institutional Investor Study operated, time always has been the most severe.

The Study was authorized by the Congress and approved by the President on July 29, 1968. Funds for its conduct were appropriated on October 21, 1968, and apportioned by the Bureau of the Budget on October 31, 1968. An intensive search for the Study's Director began at that time.

During December 1968 a Director was obtained, and during January 1969 an Advisory Committee was selected by the Commission. Several key staff members were obtained during January and February, largely from university faculties. Recruitment of senior staff, financial analysts and computer specialists continued throughout the spring of 1969. Academic commitments prevented full-time participation on the Study by most staff members until May and June of 1969.

With a skeletal staff on hand during February and March of 1969, overall draft study designs were prepared, discussed with and reviewed by the Advisory Committee. Large numbers of preliminary interviews were conducted with financial institutions and securities firms. Interaction with the Advisory Committee, continued interviews and work on detailed research designs and preliminary questionnaires for various portions of the Study continued through April and May of that year.

By June of 1969 the nucleus of the Study's staff were available on a full-time basis and the data collection process began. Detailed questionnaires were discussed with and reviewed by industry technical committees formed for that purpose by the Study under Bureau of the Budget auspices. Most questionnaires went through many revisions to accommodate the record-keeping systems and data retrieval capabilities of the various respondent groups. During September 1969 initial questionnaires were cleared by the Bureau of the Budget and mailed to the first set of respondents. Eight subsequent versions of this questionnaire were developed, cleared and sent to other respondent groups between September 1969 and January 1970. Simultaneously, some 200 versions of more than 50 other questionnaires were under development.[24] The time consumed in questionnaire development varied from a minimum of two months to a maximum of nine months, and averaged a little more than five months in duration. The final questionnaire was cleared and mailed during April 1970.

Mandatory response times on questionnaires ordinarily were some six weeks following the date of mailing. Individual firms having legitimate difficulty meeting such dates, however, received sympathetic consideration from the staff, as much of the burden coincided with year-end reporting periods for the firms and many of the response times were known in advance to be short. On overage, 50 percent of responses

[24] See Supplementary Volume II for full documentation of the Study's various questionnaires and respondent groups.

were in-hand, in machine readable form, within six weeks following the indicated response date. Follow-up procedures beginning with telephone calls from a staff member shortly after the indicated response date, followed after a suitable interval by a letter from the Director, followed after a shorter interval by a somewhat more insistent letter from the Chairman of the Commission, followed in turn by a subpoena, if necessary, ordinarily stimulated the remaining responses within the next six to eight weeks. The frequency with which such measures were employed, of course, decreased rapidly from one step to the next. Less than 50 subpoenas were issued by the Commission to obtain delinquent questionnaire responses. If one considers that nearly 20,000 separate questionnaires were distributed by the Study, the rate of serious delinquencies can be seen to be extremely low.

A great deal of time was consumed, of course, in this process. Editing, correction, follow-up of late respondents and the creation of "clean files" for preliminary analysis continued throughout the spring of 1970. On average, 3½ months elapsed from response dates to clean file dates.

Intensive analyses of the Study's files proceeded throughout the late spring and early summer of 1970. Initial drafts of a number of sections of substantive analytical chapters were completed during late summer and early fall of the year and subjected to reviews by subcommittees of the Advisory Committee and regular members of the Commission's staff. The process of draft completion, review, revision and subsequent review continued at an intensive pace throughout the final months of the Study's existence. Differences between the Study staff and members of the Advisory Committee were aired before the Commission. In most cases they could be resolved through clarifying language. Some differences, of course, remain.

Time took its toll in a variety of ways during each of the Study's various phases. Some personnel losses, some analyses deleted and promising findings not pursued, and some compression in review procedures all can be attributed in whole or in part to the pace and the time pressures under which the Study worked. The most serious allocative decision made during the closing months of the Study, however, was to concentrate remaining resources on further analytical work and on refining the presentation of existing findings, at the expense of formulating detailed recommendations for legislative or regulatory action.

Either long or short explanations for this decision are possible. Both, however, would focus their attention on the clock, on the scope of the Study, on the time required in the first instance to review, integrate and complete in a more satisfactory manner analytical portions of the Report, and in the second instance to transfer its many and fundamental policy implications from technical to policy levels. This second process necessarily will continue over the weeks and months following the Report's submission, aided by discussion, debate and comment resulting from its public dissemination.

It is the Commission's hope and expectation that students, practitioners and policy makers alike will benefit from the extensive analyses of institutional investors and investment provided for the first time by this fact finding inquiry. As indicated by the Chairman of the Commission prior to the passage of Public Law 90–438:

Institutionalization of investment is probably the most significant phenomenon in the securities markets today. It is a dramatic and developing process, concerning which all of us should be informed as promptly, as currently, and as continuously as possible. There is little doubt as to the need for such study or the potential dangers if one is not undertaken promptly.[25]

The Institutional Investor Study attempts to provide a factual, economic basis for an understanding of this important segment of our nation's capital markets, and for the continuing development and evaluation of public policy measures to assure its future vitality. To the extent that this goal has been attained, the efforts of everyone associated with the Study—including its many industry respondents who bore the demands of a major data collection effort with more patience than could have been anticipated—will be amply repaid during the years to come.

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[25] 1968 Senate Hearings 30; 1968 House Hearings 55.

## APPENDIX

### Institutional Reporting of Securities Holdings and Transactions

### 1. Introduction

While the Study gathered primary data from institutions through special questionnaires, there are some existing requirements for regular reporting of securities holdings and transactions by institutions. These are briefly summarized in this appendix. This description affords insight into the pattern of regularized institutional disclosure which currently exists and provides a basis for assessing the adequacy of such disclosures in light of the Study's findings on intitutional participation in the securities markets. To the extent that the Study's findings suggest policy implications that could not reasonably be made on the basis of existing data flows, there may be a need for reevaluation of the parameters and substance of institutional reporting.

The Congress recognized the shortcomings in existing information about institutional investors in authorizing the Study. As noted in H.R. Rep. No. 1665 (90th Cong., 2d Sess.) at page 3:

"The available data concerning the activities of various types of institutions in the stock market ranges from fairly extensive as to investment companies . . . to almost no information at all with respect to foundations. . . . Between these two extremes are other important financial institutions such as bank-administered pension funds, bank trust funds, and life insurance companies. These institutions report limited data . . . but do not report information on individual transactions or on their holdings in individual stocks. A clear need has been demonstrated for additional information in these areas. Only after such information is obtained can we fully understand the nature and impact of institutional investment upon the securities markets and upon the economy."

Institutional reporting is significant for several reasons:

(1) *Disclosure to beneficiaries.*—Institutional beneficiaries require information about the way in which their investments are being managed by the financial managers to whom they are about to entrust, or have entrusted, their savings. Systematic disclosures of this nature are currently made by registered investment companies, both by filings with the Commission and the dissemination to their shareholders of prospectuses, proxy statements and other materials.

(2) *Disclosure to investors.*—The fact that an institution (or group of institutions) holds a substantial percentage of a company's outstanding shares may be important to other investors and shareholders in the company, both from the standpoint of the kind of trading market that may exist in the company's securities and from the perspective of ascertaining corporate power sources within the company. Institutions with large holdings (or heavy trading activity) in a company's shares are part of the market environment affecting investment and shareholder decision-making by individual investors as well as by other institutions.

(3) *Disclosure to government policy-makers.*—The scope and extent of institutional holdings and trading are critical factors in the evaluation by government policy-makers of the adequacy of existing market mechanisms; they are also an important aid to an understanding of the emerging forces and trends in the economy. However, unlike the first two reasons for institutional reporting—disclosures to beneficiaries and to investors—the communication of data on institutional participation in the securities markets to government policy-makers does not necessarily require public reports or the public dissemination of such reports.

There are several immediately observable shortcomings in the existing scheme of institutional reporting:

(1) The scope of information reported by institutions is often limited, particularly with respect to holdings of and transactions in the securities of specific companies. In part, this limitation results from a failure to pierce the "institu-

tional veil"; institutions generally are not required to report their aggregate holdings of a company's securities held in several separate accounts or trusts, nor do affiliated institutions report their aggregate holdings of such securities.

(2) Information is supplied to many different agencies—both governmental and private—with the result that there is in some instances unnecessary duplication of effort.

(3) Much information is supplied only on a voluntary basis by the institutions to the Commission, other federal agencies and state agencies. Inadequate resources exist to verify the data submitted.

(4) Much information is supplied on a confidential basis and is thus unavailable for use by institutional beneficiaries or corporate investors and shareholders. Of course, not all information that might be useful to government policy-makers would necessarily be sufficiently material to public investors to justify or require its public disclosure.

Even assuming some deficiencies in existing reporting requirements, it is necessary to balance the benefits of increased disclosures—both public and non-public—against the consequent burdens of such disclosures. Some types of reporting may entail onerous efforts on the part of institutional respondents. The danger exists that greatly expanded reporting may obfuscate the central elements of material disclosure necessary for informed investor judgment while over-taxing the functions of orderly review and deliberation by government regulators. However, some rationalization of the reporting regimen might well result in decreased burdens as well as improved public and governmental information flows.

### 2. Summary of Existing Institutional Reporting Requirements

For the most part state and federal agencies request only that information which seems necessary to the fulfillment of the particular statutory or regulatory purpose they are charged with administering. For example, an agency may be concerned only with the institution's adherence to fiduciary requirements; its attention may be focused on the risks of insolvency; the agency may limit its concern to prescribed tax or other regulatory schemes.

Institutional investing disclosures have been most pervasive in the case of investment companies on the federal level and insurance companies on the state level. The Investment Company Act of 1940 requires registered investment companies to disclose their holdings of individual securities in their periodic reports to shareholders and in quarterly filings with the Commission. Insurance companies are required by state regulation to provide similar information to state regulatory authorities (quarterly in New York and California and annually in other states), although these disclosures are not necessarily made to shareholders or policyholders.

Among other types of institutions, specific disclosures of equity holdings and transactions have been slow in developing or are almost completely absent. Thus, for example, while pension funds have become a significant factor in equity investment, relatively little has been known about their holdings in particular securities. The Federal Welfare and Pension Plan Disclosure Act requires disclosure only of holdings of securities issued by the employer company or other "party-in-interest"; disclosure is not required if portfolio securities are listed on a national securities exchange, registered under the Exchange Act or issued by a registered investment company or public utility holding company.

The Commission has directed its attention in recent years to two aspects of the information gap: dissemination and aggregate data.

(1) *Dissemination*—To the extent that institutions are required to submit public data on securities holdings and transactions, the dissemination of such data expands its usefulness and tends to ensure that its impact on investors will be more even-handed and fair. As previously noted, investment companies subject to the Commission's jurisdiction are required to file quarterly reports of their securities transactions. This data can now be obtained either in hard copy form from the Commission or on microfiche from a service organization which has contracted with the Commission to provide this service. A number of individuals and organizations have subscribed to these services and several advisory services have been making compilations of the data for distribution or sale to others.

(2) *Aggregate data*—During the past twenty years, the Commission has instituted programs to gather and develop on a regular basis data on the flow of funds from households and other providers of capital to institutional intermediaries and

the securities markets and from these to corporations and other users of capital. The Commission assembles information on purchases and sales of common stocks and portfolio turnover rates (more recently, activity rates) for each of four major groups of institutional investors: pension funds, life insurance companies, property and liability insurance companies and open-end investment companies. This information is published quarterly in a statistical release: "Stock Transactions of Financial Institutions." The data underlying these statistics is gathered from primary sources by the Commission and has been gradually improved in terms of quantity and timeliness.

A description of the primary and secondary sources of data on institutional equity holdings and transactions for each tvpe of institution is summarized below.

*a. Investment companies*

*(1) Commission reports*

Regulated investment companies are required to register securities for public offering and sale under the Securities Act of 1933; the companies themselves register under the Investment Company Act of 1940. Registered investment companies file periodic reports with the Commission. Form N–1R, the annual report for management investment companies, and Form N–1Q, the quarterly report for such companies, are adaptable for data processing purposes.

*Form N–1R* provides information about the relationships between investment companies and affiliated persons, including investment advisers, principal underwriters, broker-dealers and shareholders. The report contains financial statements of the investment company as well as other financial data. The reported information includes: classification of the investment company; annual per share changes in net asset value; operating expense ratios; description of senior securities; sales, repurchases and redemptions of the registered entity's shares; principal owners of shares; remuneration of officers and directors; fee arrangements for fund management; relationships with affiliated persons of the fund; classification of assets (including investments in various types of securities); aggregate purchases and sales of securities; and portfolio turnover rates. The Commission has given notice that it is considering amendments to Form N–1R to require additional disclosures as well as more timely filings (90 days after the end of the fund's fiscal year instead of the present 120 days.)[1]

About 700 investment companies file reports on Form N–1R. These reports include EDP attachments to facilitate the transfer of data to computer readable form. This permits rapid retrieval of information as well as aggregation of data for analytical purposes.

*Form N–1Q* provides a quarterly record of total purchases, sales and holdings of each portfolio security as well as other material events occurring during the period covered. While Form N–1R is filed on a fiscal year basis, Form N–1Q is filed on a calendar year basis in order to permit consistent aggregation of data. The initial report on Form N–1Q and the first report filed after the end of each calendar year contains a complete list of the investment company's holdings as well as total purchases and sales of each security. Other reports contain only changes in these holdings.

Where the investment company is engaged in a purchase program involving a particular security both at the end of the quarter for which the report is filed and at the time of filing and the company has made no sales of the particular security, the value of all such purchases and of aggregate holdings of the security may, with certain limitations, be classified in the public report, under the caption "Other," as "Miscellaneous Securities" without identifyng the security. In such case, the security and the relevant data must be identified in a non-public supplement to the report.

*(2) Industry organizations*

*The Investment Company Institute* is an association of open-end investment companies whose members hold about 90 percent of all mutual fund assets (although comprising less than half of all such companies). The ICI collects and publishes monthly data on mutual fund sales and redemptions, holdings of liquid assets and total net assets of its members. Quarterly statistics are compiled on portfolio transactions, transactions in common stocks and major categories of asset holdings of members. Historical data is published annually in "The Mutual Fund Fact Book," which includes an analysis of the characteristics of the mutual fund shareholder, alternative savings media, the number and type of investment

[1] SEC Investment Company Act Release No. 6284 (December 16, 1970).

plans offered by the industry, mutual fund disbursements, performance, the number and value of institutional shareholdings, mutual fund sales by geographical region, portfolio transactions and turnover rates.

*The Association of Closed-End Investment Companies* receives monthly reports from about 20 such companies (representing about 40 percent of the assets of the 195 active closed-end companies). The reports include data on total portfolio transactions as well as common stock purchases and sales.

*(3) Secondary sources*

A number of advisory organizations publish information on the investment company industry, utilizing data provided directly by the funds or obtained from their periodic filings with the Commission. Most of these organizations do not report on portfolio holdings and transactions. However, Vickers Associates in its "Vickers Guide to Investment Company Portfolios" reports on investment company holdings of common stocks as well as changes in portfolio holdings. The same organization publishes "Vickers Favorite 50" and "Vickers Over-the-Counter Favorites" which list the most popular stocks in investment company portfolios. As in the case of primary sources, these secondary sources do not give information on the cost of purchases or the proceeds of sales of portfolio securities.

*b. Non-governmental pension funds*

*(1) Commission statistical data*

Pension funds and bank trustees for such funds make voluntary reports to the Commission on a confidential basis. The banks report on a consolidated basis for all pension funds managed by them or for which they are trustees. Since all data are confidential, the Commission prepares only aggregate statistics and the individual data are not available to secondary processors.

*Form R–4a* includes information on aggregate common stock transactions and participation in private placements. Quarterly data is reported on assets at both book and market values, including cash and deposits, U.S. Government securities, convertible debt securities, non-convertible debt securities, preferred stock, common stock, real estate mortgages and other assets. The report is prepared in machine processable form. The Commission's estimates of total pension fund assets are prepared quarterly on the basis of approximately 600 reports (including bank reports consolidating the assets of many separate funds).

*Form R–4i* includes information on receipts and disbursements of pension funds on an annual basis. Receipt items include income from interest, dividends and rent, and net profit or loss on sale of assets. The book and market values of "own company" stock are disclosed separately. The report is prepared in machine processable form. The Commission's estimates of total pension fund receipts and disbursements are prepared annually on the basis of reports covering over 2,000 pension funds.

(2) *U.S. Department of Labor*

Under the Welfare and Pension Plan Disclosure Act, the Department of Labor requires pension funds having 100 participants to file publicly available annual reports on a fiscal year basis with the Department. *Form D–1*, which describes the pension plan, is filed initially by such funds as well as by funds having over 25 participants. *Form D–2* is the annual report, with separate parts for unfunded plans, insured plans, and non-insured plans "involving a trust or separately maintained plan." Information on the underlying reserves of insured plans is not reported because the assets of these plans are an undistinguishable part of the total assets of the administering life insurance companies.

Among the information disclosed by non-insured plans is the following:

Assets and liabilities, including common stocks and preferred stocks (valued on the basis of reports to the Treasury Department or, if reports are not filed, at the lower of cost or book value).

Cash receipts and disbursements, including receipts from investments, sales of assets (with separate disclosure of aggregate sales to parties-in-interest), and purchases of investment assets other than real estate (with separate disclosure of aggregate purchases from parties-in-interest).

Realized capital gains or losses on each category of assets.

Investments in parties-in-interest, except for listed securities or other securities registered with the Commission. This type of disclosure is obviously quite

limited since the securities of most companies having 500 shareholders and over $1 million in gross assets are registered with the Commission.

Reports filed with the Department are intended to provide public disclosure of material facts concerning the operation of pension funds. The published information based on these reports, however, is minimal; reports are not fully analyzed, processed or published by the Department.

(3) *Internal Revenue Service*

Pension funds file confidential forms with the IRS for the purposes of qualification for tax exemption, and the sponsoring employer files a statement in support of its deduction for contributions to the pension fund. These forms are not available for statistical or disclosure purposes.

(4) *State reports*

Several states require pension funds to file reports with state regulatory authorities. The reporting requirements of two states, New York and Wisconsin, are summarized here.

*New York* requires banks to report annually on the number and assets (both at book and market value) of pension and other employee benefit plans for which they are trustees or managers. Banks also report on collective funds maintained for employee benefit plan investments. Pension funds established or maintained jointly by labor and management file annual reports with the State Banking Department, which include information on receipts and disbursements, assets and liabilities, and party-in-interest transactions. If Form D–2 is filed with the U.S. Department of Labor, it is filed with the New York authorities in substitution for these disclosures. New York requires supplementary information of common for these disclosures. New York requires supplementary information on commenket value and book value. Information is also given on profits and losses on disposition of investments.

Individual reports are confidential, although the Superintendent of Banking may publish aggregate data.

*Wisconsin* requires any employee benefit plan to register with the State Insurance Department; plans covering over 25 Wisconsin employees must also file annual reports, including information as to investments in or transactions with parties-in-interest. If Form D–2 is filed with the U.S. Department of Labor, it is filed in Wisconsin in substitution for the state form. The State Insurance Department publishes aggregate data, and individual reports are available to any person covered by a reporting fund.

(5) *Secondary sources*

Secondary processors rely primarily on the public Form D–2 reports filed with the Department of Labor. Investors Publishing Company annually publishes "Pension Funds," a compendium of D–2 reports for selected pension funds. "Pension and Welfare News," a monthly periodical, bases news and feature stories on D–2 reports and sells copies of condensed reports upon request.

As in the case of primary sources, there is no reliable public data on pension fund holdings of and transactions in particular securities.

*c. Insurance companies*

(1) *State reports*

Since insurance companies are subject to primary regulation by state authorities, the most extensive reports are filed with the states. The basic form is an Annual Statement, the content of which (with certain modifications) has been standardized by the National Association of Insurance Commissioners for use in all states. The Annual Report is filed in each state in which the company is licensed and is available for public inspection.

The information submitted includes a balance sheet, analysis of operations, gains and losses on investments, the company's interests in the stock of other insurance companies, control of the reporting company by other companies, custody of securities, loans of securities, aggregate stocks and bonds held as of the end of the calendar year, aggregate common and preferred stock holdings classified by industry and by country in which issued, and detailed descriptions of each security held, acquired or disposed of during the year (including cost and market value). Life insurance companies having separate accounts (for example, for the purpose of variable annuity plans) are required to file an additional statement for each account.

Some states, including New York and California, also require quarterly reports, which contain information on equity holdings, purchases and sales. These reports are non-public in New York, but available for public inspection in California.

(2) *Commission reports*

Most insurance companies (except those whose securities are listed on a national securities exchange) are exempt from the reporting requirements of the Securities Exchange Act of 1934. To the extent that these companies do file periodic reports, there will be certain differences between the financial information in such reports and financial information in reports filed with state regulatory authorities because of differing methods of accounting utilized. State authorities are generally concerned with protecting the policyholders of insurance companies by ensuring adequate reserves; this concern manifests itself in requirements that certain costs be charged to income in the year incurred rather than being amortized as would be required under generally accepted accounting principles. The Commission on the other hand is primarily concerned that investors in insurance companies receive an accurate and complete financial picture of the value of the enterprise in which they have invested. While these differing regulatory viewpoints are by no means irreconcilable they do result in differing types of disclosures.

In addition to any reports required to be filed under the Exchange Act (which, of course, are public), about 150 property and liability insurance companies voluntarily submit data to the Commission on a confidential basis regarding monthly aggregate purchases and sales of common stock and assets (at both book and market values), reported quarterly. This information, supplied on Form R–5, is used for aggregate statistical data; the report is in machine processable form.

(3) *Industry organizations*

*The Institute of Life Insurance* obtains data from 1,200 companies holding 96 percent of the industry's assets. Aggregate data are reported in the "Life Insurance Fact Book" annually, while the Institute issues monthly reports on aggregate asset holdings (by market value) and total acquisitions. Monthly data on asset holdings, statement value and acquisitions are reported to the Institute and published monthly in the "Tally of Life Insurance Statistics."

*The Life Insurance Association of America* obtains data from its member companies on a voluntary and confidential basis, including monthly data on corporate direct placement yields, quarterly cash flow data, and monthly data on commitments to acquire securities, real property and real estate mortgage loans. The data are utilized for statistical purposes and do not generally deal with investments in equities.

(4) *Secondary sources*

A. M. Best Company publishes several compilations of insurance company data derived from annual statements filed with state insurance authorities. These include "Best's Market Guide" (purchases, sales and holdings of securities for 900 insurance companies), "Insurance Reports, Property-Liability" (balance sheet data and stockholdings), "Aggregates and Averages, Property-Liability" (complete data for the industry) and "Insurance Reports, Life-Health" (data on life insurance companies). Vickers Associates publishes "The Vickers Guide to Insurance Company Portfolios," covering the investment of about 900 life and property and liability insurers. Securities held by these companies are listed as are transactions in these securities by the insurance companies. Annual data in *The Spectator* magazine is based on the annual statements, but does not deal with equity investments.

*d. Bank trust departments*

(1) *Federal reports*

The trust departments of federally insured banks file annual Trust Department Reports with the Federal Reserve Board, the Comptroller of the Currency or the Federal Deposit Insurance Corporation (the repository agency depending on whether the bank is a national bank, a state-chartered member of the Federal Reserve System or a non-member insured bank). Holdings of and transactions in particular securities are not reported. Aggregate statistical data is published jointly by the three agencies on an annual basis in "Trust Assets of Insured

Commercial Banks." Data are not available for non-insured banks; however, the overwhelming majority of banks in the United States are federally insured. The individual reports submitted by the banks are non-public.

The published aggregations disclose trust assets at market value and separately disclose holdings of all common stock and all preferred stock, but not individual securities. The data is also broken down according to the size of trust departments reporting. However, the aggregate data are not as of a common point in time; most of the banks reporting, value their investment assets at calendar year end, but others value assets at some other date.

Since 1963, the Comptroller of the Currency has required banks operating common trust funds to file annual reports; these reports were previously filed with the Federal Reserve System. Limited aggregate data is published by the Comptroller in his Annual Report, but the banks do not report holdings of or transactions in particular securities. Furthermore, common trust fund assets are not valued on the same date for all reporting banks and the reports are not machine processable. Bank trust departments are required to report to each participant in common trust funds on the particular securities held by such funds. Although there is no official publicly available compilation of this data, "Trust and Estates" magazine compiles and publishes data on common trust fund holdings of particular stocks.

*(2) State reports*

The New York State Banking Department obtains annual reports on common trust funds from about 80 New York trust companies on a voluntary and confidential basis. The Annual Report of the Superintendent of Banks contains aggregate statistics, although the valuation dates for assets are not consistent. Although the reports contain information on various types of investments held, they do not disclose holdings of or transactions in particular securities. Information obtained by bank examiners (state or federal) on particular investments is non-public. Thus, as in the case of federal reporting, there is no public information in individual or aggregate form regarding the holdings of bank trust departments in particular securities. Such data as is available is limited to annual reporting of total assets, subdivided only into broad categories of investments.

*e. Bank commercial departments*

Commercial banks are generally restricted in the investments they can make for their own account to stock in the Federal Reserve System, Federal National Mortgage Association, bank subsidiaries (acquisitions of which are regulated by the Federal Reserve Board under the Bank Holding Company Act of 1956, as recently amended), and temporary holdings of collateral acquired by default. Beginning in 1969, banks have been required to disclose these holdings to federal banking authorities in their periodic call reports of condition. Reports to the Federal Deposit Insurance Corporation disclose investments in stocks on an aggregate basis. The reports are not public, but some aggregate data is available from the FDIC.

*f. Mutual savings banks*

Mutual savings banks hold corporate securities as a normal part of their business. In addition to filing reports of condition with the FDIC, these banks also file annual reports with state supervisory authorities which generally contain more detailed information on stock holdings and are available to the public.

*The National Association of Mutual Savings Banks* obtains balance sheet data from its members on a voluntary and confidential basis. Monthly reports aggregate all types of corporate securities; semi-annual reports show separate total holdings of common and preferred shares (with some further functional segregations); annual reports simply divide corporate stock into shares of other banks and all other stock. Holdings of and transactions in particular securities are not reported. The Association reports aggregate equity investments semi-annually in "Savings Bank Journal" and in its "Annual Report—Mutual Savings Banking."

The *New York Savings Bank Association*, whose members hold about half of the shareholdings of all mutual savings banks, obtains monthly reports from its members on a voluntary and confidential basis. The reports include holdings of common and preferred stock; the Association publishes aggregate data.

*g. Foundations*

Foundations, as well as other tax-exempt organizations, file for exemption under section 501(c)(3) of the Internal Revenue Code on Form 1023. This form contains balance sheets and income accounts, but not specific information as to holdings of particular securities. Tax-exempt organizations also file annual reports on Form 990–A with the Internal Revenue Service. The reports cover the tax year of the reporting entity, and accordingly vary. A short form is filed if gross receipts and total assets are $10,000 or less; this form gives information only as to broad categories of assets, including investments. The long form (filed in all other cases) is generally available for public inspection, although certain information may be filed on a non-public basis. The public information includes a balance sheet, income accounts, market value of investments (stated separately for publicly traded securities), and each asset sold or exchanged with an indication of original cost, sale price and other details. Information as to holdings or purchases of particular securities is not required except where the organization owns 5 percent or more of a company's outstanding shares. In the latter case, detailed information must be filed, including the book and market value of the organization's holdings, date and manner acquired and dividends received.

Publicly available information must be obtained from the IRS District Office where the report was filed. Reports for foundations are not segregated from the nearly half-million reports filed by all tax-exempt organizations. The IRS has not compiled any aggregate statistics from the reports filed by foundations and other tax-exempt organizations, and only gross receipts and total assets are available on computer tapes.

Many states have charitable trust laws requiring foundations to file reports with state authorities. In New York, such organizations file Form NYCF–2 with the Charitable Foundations Division of the Attorney General's Office. The information requested is similar to that in IRS Form 990–A.

*h. Educational endowments*

The Office of Education of the U.S. Department of Health, Education and Welfare obtains limited data on a voluntary and confidential basis from college and university endowments. The data does not segregate assets, does not always include market value and is filed for the particular fiscal year of the responding entity rather than a fixed date. The statistics gathered are used for administrative and research purposes by the Office of Education, other federal agencies and independent research organizations. Although the Office of Education has made several studies in which sample data included a breakdown of assets, the samples were limited.

Some colleges and universities publish detailed information on their endowment holdings and transactions. Boston Management and Research Company annually compiles and publishes a report of major investments held by institutions voluntarily supplying this data. However, there is no data on holdings of and transactions in particular securities by particular educational institutions except to the extent that these institutions individually publish such data.

*i. Investment advisers*

Investment advisers are required to register with the Commission under the Investment Advisers Act of 1940. Initial registration on Form ADV supplies public information on the operations of the adviser, control exercised by or over the adviser and the nature of other businesses in which it is engaged. Neither Form ADV nor other reports filed by investment advisers contain any information on the size or nature of investment assets under management or advice, nor do such reports disclose holdings of or transactions in particular securities (with very limited exceptions).

Broker-dealers, which may also be investment advisers, are required to register with the Commission under the Securities Exchange Act of 1934; however, they make no disclosures as to particular securities held for their customers' accounts.

*j. State and municipal retirement funds*

The U.S. Census Bureau collects annual data from state and municipal retirement funds on a voluntary basis. The data deals with receipts, asset holdings and coverage of the retirement plans. Assets are not valued at a uniform date,

and each retirement fund reports for its fiscal year. The data does not separate out equity holdings. The annual survey includes all state-administered retirement funds (which hold over two-thirds of total assets of such funds) and a large sample of locally-administered funds including all but minor funds.

The Census Bureau conducts a Census of Governments every five years covering virtually all state and municipal retirement funds. The latest information available on computer tapes is for 1967. In 1968, the Census Bureau instituted a quarterly survey of retirement funds covering the 100 largest such funds (which hold about 90 percent of the assets of all retirement funds). Assets are stated as of the last day of the calendar quarter and corporate stockholdings are valued at book value or cost. The reports are not machine readable, but are available to secondary users. None of the information gathered by the Census Bureau indicates the holdings of or transactions in particular securities by retirement funds.

*k. Foreign entities*

Reporting requirements generally do not extend to institutions outside the territorial jurisdiction of the United States. Thus, foreign banks, investment advisers, off-shore funds and other institutions organized and doing business outside the country are not subject even to the minimal reporting mechanisms described above. Nonetheless, these institutions may hold and trade securities issued by American corporations. In order to provide some data for estimating capital movements and balance of payments statistics, the Treasury Department requires persons (usually U.S. banks and broker-dealers) dealing with foreign persons or entities in securities transactions involving more than a specified amount of money to report such transactions on Treasury Foreign Exchange Form S–1. These reports are non-public, but the aggregate statistics are published in the Treasury Bulletin. The data are collected by Federal Reserve System banks and stored on computer tapes.

Form S–1 reports indicate the dollar amount of purchases and sales for all stocks (common and preferred combined) during each calendar month and also indicate the domicile of the foreign person. The reports do not indicate the holdings of or transactions in particular securities by foreign persons.

*l. Trading data*

For the most part, little data has been regularly gathered by government agencies on institutional trading activities. The focus instead has been on aggregate holdings of institutions; dealings in particular securities have been the subject of disclosure mainly when possible conflicts of interest are involved. There are nonetheless two recognized sources of data on trading by institutions, one statistical and the other specific but limited.

(1) *New York Stock Exchange public transaction studies.*—The Exchange has conducted a series of public transactions studies since 1952. The studies are based on stock market trading activity during one or two sample trading days selected at random for each year covered by the survey. Unlike previous studies, however, the data for the 1969 study encompassed a random sampling of member firm activity on every trading day. The study data indicate the sources of NYSE share and dollar volume. The sources analyzed are (1) institutions and intermediaries (including non-NYSE-member broker-dealers and non-financial corporations); (2) public individuals (non-NYSE-member affiliated individuals); and (3) NYSE members.

(2) *Ownership reports filed under the federal securities laws.*—Any "beneficial owner" of over 10 percent of the outstanding shares of a company whose securities are registered under the Exchange Act (which includes most publicly held corporations), or of a company registered under the Public Utility Holding Company Act of 1935 or the Investment Company Act of 1940 is required by the provisions in each of those Acts to report its initial ownership and any changes in its ownership of the company's securities. These ownership reports are filed with the Commission, with the exception of reports relating to securities issued by banks, which are filed with appropriate federal banking agencies (the Federal Reserve System, Comptroller of the Currency or Federal Deposit Insurance Corporation).

The reports are brief and relatively simple, basically setting forth the identity of the beneficial owner and changes in its holdings of the particular security. A separate report is filed for each security. Ownership reports are also filed by

officers and directors of the company; these persons, together with 10 percent beneficial owners are deemed to be statutory "insiders" with access to non-public corporate information. In addition to serving as a mechanism for detection of so-called short-swing profits transactions, for which the securities acts provide recovery by the corporation, ownership reports are a source of market information about activity in the company's shares by major holders. Although institutional investors are not specifically covered or excluded by the existing system of ownership reporting, the statutory limitation to reporting by "beneficial owners" of over 10 percent of a company's shares eliminates any reporting by institutions that hold and manage shares for the benefit of others (such as bank trust departments) and does not require aggregation of the holdings of several accounts managed by the same institution or of the holdings of several institutions with the same adviser in determining whether the 10 percent threshold (which itself is rather high) has been met.

The Commission sets forth in explicit detail the information in ownership reports in its monthly "Official Summary of Security Transactions and Holdings." This publication is by far the most extensively disseminated Commission document, with about 20,000 subscribers. However, the ownership report data is processed manually and individual reports must be examined or obtained in hard copy form.

# CHAPTER II

## DEVELOPMENT OF FINANCIAL INSTITUTIONS AS INVESTORS IN CORPORATE STOCK, UP TO THE POST-WAR PERIOD

## DETAILED TABLE OF CONTENTS



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# CHAPTER II

## Development of Financial Institutions as Investors in Corporate Stock, up to the Post-War Period

### A. THE FINANCIAL SYSTEM AND U.S. ECONOMIC GROWTH

#### 1. Introduction

This chapter and the one which follows are summaries of the much more extensive treatment of this material contained in The National Bureau of Economic Research's *Institutional Investors and Corporate Stock: A Background Report* (R. W. Goldsmith et al., 1970). This document, hereafter cited as *NBER Report*, was prepared for the Institutional Investor Study and is printed as *Supplementary Volume I* of the Study. It provides the statistical background necessary for assessing the role of both corporate stock and of institutional investors in the American economy since the mid-nineteenth century; it presents new estimates of the value of several classes of assets and of the portfolios of several categories of institutions; and it attempts econometrically to relate decisions by corporations to issue securities, decisions by households to purchase these securities directly or through intermediaries, and decisions by financial institutions to purchase stock and other assets to relative yields and general indicators of economic activity.

The major statistical effort was devoted to expanding and refining the Federal Reserve Board's Flow of Funds Accounts [1] first by developing estimates of the market or replacement value of the stock of tangible assets consistent with the gross investment figures presently incorporated in the accounts; second, by creating new estimates of the value of corporate securities outstanding; and third, by providing estimates of the balance sheets and of the sources and uses of funds for certain institutions which have heretofore been included in the household sector by default.

These statistical improvements and the bulk of the analysis pertain to the period 1952 through 1968 covered in chapter III of the Study. This period is characterized by a much richer data base than is the period which precedes it. Although flow of funds estimates exist for the entire post World War II period, the quality of the data before 1952 is much inferior to that after 1952; furthermore, the inclusion of the 1946-1951 years of demobilization, post-war adjustment and then renewal of war in Korea introduce some distortions which make analysis more difficult. The *NBER Report* does, however, assemble some historical data from previous Bureau studies in order to place the more recent events in a longer time perspective. The re-

[1] *Flow of Funds Accounts, 1945–1968*, March 1970.

mainder of this chapter is devoted to a summary of this historical material. Chapter III will examine the years since 1952 in more detail, and it will recapitulate the general findings and conclusions of the *NBER Report.*

## 2. The Growth of National Assets Since 1900

In 1900 the United States had tangible assets valued at $88 billion; by 1968 the stock of land, buildings, and equipment was worth $3,140 billion. A portion of this growth in the value of assets is, of course, attributable to the increased prices of all types of wealth, particularly the price of land. Another portion of this growth in the replacement value of physical assets merely kept pace with increases in the population; simply to keep each member of the labor force endowed with as much capital in 1968 as in 1900 would have required considerable investment. Most of this increase in the value of our tangibles, however, has made the per capita endowment of real capital much larger than it was in the earlier years of American economic history; and thus directly or indirectly has contributed to the increases in income and output per capita experienced in this century.

Over the same time period the stock of financial assets has grown from $59 billion to $3,900 billion; thus, in 1900 the value of the paper claims on our stock of real assets was worth only 65 percent of the value of those same real assets. By 1968, however, the economy had issued paper worth more than 130 percent of the value of the underlying tangibles. This reflects both the growth of external financing and the role of financial institutions as intermediaries between savers and the accumulators of tangible assets. Table II–1 indicates the tremendous increase in both tangible and financial assets per head which has occurred since 1900. Table II–2 indicates the growth rates which have brought it about.[2]

This capital accumulation was dependent to some extent, at least, on the particular set of financial institutions, arrangements, and instruments which in fact existed. Output, consumption and investment would probably have occurred at different levels with a different set of financial arrangements. Although the economic history of the past 70 years cannot be recreated, it is useful to consider briefly some of the links between the paper and the real economies using the financial history of the United States before 1952 as illustrative material. Thus the next sections discuss financial institutions, their role in the savings investment process, and the functions performed by financial as opposed to tangible assets. These points are illustrated by some historical data. In the remainder of the chapter the market for corporate equity is examined in more detail.

[2] The growth rates shown here are the annual percentage rates of change over the period. They incorporate price effects as well as real growth.

## Table II-1

### The Growth of National Assets of the U.S., 1900-1968

| | Aggregate ($ billion) | | | | Per Head ($ 000) | | | |
|---|---|---|---|---|---|---|---|---|
| | Tangible Assets | Financial Assets | | National Assets | Tangible Assets | Financial Assets | | National Assets |
| | | Primary[1/] | Secondary[2/] | | | Primary[1/] | Secondary[2/] | |
| 1900 | 88 | 42 | 17 | 147 | 1.1 | .6 | .2 | 1.9 |
| 1929 | 439 | 369 | 133 | 941 | 3.6 | 3.0 | 1.1 | 7.7 |
| 1952 | 1,153 | 723 | 439 | 2,315 | 7.4 | 4.7 | 2.8 | 14.9 |
| 1960 | 1,895 | 1,242 | 759 | 3,896 | 10.5 | 6.9 | 4.2 | 21.6 |
| 1968 | 3,141 | 2,344 | 1,573 | 7,058 | 15.6 | 11.6 | 7.8 | 34.9 |

1/ Securities issued by nonfinancial [illegible] 3,896 s

2/ Securities issued by financial institutions

SOURCE: Adapted from Table 3-10 NBER Report.

Table II - 2 .

Rates of Growth of National Assets and Components

1952-68 vs. 1901-51

percent per year[1]

| | 1901-51 (1) | 1952-68 (2) | Difference (3) |
|---|---|---|---|
| I. National Assets in current prices | 5.60 | 7.20 | +1.60 |
| 1. Tangible assets[2] | 5.20 | 6.50 | +1.30 |
| a. Reproducible tangible assets | 5.70 | 6.10 | +0.40 |
| b. Land | 3.80 | 8.30 | +4.50 |
| 2. Financial assets | 6.10 | 7.90 | +1.80 |
| a. Claims | 6.20 | 6.80 | +0.60 |
| b. Equities | 5.30 | 11.80 | +6.50 |
| 3. Debt | 6.30 | 6.80 | +0.50 |
| 4. Net Worth | 5.10 | 7.10 | +2.00 |
| II. General price level | 2.50 | 2.10 | -0.40 |
| III. Population | 1.40 | 1.65 | +0.25 |
| IV. National assets in constant (1929) price on basis of general price level | 3.10 | 5.10 | +2.00 |
| V. National assets per head at constant price | 1.70 | 3.45 | +1.75 |
| VI. Financial interrelations ratio (I2:I1) | 0.95 | 1.30 | +0.35 |

[1] Calculated on basis of value at beginning and end of period.

[2] Includes gold and net foreign assets.

Sources: Adapted from Table 3-11 of NBER Report.

### 3. Saving, Investment and Financial Intermediaries

The tangible wealth of the United States has increased enormously since 1900, both absolutely and relative to increases in the population or in the labor force. The investment which adds to this stock of wealth each year must be financed by saving, the giving up of a claim on current consumption in exchange for a claim of equivalent present value on future output.

In the early stages of industrial development saver and investor are frequently identical. As capital goods become more complex, however, the outlay of money necessary to increase future output becomes larger than can be financed from the entrepreneur's savings alone. External funds, in the form at first of debt, and later also of equity as the corporate form of business organization became more prevalent, became the source of financing of this new capital accumulation.

At the same time that capital goods grow too costly for some entrepreneurs to finance out of their own saving, others find their savings larger than their own enterprises can profitably absorb. These net savers then may lend surplus funds directly to net investors; they may purchase the equity securities of the deficit group; or they may instead acquire a claim on financial intermediaries which then supply the debt or equity funds required by nonfinancial business.

Thus for any sector the existence of the paper economy in which claims on future resources may be exchanged for the use of present ones makes it possible to finance a level of investment which would be impossible were investors forced to limit their acquisitions to what their own funds could finance. The development of debt and equity instruments has made possible a better system of mobilizing saving than would have been available without rather extreme forms of Government intervention.

Financial markets and institutions relieve the investor and the saver of much of the trouble of finding each other. The necessity of finding a lender with the proper amount of funds and a willingness to hold the sort of paper that the borrower wished to offer created a situation in which it was profitable for someone to make a business of intermediating between borrower and lender. Just as the existence of financial assets made it possible to own tangibles indirectly, the existence of financial intermediaries makes it possible to own indirectly the claims and equities issued by nonfinancial sectors. In this process the cost of borrowing is made lower than it would otherwise be, and the return on lending is raised relative to the risks involved. The financial institution attracts funds by giving savers securities which are more desirable from their point of view than are those issued directly by the nonfinancial sectors; they may have a shorter maturity, they may be less risky, they may require less skill and sophistication on the part of the purchaser, or they may have other characteristics and uses which make them attractive. With the funds so raised from net savers, the financial institution is enabled to purchase the securities of the net borrowing sectors. It does and can do this because it can achieve certain economies of scale in both lending and borrowing and thus create a spread between lending and borrowing rates.

Transactions and exchange costs contain fixed elements which lead to an inverse relationship between the size of the transaction and the costs of effecting it. The institution can also reduce the costs of borrowing

below what would be entailed in assembling a given pool of capital from many small savers. In addition, the institution can afford to acquire or to set up facilities for research and the like which can give it information and analysis that are not available to the same degree to the small or intermittent acquirer of financial assets.

The ability to assemble large portfolios has other advantages for the institution. Diversification is possible only with a portfolio large enough to accommodate positions in an assortment of assets whose risks are relatively independent; thus the return available for a given risk is probably greater for the individual as part of a large pool of funds than as the owner of a small portfolio of his own. Furthermore, although the individual accounts that comprise the liability of the intermediary may be quite volatile, offsetting movements in other accounts make the total inflows to the financial institution somewhat less erratic, and their need for liquidity is therefore somewhat less. In addition the degree of liquidity associated with a given return may be increased for the holder of a claim on a financial institution. Finally the institution's service of pooling risks and scheduling the portfolio's maturities to match outflows reduce uncertainty for the individual. The fact that savings, primarily supplied by households, can be mobilized and put to use at a lower cost as a result of intermediation performed by these institutions means that the cost of credit is lower than it would have been did these institutions not exist. Thus there will be more saving and investment at every level of income, a higher level of capital accumulation, and a higher rate of growth of output than would otherwise be the case.

Another feature of the financial system which has also contributed to its ability to channel savings into investment is the existence of organized secondary markets in which existing financial assets can be bought and sold. These exist only rarely for tangibles ("previously driven automobiles" and "previously occupied houses"). The existence of such secondary financial markets means that, although in the aggregate new investment is financed by new money, the ability of a particular sector to acquire newly issued paper or newly produced tangible assets is not limited either by funds newly committed to it or by its own savings. Some changes in its existing portfolio may be made, and will be made, so long as the new issue provides a more attractive investment opportunity than those assets which must be disposed of in order to acquire it. Secondary markets not only provide a mechanism whereby market valuations are established, but they provide somewhat greater liquidity for holders of the assets traded there. Although the price is not certain, it is at least somewhat more predictable than is the price of an asset which is traded only rarely. Again, the existence of a secondary market may make the buyer of the security content with a somewhat lower yield.

### 4. Historical Illustration

The U.S. financial system has certainly not been incompatible with the growth of its economy. The crucial characteristic of a financial system in the long view is its ability to innovate and to be flexible in response to the large structural shifts in production and distribution which take place over time. Presumably if the conditions for an opti-

mum short-run allocation of funds are met, this allocation of resources between present and future income will be "best" from the point of view of the satisfaction of private preferences. Should there be externalities such that private and social goals diverge, the Government can intervene to shift the temporal allocation of income.

Tables II–3 and II–4 trace some of these developments. Land represented 35 percent of national wealth in 1900; by 1952 its share had declined to 17 percent; in 1968 it represented 23 percent of national wealth. This reflects primarily the declining importance of farming since the turn of the century and then the rise in urban land prices since World War II. The share of private plant and equipment has declined while that of public structures and durables has risen.

Financial assests have also undergone changes in composition. The debt of the Federal Government increased in importance during World War II. The share of claims against nonfinancial sectors declined steadily; that of the liabilities of the banking system remained little changed except for the immediate post-war years, while the role of claims against financial institutions other than banks became more prominent. The share of equity securities rose until 1929, fell until the post-war period was well advanced, and then began its rise. The growth of the shares of nonfinancial corporations relative to other financial assets was less pronounced than that which occurred before 1929; for shares of financial corporations, a category including mutual fund shares, the relative growth has been considerably more rapid.

Table II–5 indicates that the importance of the various classes of institutions has also shifted over time. In terms of the share of the institutions in the total assets of financial intermediaries, the share of commercial banks (excluding their trust departments) has declined and that of other institutions has grown. This relative growth in nonbank financial institutions reflects the development of new institutions as well as the rapid growth of some existing institutions. The relative growth of pension funds has been especially dramatic.

These data are too fragmentary to permit one to say very much about the role of the U.S. financial system in the economic growth of the country. They do suggest, however, that the shifts in the composition of wealth that have occurred both through price movements and shifts in the composition of real investment have been accommodated by the set of instruments and institutions which developed simultaneously during the period. The rise in residential relative to nonresidential construction in the private sector was obviously facilitated by the growth in savings and loan associations. The steady decline in the debt of nonfinancial sectors and the increased share of the debt and equity issues of financial institutions indicates that intermediation was increasing, thus implying higher rates of captal formation and growth than would have been available without it.

Table II-3

The National Wealth of the U.S. and its Main Components, 1900-1968

Current values; net percent

| Tangible Assets | 1900 (5) | 1929 (4) | 1952 (3) | 1960 (2) | 1968 (1) |
|---|---|---|---|---|---|
| I. Land | 35.3 | 25.9 | 17.3 | 21.8 | 22.8 |
| 1. Private, agricultural | 18.3 | 8.7 | 5.8 | 4.9 | 4.9 |
| 2. Private, non-agricultural | 12.4 | 13.7 | 8.5 | 12.7 | 13.3 |
| 3. Public | 4.6 | 3.5 | 3.0 | 4.2 | 4.6 |
| II. Structures | 39.9 | 43.2 | 50.0 | 48.8 | 48.8 |
| 1. Private, residential | 19.9 | 21.8 | 24.4 | 23.5 | 22.1 |
| 2. Private, non-residential | 17.7 | 16.1 | 12.3 | 11.5 | 11.5 |
| 3. Public, non-military | 2.3 | 5.3 | 13.3 | 13.8 | 15.2 |
| III. Equipment | 14.4 | 18.3 | 19.8 | 19.3 | 19.4 |
| 1. Private, prod. durables | 7.3 | 8.6 | 10.9 | 10.5 | 10.5 |
| 2. Private, cons. durables | 7.0 | 9.6 | 7.9 | 7.4 | 7.4 |
| 3. Public non-military | 0.1 | 0.1 | 1.0 | 1.4 | 1.5 |
| IV. Inventories (incldg. livestock) | 11.3 | 8.7 | 9.6 | 7.8 | 6.9 |
| V. Monetary metals | 1.8 | 1.1 | 2.0 | 0.9 | 0.4 |
| VI. Net foreign assets | -2.6 | 2.8 | 1.2 | 1.3 | 1.6 |
| VII. National wealth | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

Source: Adapted from Table 3-5 of NBER Report.

Table II-4

Structure of Financial Assets, 1900-1968

percent

| | All Financial Assets[1] | Claims[2] | | | | | | Corporate Stock[3] | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | All | Against Non-financial Sectors | | | Against financial Institutions | | | All | (1) Financial Institutions | Others |
| | | | All | Federal Government | Other | All | Banking System | Other | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) |
| 1900 | 100.0 | 76.3 | 52.1 | 2.2 | 49.9 | 24.2 | 13.8 | 10.4 | 23.7 | 4.6 | 19.1 |
| 1929 | 100.0 | 63 0 | 40.6 | 3.6 | 37.0 | 22.4 | 12.2 | 10.2 | 37.0 | 4.4 | 32.6 |
| 1952A | 100.0 | 83.0 | 47.6 | 21.5 | 26.0 | 35.5 | 20.9 | 14.6 | 17.0 | 1.9 | 15.0 |
| 1952B | 100.0 | 83.7 | 48.8 | 21.0 | 27.8 | 34.9 | 17.9 | 16.9 | 16.3 | 3.0 | 13.4 |
| 1960 | 100.0 | 77.7 | 44.4 | 13.2 | 31.3 | 33.3 | 13.0 | 20.3 | 22.3 | 4.6 | 17.6 |
| 1968 | 100.0 | 71.3 | 38.5 | 8.5 | 30.0 | 32.7 | 12.4 | 20.3 | 28.7 | 7.4 | 21.3 |

[1]Does not include proprietors' equities in unincorporated businesses.

[2]Face value.

[3]Market value.

Source: Table 3-6.

Table II-5

THE SHARE OF THE MAIN FINANCIAL INTERMEDIARIES, 1860-1968

(Assets of all financial intermediaries = 100)

| | 1860 | 1890 | 1912 | 1929 | 1939 | 1952 | 1960 | 1968 |
|---|---|---|---|---|---|---|---|---|
| Federal Reserve banks | -- | -- | -- | 4 | 11 | 13 | 8 | 6 |
| Commercial banks 1/ | 65 | 58 | 64 | 50 | 40 | 42 | 34 | 34 |
| Mutual savings banks | 20 | 18 | 12 | 7 | 7 | 6 | 6 | 6 |
| Savings and loan associations | -- | 6 | 3 | 6 | 3 | 6 | 11 | 12 |
| Finance companies | -- | -- | 0 | 2 | 2 | 3 | 4 | 4 |
| Investment companies | -- | -- | -- | 2 | 1 | 1 | 3 | 4 |
| Federal lending institutions | -- | -- | -- | 0 | 6 | 1 | 2 | 2 |
| Life insurance companies | 2 | 8 | 13 | 13 | 18 | 18 | 18 | 14 |
| Pension funds 2/ | -- | -- | 0 | 2 | 4 | 4 | 9 | 11 |
| Property insurance companies | 8 | 4 | 3 | 4 | 3 | 4 | 4 | 4 |
| Other financial intermediaries | 5 | 6 | 5 | 11 | 5 | 2 | 2 | 3 |

1/ Does not include trust departments.
2/ Private trusteed and public funds.

Source: 1860-1939 Raymond W. Goldsmith, Financial Institutions, New York, 1968.
1952-1968, Flow of Funds Accounts, 1945-1968, Washington, D.C., 1970.

## B. EQUITY SECURITIES AND THEIR ROLE IN INSTITUTIONAL PORTFOLIOS BEFORE 1952

### 1. Trends in Corporate Finance

The extent to which firms have relied on the market for corporate shares for financing has varied over time. Both the volume and the industrial composition of corporate stock outstanding in the United States over its history has reflected the rise, maturity and in some cases the decline of great American industries. The data in Table II–6 trace the growing popularity of corporate equity from the days when financial institutions were the only substantial users of the corporate form, through the growth and decline of the railroad, the later growth of other utilities, and the virtually uninterrupted growth in the share of stock outstanding representing a claim on manufacturing, mining, trade and services.

Railroads and public utilities together had almost half of the tangible assets of nonfinancial corporations at the end of the nineteenth century, but their share had declined to 40 percent by the middle of the twentieth century. The share of nonfinancial corporations in the national wealth remained around 25 percent from 1850 to 1950; increases in the use of the corporate form and in business capital formation were offset by rising household and Government capital formation.[3]

The amount of capital formation does not automatically determine the supply of new equity issues. Corporations may finance internally. While this increases the equity of existing shareowners, it does not increase the number of shares to be traded and priced. It is also possible for corporations to borrow, either through the public sale of bonds or through institutional loans, trade credit, and the like. Table II–7 summarizes this. While stocks account in value for the bulk of the issues outstanding for these corporations, they account for a much smaller fraction of the net new issues during any of the subperiods. Indeed after 1912, the most common form of external financing is not security issues at all, but is, in fact, "other debt."

In Table II–8 this is shown even more sharply during this century. Internal funds have never accounted for less than 55 percent of total sources of funds. Within the external financing category, although stock issues increased during the 1920's (and were the only positive external issue in the 1930's as debt was retired, defaulted, *etc.*), this has generally been a financing medium of declining popularity. Table II–7 showed that both corporate stock outstanding and net new issues declined relative to GNP from 1929 until well into the 1950's. Table II–8 indicated that the share of these funds devoted to the financing of the acquisition of tangible assets declined (with a rather extreme interruption in the securities retirement era of the 1930's) until after 1945. The next chapter will demonstrate, however, that since 1952 the trend in this ratio has been generally upward; only in a few years is it as low as in most of the early years of this century. In the nineteenth century the growing industries had engaged in more external financing, and there was relatively more corporate capital formation to be financed.

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[3] See *NBER Report,* Chapter 2, secs. 1, 2a.

Although stock issues serve as only a minor vehicle for attracting inflows of funds to financial institutions other than investment companies, such stocks were quite important as a component of stock outstanding until the late nineteenth century, as Table II–9 demonstrates. Although now small in relation to the stock of nonfinancial corporations outstanding, these securities do constitute an investment vehicle for both individuals and institutions. Foreign issues are also available for acquisition by domestic institutions and individuals, and there are also foreign holders of the securities issued by U.S. corporations. During this period, however, with the exception of Canadian issues, the role of foreign stocks in the U.S. markets was negligible; nor were foreign investors a significant element in the market.

Table II-6

Industrial Distribution of Corporate Stock Outstanding 1835-1949

(percent)

| | 1835 (1) | 1871 (2) | 1900 (3) | 1929 (4) | 1949 (5) |
|---|---|---|---|---|---|
| 1. Railroads | 2 | 19 | 39 | 6 | 3 |
| 2. Other transportation Gas and electricity | 7 | 9 | 7 | 11 | 10 |
| 3. Banks and insurance | 64 | 26 | 20 | 11 | 8 |
| 4. Manufacturing and mining Trade and services | 27 | 46 | 34 | 72 | 79 |
| 5. Total | 100 | 100 | 100 | 100 | 100 |

SOURCE: Adapted from Table 2-4 of NBER Report.

Table II-7

The Supply of Stock of Nonfinancial Corporations, 1840-1952

| | Issues Outstanding[1] | | | | Net Issues[2] | | | | Issues Outstdg. | | Net Issues | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Stocks | Bonds | Other Debt | Total | Stocks | Bonds | Other Debt | Total | Stocks | Total | Stocks |
| | Billions of Dollars | | | | | | | | Percent of GNP | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) |
| 1840 | 0.3 | 0.1 | 0.1 | 0.1 | | | | | 18 | 6 | | |
| 1860 | 1.5 | 0.7 | 0.5 | 0.3 | 1.1 | 0.5 | 0.4 | 0.2 | 39 | 18 | 2.0 | 0.9 |
| 1880 | 9.0 | 4.0 | 3.0 | 2.0 | 7.2 | 3.0 | 2.5 | 1.8 | 86 | 38 | 5.0 | 2.0 |
| 1900 | 26.2 | 11.2 | 7.1 | 7.9 | 15.0 | 5.0 | 4.1 | 5.9 | 132 | 56 | 5.6 | 1.9 |
| 1912 | 65.2 | 32.0 | 18.1 | 15.1 | 23.0 | 4.8 | 11.0 | 7.2 | 182 | 89 | 7.0 | 1.5 |
| 1922 | 129.5 | 65.1 | 24.5 | 39.9 | 37.6 | 6.4 | 6.4 | 24.8 | 175 | 88 | 6.0 | 1.0 |
| 1929 | 261.0 | 164.7 | 36.3 | 60.0 | 42.5 | 10.6 | 11.8 | 20.1 | 253 | 160 | 6.4 | 1.6 |
| 1939 | 155.2 | 89.2 | 31.4 | 34.6 | -26.4 | 3.8 | -4.9 | -25.4 | 171 | 100 | -3.4 | 0.5 |
| 1945 | 218.4 | 130.2 | 23.6 | 64.6 | 19.6 | 1.8 | -7.8 | 30.0 | 103 | 61 | 2.0 | 0.2 |
| 1952 | 361.8 | 193.1 | 44.1 | 124.6 | 90.7 | 10.2 | 20.5 | 60.0 | 105 | 56 | 4.7 | 0.5 |

1 Market value for stock; face value for debt.

2 Net issues cumulated over period ending with year indicated.

Source: Adapted from Table 2-2 of NBER Report.

Table II-8

Sources of Funds of Nonfinancial Corporations, 1901-1952

| | 1901 to 1912 (1) | 1913 to 1922 (2) | 1923 to 1929 (3) | 1930 to 1939 (4) | 1940 to 1945 (5) | 1946 to 1952 (6) | 1901 to 1952 (7) |
|---|---|---|---|---|---|---|---|
| I. Total sources of funds ($ bill.) | | | | | | | |
| 1. Period total | 40.0 | 76.1 | 86.1 | 28.3 | 75.4 | 201.8 | 507.7 |
| 2. Annual average | 3.3 | 7.6 | 12.3 | 2.8 | 12.6 | 28.8 | 9.8 |
| II. Individual Sources (%) | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1. Internal sources | 55 | 60 | 55 | 114 | 80 | 58 | 64 |
| a. Ret. profits | 22 | 27 | 17 | -71 | 32 | 31 | 22 |
| b. Capital cons. allowances | 34 | 34 | 37 | 184 | 49 | 27 | 42 |
| 2. External sources (net) | 45 | 40 | 45 | -14 | 20 | 42 | 36 |
| a. Borrowing (excl. b) | 10 | 20 | 12 | -32 | 20 | 27 | 18 |
| b. Bonds and notes | 21 | 9 | 14 | -1 | -5 | 10 | 9 |
| c. Stock | 14 | 11 | 19 | 19 | 5 | 5 | 10 |
| III. Gross capital expenditures | 26.1 | 49.4 | 51.1 | 31.2 | 40.9 | 149.1 | 347.8 |
| $ Billion | 65 | 65 | 59 | 110 | 54 | 74 | 69 |
| Percent of I-1. | | | | | | | |

Source: Adapted from Table 2-3 of NBER Report.

Table II-9

The Supply of Stock of Financial Institutions, 1840-1952

($ billion)

| | Total (1) | Federal Reserve Banks 1/ (2) | Commercial Banks 2/ (3) | Property ins. cos. 2/ (4) | Federal Home Loan Banks 1/ (5) | Investment Cos. 3/ Open end (6) | Investment Cos. 3/ Other (7) | Total p.c. of stock of non-financial corporations 2/ (8) |
|---|---|---|---|---|---|---|---|---|
| 1840 | .33 | - | .29 | .04 | - | - | - | 330 |
| 1860 | .49 | - | .42 | .07 | - | - | - | 70 |
| 1880 | 1.00 | - | .90 | .10 | - | - | - | 25 |
| 1900 | 2.70 | - | 2.40 | .30 | - | - | - | 24 |
| 1912 | 6.00 | - | 5.00 | . | - | - | - | 19 |
| 1922 | 11.00 | .33 | 9.20 | . | - | - | - | 17 |
| 1929 | 22.00 | .45 | 15.80 | 3.10 | - | .13 | 2.52 | 13 |
| 1939 | 10.90 | .35 | 6.10 | 2.80 | .17 | .53 | .95 | 12 |
| 1945 | 16.47 | .59 | 9.30 | 3.80 | .20 | 1.30 | 1.28 | 13 |
| 1949 | 17.69 | .83 | 8.20 | 4.20 | .23 | 3.10 | 1.13 | 13 |
| 1952 | 26.36 | .97 | 13.00 | 6.00 | .32 | 3.90 | 2.17 | 14 |

1/ Book value.
2/ Market value.
3/ Assets of companies.

Source: Adapted from Table 2-5 of NBER Report.

## 2. Sources of Funds for Financial Institutions

Institutions finance their own acquisition of claims on and equities in nonfinancial businesses, households, and governments, by issuing liabilities with risk and maturity characteristics more desirable from the point of view of these same nonfinancial asset holders than are the securities in the intermediary's own portfolio. The first institutions to develop were, of course, banks and insurance companies. Commercial banks attract funds in the form of both demand and time deposits; the former are money, the latter constitute for the holder a highly liquid but interest-bearing asset. Thrift and insurance organizations grew up as devices to channel the savings of small investors; investment companies, finance companies, brokers, investment bankers and other specialized financial institutions grew up as the need arose for their services and the opportunity to profit by filling that need presented itself.

Table II–10 traces some of these inflows into financial institutions. The inflows are scaled in all cases by gross national product.[4] The money stock rose rapidly relative to GNP during 1913–1922 and during 1940–1945. During both of these periods the country was financing a war, and the first period included, in addition, the creation of the Federal Reserve System. The inflows from household accumulation of time deposits, pension, and insurance claims increased from one to four percent of GNP over the period 1860–1929. Although the ratio dropped during the depressed 1930's, the funds committed to such assets again increased relative to GNP after World War II. This seems to have reflected a definite commitment of funds to this form of financial savings on the part of households, since neither the personal savings rate nor the share of disposable income in GNP exhibited much of a trend in this direction over the period.[5] During this time pension funds and life insurance companies were growing in importance, while in the earlier years, at least, mutual savings banks were not yet in the steady state that would characterize their later years.

The last column in this table indicates the extent to which the inflows represented by additions to the money supply, to time deposits, and to claims on insurance and pension organizations account for total inflows into all financial institutions. This has usually been quite large, though during the 1920's the growth of finance companies, investment companies, and the activities of brokerage houses made these institutions more attractive outlets for financial asset accumulation that the more traditional claims discussed above. A similar development has occurred since 1965; investment company shares have become more popular, and interest rates have been high enough to encourage the disintermediation which strikes deposits at thrift institutions particularly heavily.

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[4] This scale factor relates the growth of additions to the stock of the claims on financial institutions to the growth of the economy as a whole.

[5] See *NBER Report,* Chapter 2, sec. 3, *passim.*

Table II-10

Determinants of Growth of Assets of All Financial Institutions in the United States 1861 - 1952

(Percent of gross national product)

| | Net Issues of | | | | Change in assets of all financial institutions[4] (5) | (4) as percent of (5) (6) |
|---|---|---|---|---|---|---|
| | Money[1] (1) | Commercial bank time deposits[2] (2) | Thrift & insurance organizations[3] (3) | Total (4) | | |
| 1861-1880 | 0.7 | 0.1 | 0.9 | 1.7 | 2.3 | .74 |
| 1881-1900 | 1.4 | 0.4 | 1.3 | 3.1 | 4.2 | .74 |
| 1901-1912 | 1.4 | 1.1 | 1.7 | 4.2 | 5.2 | .81 |
| 1913-1922 | 1.9 | 1.4 | 1.7 | 5.0 | 7.5 | .67 |
| 1923-1929 | 0.5 | 1.0 | 3.2 | 4.7 | 8.0 | .59 |
| 1930-1939 | 1.3 | -0.5 | 2.5 | 3.2 | 4.3 | .74 |
| 1940-1945 | 6.7 | 1.5 | 5.1 | 13.3 | 19.4 | .69 |
| 1946-1952 | 1.3 | 0.5 | 4.7 | 6.5 | 7.0 | .93 |

[1]Bank notes held by public plus adjusted demand deposits (from 1880 M. Friedman and A. J. Schwartz, A Monetary History of the United States, 1867 1960, New York, NBER, 1963, pp. 704 ff.); rough estimates for 1860.

[2]Time deposits in commercial banks (loc. cit.).

[3]Increase in total assets of mutual savings banks, postal savings system, saving and loan associations, credit unions, and all insurance and pension organizations, (Financial Intermediaries, pp. 73-74 and rough estimates for 1861-1900.)

[4]Loc. cit.; excludes personal trust departments and holding companies.

Source: Adapted from Table 2-6 of NBER Report.

### 3. The Stock Portfolios of Financial Institutions

Tables II–11 and II–12 present information on the size of the holdings of corporate stock by the various financial institutions important in this market and the importance of this stock in the portfolios of the several types of institutions.

*a. Commercial banks*

As we have seen, commercial banks, even excluding their trust departments, are the largest institutional group in terms of assets, though stock has never been one of the major components of their own portfolios nor have they been important holders of stock. National banks may not, and state banks generally do not hold corporate stock, though state banking regulations on this matter vary. Before 1939, from one to one and one-half percent of their portfolios consisted of the stock of operating affiliates, whether actual or potential; despite the size of bank assets, this modest commitment to stock gave them only a negligible share of stock outstanding even then, and their significance in the market for corporate equities is even less now. (As administrators of trust assets, of course, their role in this market is considerable.)

*b. Mutual savings banks*

In the late nineteenth century, mutual savings banks held from three to five percent of their assets in the form of stocks. These holdings were heavily concentrated in commercial bank stocks, and they held at this time about three to four percent of the bank stock then outstanding. These holdings were especially concentrated in the shares of banks in states where mutual savings banks were active. From 1900 until 1922, though their stock portfolio stayed constant, their assets trebled; thus by 1929 only .78 percent of their portfolio was invested in stocks, and their share of outstanding bank stock was down to one percent. During the 1930's and 1940's both their share of bank stock and the importance of stock in their portfolios again increased. Thus by 1952 1.3 percent of their assets consisted of stock, and they held about 2.2 percent of outstanding bank stock.

*c. Life insurance companies*

Statutory requirements on the investment policies of life insurance companies were not too strict before 1905. Until 1880, however, only two percent of their portfolio consisted of the shares which they held of railroad and bank stock. Between 1880 and 1905 they were devoting six percent of their portfolio to the shares of railroads, banks, and public utilities. However, the Armstrong Commission investigation led to severe restrictions on the stock holdings of companies operating in New York State; thus by 1922 only one percent of their insurance portfolio was devoted to corporate equities. From the late 1920's on, their stock portfolio grew, but stocks accounted for only three percent of their portfolio by 1952. There was a slight change in emphasis from yield to appreciation apparent in the switch in acquisitions from preferred to common after World War II. However, corporate equities were never a significant item in the portfolios of life insurance companies during this period, even when they were free to acquire them.

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*d. Property-liability insurance companies*

The situation is somewhat different for property-liability insurance companies. They were under no investment restrictions; they had liabilities of only intermediate length as distinct from life companies, and they did not have the incentive that deposit institutions would have to hold relatively liquid assets. In 1860 almost a quarter of their portfolio was held in the form of stock, primarily bank stock. This gave these companies control of about one percent of total stock outstanding and about three or four percent of bank stock outstanding. By 1900 they had substituted railroad for bank stock. The share of corporate stock in property insurance portfolios exhibited little trend over the period, though there were price fluctuations which caused some variation around its 25 to 30 percent range. The rapid increase in their holdings during the 1920's reflected both price appreciation and heavy net purchasing; the latter continued in the 1930's as well. Again as distinct from the practice of life insurance companies, preferred stock was much less important than was common stock as an asset throughout the period.

*e. Investment companies*

Investment companies, so much a feature of the financial scene today, were of only minor importance until the 1920's when closed-end companies became vehicles for diversification and participation in the booming stock market of the period; many of the companies did not survive the depression. Although the now common mutual funds made their appearance during this era, the industry as a whole stagnated until well after World War II. Their assets have almost always consisted largely of corporate stock; at times, such as in the late 1920's, they have come to exert a considerable influence in the market for corporate shares. Common stock has always been predominant; preferred stock has declined in importance in their portfolios, as have railroad shares. Most of their holdings were in industrial stocks; holdings of utility and financial stocks each constituted about ten percent of their stock portfolios. There was some participation in the market for Canadian shares in the late 1920's, but serious interest in foreign securities began only in the mid-1950's. Both law and their own custom have kept the portfolios of most investment companies fairly diversified.

*f. Private uninsured pension funds*

Until after World War II, private uninsured pension funds were not significant as a form of institutional portfolio; even by 1952 their holdings of stocks were relatively small in comparison with those of other major institutional holders. Although stock represented only about 11 percent of their assets in 1945, 20 percent has been the more common figure over the period. Again, one can observe a switch out of preferred and into common stock over the period.

*g. Bank administered personal trusts*

Bank trust departments have always been the largest administrators of personal trusts. By 1900 the stock portfolios which had been entrusted to them by the large estates which had been accumulated in the nineteenth century gave them control over almost twice as much stock as that held by all other institutions together. The portfolio policy of a trustee is, of course, limited by fiduciary rules in general, and by

the particular agreement setting up the trust in question. Although the importance of stock in the portfolios of trusts increased, this phenomenon was not attributable so much to the investment policies of bank trust department portfolio managers as to the general temporal pattern of stock prices and the composition of the portfolios which passed into their control. Stock holdings were and are rather concentrated among the wealthy; these same accumulators of large fortunes were more likely to set up trusts; and the movements in the share of stock in the portfolios of personal trusts can be readily explained by these facts and by the movement of stock prices over the period.[6]

The portion of the personal trust accounts which are represented by common trust funds is small. Information on them is somewhat more plentiful than it is for the entire category of personal trusts, however. Like mutual funds, they are a means of pooling the assets of many small accounts in an effort to achieve some advantages of scale and diversification; unlike mutual funds, units of participation may not be sold. Because the manager's investment decisions are not so much circumscribed by the trust agreement as in the case of separate trust accounts (although there are specialized types of common trust funds), movements in the share of the portfolio committed to stock may be more indicative of changes in the trust department's investment policies. They shifted from equal shares of common and preferred to a much greater reliance on common stock. Their stock portfolios constituted a somewhat larger fraction of their assets than was the case for personal trusts in general.

*h. Other institutions*

Other institutions are not discussed in detail in the *NBER Report*, either because their participation in the equity market was so limited or because there exists virtually no information on which to base the discussion. Two examples of the latter are broker-dealers and investment advisors. The latter give portfolio management and advice, either alone or in combination with investment banking, brokerage, and other financial services. They are rather like bank trustees in that they manage but do they not own; however, there is no trustee relationship. They may have profit sharing contracts with the owner of the portfolio, and they generally do not have physical custody of the securities. They manage portfolios for both institutions and individuals. In 1939 such individual accounts had about $1½ billion worth of stock.

To summarize briefly, there is a pattern of growing institutional interest in corporate shares. However, the institutional composition of this growth in the stock holdings of financial institutions is by no means constant over time. Different institutions grew up at different times, and their portfolio policies shifted in response to different classes of events. All did become active purchasers during the 1920's and in the immediate post-World War II period. In general, there was some substitution of common stocks for preferred as the equity component of institutional portfolios. The next section will examine the implications of these developments for the market for corporate stock.

[6] The Standard and Poor's 500 stock index had regained its 1929 value by the early 1950's. See the *NBER Report*, Chapter 2, sec. 4.h, *passim*.

Table II-11

Financial Institutions' Holdings of Corporate Stock, 1860-1952

($ million)

| | Comm. Banks[1] (1) | Mutual Svngs. Banks (2) | Life Ins. Cos. (3) | Prop. Ins. Cos. (4) | Priv. Pens. Funds (5) | Inv. Cos. (6) | Comm. Trust Funds (7) | Total (1)-(7) (8) | Pers. Trust Funds (9) | Total (10) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | I. All Stock | | | | | |
| 1860 | 10 | | | 18 | | | | 28 | | |
| 1880 | 30 | 40 | | 25 | | | | 95 | | |
| 1900 | 103 | 43[3] | 62 | 122 | | | | 330 | 600 | 930 |
| 1912 | 284 | 41 | 84 | 231 | | | | 640 | 2,450 | 3,090 |
| 1922 | 401 | 48 | 75 | 370 | 18 | 69 | | 981 | 6,300 | 7,281 |
| 1929 | 1,009 | 77 | 352 | 1,511 | 100 | 2,189 | 12 | 5,250 | 12,600 | 17,850 |
| 1935 | 473 | 136 | 568 | 1,457 | 210 | 1,204 | 25 | 4,073 | 12,950 | 17,023 |
| 1945 | 220 | 166 | 1,000 | 2,415 | 289 | 1,977[4] | 70 | 6,137 | 18,000 | 24,137 |
| 1952 | 150 | 336 | 2,450 | 4,320 | 1,964 | 6,580 | 579 | 16,379 | 25,000 | 41,379 |
| | | | | | II. Common Stock | | | | | |
| 1860 | 10 | | | | | | | | | |
| 1880 | 30 | 40 | | | | | | | | |
| 1900 | 103 | 43 | 54 | 93 | | | | 293 | | |
| 1912 | 284 | 41 | 72 | 186 | | | | 583 | | |
| 1922 | 401 | 48 | 59 | 275 | 11[2] | 57 | | 851 | | |
| 1929 | 1,009 | 77 | 97 | 1,235 | 60[2] | 1,998 | 6 | 4,482 | | |
| 1935 | 473 | 136 | 133 | 1,127 | 126[2] | 1,132 | 16 | 3,143 | | |
| 1945 | 220 | 166 | 180 | 1,932 | 195 | 1,776[4] | 42 | 4,511 | | |
| 1952 | 150 | 336 | 960 | 3,520 | 1,550 | 6,290 | 441 | 13,247 | | |
| | | | | | III. Preferred Stock | | | | | |
| 1860 | | | | | | | | | | |
| 1880 | | | | | | | | | | |
| 1900 | | | 8 | 29 | | | | 37 | | |
| 1912 | | | 12 | 45 | | | | 57 | | |
| 1922 | | | 16 | 95 | 7[2] | 12 | | 130 | | |
| 1929 | | | 255 | 276 | 40[2] | 191 | 6 | 768 | | |
| 1935 | | | 435 | 330 | 84[2] | 72 | 9 | 930 | | |
| 1945 | | | 820 | 483 | 94 | 201[4] | 28 | 1,626 | | |
| 1952 | | | 1,490 | 800 | 414 | 290 | 138 | 3,132 | | |

Source: Adapted from Table 2-18 of NBER Report.

1/ Excluding stock of Federal Reserve Bank. Does not include trust accounts.
2/ Breakdown of preferred and common stock: 40% of total = preferred; 60% of total = common.
3/ An alternative figure (83) has been estimated based on figures for 6 main states (New York, Massachusetts, Connecticut, Maine, New Hampshire, and Rhode Island) taken from reports of their bank supervisory authorities.
4/ Alternative figures, 250 for preferred stock and 2,650 for common stock, can be found in Studies in the National Balance Sheet, pp. 168-69.

Table II-12

Share of Stock in Assets of Financial Institutions, 1860-1952

| | Comm. Banks (1) | Mutual Savings Banks (2) | Life Ins. Cos. (3) | Prop. Ins. Cos. (4) | Priv. Pens. Funds (5) | Inv. Cos. (6) | Comm. Trust Funds (7) | All (1)-(7) (8) | Pers. Trust (9) | All Institutions (10) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | I. All Stock | | | | | |
| 1860 | 1.20 | | 2.30 | 22.80 | | | | | | |
| 1880 | 1.10 | 4.52 | 1.50 | 11.50 | | | | | | |
| 1900 | 1.03 | 1.77 | 3.56 | 25.68 | | | | 2.25 | 20.00 | 5.27 |
| 1912 | 1.30 | 1.02 | 1.91 | 23.50 | | | | 2.05 | 35.00 | 8.08 |
| 1922 | .84 | .73 | .87 | 16.02 | 20.00 | 69.00 | | 1.50 | 35.00 | 8.88 |
| 1929 | 1.52 | .78 | 2.01 | 32.65 | 20.00 | 74.56 | 57.14 | 5.16 | 42.00 | 13.69 |
| 1939 | .71 | 1.15 | 1.94 | 30.45 | 20.00 | 85.51 | 50.00 | 3.55 | 37.00 | 11.46 |
| 1945 | .14 | .98 | 2.23 | 31.83 | 10.77 | 82.44 | 46.67 | 2.61 | 40.00 | 8.68 |
| 1952 | .08 | 1.33 | 3.30 | 26.87 | 20.62 | 84.79 | 52.64 | 5.06 | 41.67 | 10.83 |
| | | | | | II. Common Stock | | | | | |
| 1900 | 1.03 | 1.77 | 3.10 | 19.58 | | | | 1.66 | | |
| 1912 | 1.30 | 1.02 | 1.63 | 18.92 | | | | 1.53 | | |
| 1922 | .84 | .73 | .68 | 11.91 | 12.22 | 57.00 | | 1.02 | | |
| 1929 | 1.52 | .78 | .55 | 26.69 | 12.00 | 68.05 | 28.57 | 3.40 | | |
| 1939 | .71 | 1.15 | .45 | 23.55 | 12.00 | 80.40 | 32.00 | 2.10 | | |
| 1945 | .14 | .98 | .40 | 25.46 | 7.27 | 74.06 | 28.00 | 1.61 | | |
| 1952 | .08 | 1.33 | 1.29 | 21.89 | 16.28 | 81.06 | 40.09 | 3.45 | | |
| | | | | | III. Preferred Stock | | | | | |
| 1900 | | | .46 | 6.11 | | | | .21 | | |
| 1912 | | | .27 | 4.58 | | | | .15 | | |
| 1922 | | | .18 | 4.11 | 7.78 | .12 | | .16 | | |
| 1929 | | | 1.46 | 5.96 | 8.00 | 6.51 | 28.57 | .58 | | |
| 1939 | | | 1.49 | 6.90 | 8.00 | 5.11 | 18.00 | .62 | | |
| 1945 | | | 1.83 | 6.37 | 3.51 | 8.38 | 18.67 | .58 | | |
| 1952 | | | 2.01 | 4.98 | 4.35 | 3.74 | 12.55 | .82 | | |

[1] Excluding stock of Federal Reserve Bank. Does not include trust accts.

Source: Adapted from Table 2-19 of NBER Report.

C. INSTITUTIONS AND THE STOCK MARKET, 1860–1952: A SUMMARY

In the first half of this century the issuance of equity securities was never a major source of financing or even a major source of external financing for U.S. corporations.[7] New issues constitute a small fraction of the amount outstanding in any year; thus the role of institutions or individuals in the equity financing of corporate business is more likely to take the form of participation in the secondary market. Trading in existing securities does permit investors to change the composition of their portfolios so as to be able to acquire new issues in excess of their inflows of new money. The valuations placed on the corporation's earnings by the securities markets also determine the terms on which corporations can issue new shares or add to the equity of existing shareowners by retaining earnings. In order to assess the impact of institutional shareholdings on the market for stocks and on the savings and investment decisions of the economy as a whole, one must look at their role both in terms of outstanding securities and in terms of purchases of net new issues.

A comparison of institutional net purchases and corporate net issues serves to indicate the extent to which control over outstanding shares is being passed from individuals to institutions or the reverse. Until 1945 institutions never absorbed more than 15 percent of the net issues of shares.[8] These data have little to say about the price impact of such purchases except to indicate that the supply was always incremented by a greater amount through net new issues than was institutional demand; that there was greater institutional participation in the 1923–1929 boom period, particularly among investment companies, than either before or after until 1945; and that another relatively high institutional demand occurred during the low issue years of World War II.

In the immediate post-war period, however, institutional net purchases amounted to almost 40 percent of corporate net issues; investment companies, pension funds and life insurance companies contributed to the demand in almost equal degrees. Net issues, while higher than they had been during the depression and war, were less than they had been during the 1920's.

Despite the rising share of institutional purchases in the increment to the value of corporate shares outstanding, institutional holdings *per se* were not so large as to give them general dominance of the secondary market. The holdings of institutions other than personal trust funds actually declined as a percentage of the value of all stock outstanding from 1860 until 1922, the rate of decrease in the early years of this century being more impressive than that for the late nineteenth century. Reasons for this are several in number. Commercial banks and mutual savings banks had begun to lose interest in stocks; life insurance companies were constrained by regulation of their portfolio policies; the day of the investment company was not yet at hand; and the volume of new issues was relatively large.

[7] The fact that corporations have chosen other methods of financing may, of course, reflect difficulties which they would have experienced in selling equities as opposed to debt, rather than any real preference for the latter form of external financing.

[8] The institutional transactions do not include those of personal trusts. For personal trusts, however, the changes in holdings which do not reflect capital gains are more likely to reflect transfers from owner to trustee rather than purchases.

The stock market boom of the 1920's was accompanied by a rather dramatic increase in the institutional share of the market, as investment companies in particular increased their holdings. The increases of the depression and war years reflected the relatively low volume of new issues during the period as well as a policy of acquisition on the part of property insurance companies, investment companies, and pension funds. Immediately after World War II the growth in institutional shareholdings again was considerable; it resulted from the large relative growth of institutional types with heavy commitments to stocks and from an apparent shift in the investment policies of insurance companies. The estimates for personal trust funds are of questionable reliability; if they are included, the institutional share is, of course, larger. The periods of greatest increase were the years 1880 to 1922 and the decade of the Great Depression, although the entire period showed a transfer of shareholdings from individuals to institutional management.

Institutional attention, however, has not been devoted equally to all issues. Institutions in 1949 held a larger share of stocks listed on the New York Stock Exchange than they held of stock in general. This has probably been true since the 1920's although no estimates are available to settle the issue; it was probably not the case in the nineteenth and early twentieth centuries, since there was much institutional holding of unlisted bank stocks during this period. Some individual issues are also more likely than others to have been held by institutions.

Thus, by 1952 institutions had already become a potentially important force in the stock market. This came about partly through the relative growth of institutions more heavily dependent on equities in their portfolio, and partly from apparent changes in the investment policies of institutions. In addition, corporations already had begun to rely less heavily on the equity market for new financing. Subsequent developments are examined in chapter III.

Table II-13

Net Purchases of Corporate Stock by Financial Institutions, 1897-1952

| Year | Total net issues (1) | Net purchases by: Comm. banks (2) | Mutual savings banks (3) | Life insurance cos. (4) | Property insur. cos. (5) | Pension funds (6) | Investment cos. (7) | All Fin. Insts. $ mil. (8) | All Fin. Insts. % net issues (9) |
|---|---|---|---|---|---|---|---|---|---|
| | I. All Stock | | | | | | | | |
| 1897-1900 | 981 | 55 | -5 | 15 | 54 | - | - | 119 | 12.1 |
| 1901-1912 | 7,198 | 171 | -2 | 22 | 109 | - | - | 300 | 4.2 |
| 1913-1922 | 10,727 | 115 | 7 | -9 | 139 | 13 | 13 | 278 | 2.6 |
| 1923-1929 | 23,501 | 623 | 29 | 240 | 625 | 58 | 1,994 | 3,569 | 15.2 |
| 1930-1939 | 6,564 | -535 | 59 | 228 | 270 | 51 | 396 | 469 | 7.1 |
| 1940-1945 | 4,349 | -326 | 30 | 165 | 450 | 246 | -28 | 537 | 12.3 |
| 1946-1952 | 12,700 | . | 100 | 1,300 | 600 | 1,700 | 1,360 | 5,060 | 39.8 |
| | II. Preferred Stock | | | | | | | | |
| 1897-1900 | 469 | - | - | 2 | 13 | - | - | 15 | 3.2 |
| 1901-1912 | 1014 | - | - | 4 | 16 | - | - | 20 | 2.0 |
| 1913-1922 | 2965 | - | - | 4 | 50 | 5 | 12 | 71 | 2.4 |
| 1923-1929 | 7,911 | - | - | 206 | 180 | 24 | 166 | 576 | 7.3 |
| 1930-1939 | 1,806 | - | - | 183 | 75 | 23 | -103 | 178 | 10.0 |
| 1940-1945 | 2013 | - | - | 131 | 150 | 120 | 158 | 559 | 27.8 |
| | III. Common Stock | | | | | | | | |
| 1897-1900 | 512 | 55 | -5 | 13 | 41 | - | - | 104 | 20.3 |
| 1901-1912 | 6,184 | 171 | -2 | 18 | 93 | - | - | 280 | 4.5 |
| 1913-1922 | 7,762 | 115 | 7 | -13 | 89 | 8 | 1 | 207 | 2.7 |
| 1923-1929 | 15,590 | 623 | 29 | 34 | 445 | 34 | 1,828 | 2,993 | 19.2 |
| 1930-1939 | 4,758 | -535 | 59 | 45 | 195 | 28 | 499 | 291 | 6.1 |
| 1940-1945 | 2,336 | -326 | 30 | 34 | 300 | 126 | -186 | -22 | -0.9 |

Source: Adapted from Table 2-22 of NBER Report.

Table II-14

The Share of Financial Institutions in Total Stock Outstanding, 1860-1952
(percent)

| | Comm. Banks[1] (1) | Mutual Svngs. Banks (2) | Life Ins. Cos. (3) | Prop. Ins. Cos.[2] (4) | Priv. Pens. Funds (5) | Inv. Cos. (6) | Comm. Trust Funds (7) | Total (1)-(7) (8) | Pers. Trust Funds (9) | Total (10) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | I. All Stock | | | | | | |
| 1860 | 1.30 | | | 1.50 | | | | 2.80 | | |
| 1880 | .60 | .98 | | .50 | | | | 2.08 | | |
| 1900 | .74 | .31 | .45 | .88 | | | | 2.38 | 4.32 | 6.70 |
| 1912 | .75 | .11 | .22 | .61 | | | | 1.69 | 6.45 | 8.14 |
| 1922 | .53 | .06 | .10 | .49 | .02 | .09 | | 1.29 | 8.28 | 9.57 |
| 1929 | .54 | .04 | .19 | .81 | .05 | 1.17 | .01 | 2.81 | 6.75 | 9.56 |
| 1939 | .47 | .14 | .57 | 1.46 | .21 | 1.20 | .03 | 4.08 | 12.93 | 17.01 |
| 1945 | .15 | .11 | .68 | 1.65 | .20 | 1.35 | .05 | 4.19 | 12.27 | 16.46 |
| 1952 | .07 | .15 | 1.12 | 1.97 | .90 | 3.00 | .26 | 7.47 | 11.39 | 18.86 |
| | | | | II. Common Stock | | | | | | |
| 1900 | .94 | .39 | .49 | .85 | | | | 2.67 | | |
| 1912 | .94 | .14 | .24 | .61 | | | | 1.93 | | |
| 1922 | .64 | .08 | .09 | .44 | .02 | .09 | | 1.36 | | |
| 1929 | .60 | .05 | .06 | .74 | .04 | 1.19 | .01 | 2.69 | | |
| 1939 | .55 | .16 | .15 | 1.30 | .15 | 1.31 | .02 | 3.64 | | |
| 1945 | .17 | .12 | .14 | 1.45 | .15 | 1.33 | .03 | 3.39 | | |
| 1952 | .07 | .17 | .47 | 1.73 | .76 | 3.09 | .22 | 6.51 | | |
| | | | | III. Preferred Stock | | | | | | |
| 1900 | - | - | .28 | 1.00 | | | | 1.28 | | |
| 1912 | - | - | .16 | .58 | | | | .74 | | |
| 1922 | - | - | .12 | .73 | .05 | .09 | | .99 | | |
| 1929 | - | - | 1.33 | 1.44 | .21 | .99 | .03 | 4.00 | | |
| 1939 | - | - | 3.18 | 2.41 | .61 | .53 | .07 | 6.80 | | |
| 1945 | - | - | 6.10 | 3.60 | .70 | 1.49 | .21 | 12.10 | | |
| 1952 | - | - | 9.28 | 4.98 | 2.58 | 1.81 | .86 | 19.51 | | |

[1] Excluding stock of Federal Reserve Bank. Does not include trust funds.

[2] Until 1880 only fire and marine companies.

Source: Adapted from Table 2-20 of NBER Report.

Table II-15

Institutional Holdings of All Stocks and of Stocks Listed on the New York Stock Exchange, As of End of 1949

| | Amounts | | Share in Stock Outstanding | |
|---|---|---|---|---|
| | All stocks | Stocks listed on NYSE | All stocks | Stock listed on NYSE |
| | $ bill | | per cent | |
| | (1) | (2) | (3) | (4) |
| 1. Commercial banks | 0.15[1] | . | 0.10[1] | . |
| 2. Mutual savings banks | 0.16 | 0.2 | 0.11 | 0.3 |
| 3. Life insurance cos. | 1.72 | 1.1 | 1.17 | 1.4 |
| 4. Other insurance cos. | 2.15 | 1.7 | 1.46 | 2.2 |
| 5. Corporate } pension | 0.75 | 0.5 | 0.51 | 0.7 |
| 6. Other private } pension | . | 0.0 | . | 0.0 |
| 7. State & loc.gov. } pension funds | . | 0.0 | . | 0.0 |
| 8. Federal gov. } pension funds | --- | --- | --- | --- |
| 9. Open-end } investment companies | 1.60 | 1.4 | 2.44 | 1.8 |
| 10. Closed-end } investment companies | 2.00 | 1.6 | | 2.1 |
| 11. Common trust funds | 0.25 | 0.0 | 0.16 | 0.0 |
| 12. Personal trust depts. | 20.00 | . | 13.60 | . |
| 13. Total, including (12) | 28.78 | . | 19.55 | . |
| 14. Total, excluding (12) | 8.78 | 6.5 | 5.95 | 8.5 |

[1] Excluding stock in Federal Reserve Banks.

Source:

Col. 1 Financial Intermediaries, Appendix A
Col. 2 New York Stock Exchange Research Report, January 1970
Col. 3 Col. 1 divided by $137.3 billion (Studies in the National Balance Sheet of the U.S., p. 51
Col. 4 Col. 2 divided by $76.3 billion (as in col. 2).

Adapted from Table 2-20 of NBER Report.

# CHAPTER III

# ROLE OF FINANCIAL INSTITUTIONS AS INVESTORS IN CORPORATE STOCK IN THE POST-WAR PERIOD

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# CHAPTER III

## Role of Financial Institutions as Investors in Corporate Stock in the Post-War Period

### A. OVERVIEW, 1952–1968

### 1. Introduction

This chapter is a condensation of the much more extensive treatment of financial developments since 1952 contained in the *NBER Report*, principally chapters III, IV, V, and the appendices thereto. After a brief overview of such structural changes as can be observed in the national and sectoral balance sheets, the chapter considers corporate financing patterns, household savings decisions, and the portfolio policies of financial institutions.

Chapter II concluded with the suggestion that by 1952 there were already under way several developments which, if they persisted, could lead to institutional dominance of the stock market. The remainder of section A is devoted to examining the role of institutions in the equity market within the broader framework of the shifts among sectors in the ownership of all tangible and financial assets. It also places new equity issues in the context of total credit flows within the economy over the period.

One of the phenomena which chapter II associated with the possible institutionalization of the stock market was the diminishing reliance of corporations on new equity issues as a source of funds. This financing behavior has apparently persisted; indeed corporate choices of financing vehicles seem relatively insensitive to interest rates and are much more influenced by the nonprice aspects of credit availability.[1] Section B of this chapter is addressed to these matters.

A second tendency observed in chapter II was the more rapid growth of those institutions which have a greater interest in equity securities and whose fortunes are thus more closely dependent on events in the stock market. Ultimately the rate at which a financial intermediary grows depends in large part on its ability to attract funds from savers. Thus it is necessary to explore the savings habits of households and to relate individual preferences for direct versus intermediated asset holdings to the question of institutionization of the stock market. Short-run increases in income lead to increases in the share of income devoted to the acquisition of financial assets. Higher interest rates also encourage such financial savings and, in addition, induce disintermediation when returns to direct ownership of debt rise relative to those available from indirect holdings. There has also developed a tendency for individuals

[1] *NBER Report*, ch. 4, sec. 4, *passim*.

to prefer indirect to direct equity holdings.[2] Section C of this chapter discusses household saving and asset holdings.

A third development explored in chapter II was the shift in institutional portfolio preferences toward equity holdings. This too seems to have persisted and indeed intensified, during the late 1960's. This shift appears to have been the result, in some cases, of a belated adjustment to the fact that equity yields have been considerably higher than have debt yields during the postwar period.[3] Section D gives a brief introduction to these developments which are reported on extensively in Part Two of the Study.

These three strands are brought together in a concluding section on the supply of and the demand for corporate stock; some information not available at the time the *NBER Report* was written is incorporated here.

## 2. Changes in the Composition of National Assets, 1952–1968

Tables III–1 and III–2 summarize the main features of the changes in the composition of the assets held by all domestic sectors and the shares of the major sectors in these assets. In Table III–1, assets are summed across all domestic sectors. This necessarily involves some double counting since equities (both corporate and noncorporate) are included in addition to the tangible and other assets of those business sectors which underlie this equity. These broad totals are nevertheless useful as an indication of the changing importance of various types of instruments in the economy as a whole.

Over this 16 year period covered by the chapter, tangibles declined slightly relative to financial assets. The decline in monetary reserves reflects the gold drain and other balance of payments developments. The share of money in national assets declined, while that of time deposits rose. Bonds other than those of the Federal Government remained relatively unchanged in importance, while mortgages, pension, insurance and trust claims increased.

The most dramatic increase, however, came in the share of corporate stock as a portion of national assets; indeed the market value of these securities rose more rapidly than did the value of the assets underlying them. It is therefore reasonable to ask whether such trends could persist over an indefinite period, and whether all holders have participated in this increase in values to an equal degree.

Since stock has been substituted for other assets in the portfolios of many investors, it is useful to examine also the "markets" for other instruments of particular importance in the financing of economic activity. Both bonds and "other short-term claims" are important instruments for all sectors. Financial institutions, if they are to perform their traditional function of intermediation, must obtain funds from savers; in this connection the ownership of time deposits and other short-term claims should be examined.

Despite the rapid growth of the economy during the postwar period and the marked increases in the prices of real estate and of corporate stock, Table III–2 indicates that there have been only minor changes in the distribution of these assets among sectors. The share of non-

[2] *NBER Report*, ch. 5, sec. 2.b.7.
[3] *NBER Report*, ch. 5, sec. 3.h.

financial business in national assets declined slightly, mainly as a result of the declining share of agriculture in tangible assets; the assets of financial business grew somewhat relative to the total, as did those of state and local governments.

Household holdings of short-term claims increased relative to the total, while business holdings of liquid assets declined; the household holdings are heavily concentrated in time deposits, a liquid asset which increased its share of national assets over the period. The institutionalization already established in the markets for long-term debt is reflected in the continued growth of the share of financial institutions in long-term claims. Households hold a declining share of all bonds outstanding, while financial institutions have absorbed an increasing share. This was particularly true with respect to corporate bonds, although the disintermediation of recent years has reversed this process somewhat. Table III–2 also reflects the fact that long-term U.S. Government securities have declined in importance, while the issues of financial institutions have grown most rapidly.

Financial institutions as issuers account for an increasing portion of corporate shares outstanding as well; investment company shares constitute 20 to 30 percent of the outstanding stock of financial institutions, the share rising over the period. Even if the value of investment company shares is subtracted from both the amount outstanding and from household holdings, however, the results are little changed. There has been some shift from direct to intermediated holding of shares on the part of households, but it does not appear that financial institutions are likely to reduce household holdings of such instruments to negligible amounts.

With respect to short-term claims, it appears that financial institutions managed to attract time deposits to a considerable extent by the use of certificates of deposit and other instruments attractive to nonhouseholds. While households still are the major holders of time deposits, other sectors as well have channeled increasing amounts of funds to financial institutions in this form. Other forms of short-term claims include bank and other loans, consumer credit, security credit, taxes payable, and trade credit. Households, corporations, and financial institutions are the heaviest users of these sources of funds.

An examination of sectoral balance sheets [4] as well as of total national assets over the period indicates that financial assets increased more rapidly than did real assets both in total and for most sectors; that financial institutions hold an increasing share of these assets, and, in particular, that they hold increasing shares of those assets whose relative importance is increasing. They have acquired the funds to do so in large measure from households which have elected to hold time deposits and claims on personal trusts and on life insurance and pension reserves.

Over the same period, corporate shares replaced proprietor's equity as the major equity investment of households. Tangible assets grew more rapidly in the corporate than in the noncorporate sector, but the value of shares grew even more rapidly. In order to discover possible links between the growth of financial institutions and the rapid appreciation in the value of corporate shares during the 1960's, it is neces-

[4] See *NBER Report*, ch. 3, Table 3–17 and appendix I.

sary to examine transactions in real and financial assets during the period.

### 3. Flows Through Credit Markets

The flow of funds statistic, "funds raised in credit markets," measures the utilization of securities issues and other sources of short- and long-term credit in the financing of households, government, nonfinancial business, and the rest of the world. Some of this financing is provided without intermediation, as nonfinancial sectors buy financial instruments directly; the rest is provided by financial intermediaries. As can be seen in Table III–3, the share of capital market instruments other than the debt of the United States Government has fallen throughout the postwar period. The portion represented by corporate equity issues has fallen even more radically, while that represented by bank loans and other short-term paper has increased. Corporate absorption of these credit market funds at first decreased from 1952–1965 then increased during the period 1965–1968.

The share of financial institutions in the supply of funds to nonfinancial sectors has increased slightly over the period, but its composition has altered radically. Aside from a declining role for the federally sponsored agencies and an increasing fraction of the total credit flow being accounted for by the Federal Reserve's purchases of U.S. Government securities, the major phenomenon has been the shift from nonbank to bank finance as a source of funds.

Besides the disintermediation experienced by thrift institutions in recent years, the major decline in the role of the nonbank financial institutions has come about as a result of first, the declining role of insurance companies as suppliers of funds to credit markets, and second, the increasing negative net contribution of finance "not elsewhere classified." In the case of the latter institutions, the issues of investment company shares, the security credit extended to broker dealers, and the borrowing of finance companies in both long- and short-term debt markets have absorbed more funds than these same institutions have supplied to these markets.

Private domestic nonfinancial sectors have supplied a declining share of this financing. The only seeming break in this pattern occurs in the late 1960's, a period of rising interest rates and considerable disintermediation, as thrift institutions in particular were unable to retain deposits. This is clearly reflected in the movements between time deposits and net purchases of credit market instruments.

To summarize, the share of funds raised in credit markets accounted for by equity and long-term debt issues, the "capital market instruments" of Table III–3, has declined steadily over the postwar period. Bank loans and other short-term credit have provided an increasing share of financing. Thus the role of the commercial banking system in supplying credit has grown while that of nonbank financial institutions has been reduced relatively.

Table III-1

TOTAL ASSETS, ALL DOMESTIC SECTORS
(In Percent)

| | 1952 | 1960 | 1968 |
|---|---|---|---|
| Tangible Assets | 44.4 | 44.8 | 41.4 |
| Land | 7.9 | 10.0 | 9.6 |
| Structures | 23.0 | 22.4 | 20.7 |
| Equipment | 9.1 | 8.9 | 8.2 |
| Inventories | 4.4 | 3.6 | 2.9 |
| Financial Assets | 55.6 | 55.2 | 58.6 |
| Monetary Reserves[1/] | 1.2 | 0.6 | 0.3 |
| Currency and demand deposits | 5.4 | 3.6 | 2.8 |
| Short term claims | 13.3 | 13.6 | 15.3 |
| Time deposits | 3.3 | 4.2 | 5.4 |
| Treasury securities | 2.4 | 1.9 | 1.5 |
| Other[2/] | 7.6 | 7.5 | 8.4 |
| Long term claims | 18.5 | 18.6 | 18.1 |
| Bonds | 9.4 | 7.6 | 6.4 |
| U.S. Government | 6.3 | 3.7 | 2.5 |
| Other govt. | 1.2 | 1.7 | 1.7 |
| Corporate and foreign | 2.0 | 2.2 | 2.3 |
| Mortgages | 3.6 | 5.0 | 5.3 |
| Other[3/] | 5.4 | 6.1 | 6.3 |
| Equity in unincorporated business[4/] | 8.3 | 6.4 | 5.3 |
| Corporate shares | 7.4 | 10.6 | 14.9 |
| Investment company | 0.3 | 0.6 | 0.9 |
| Other | 7.1 | 10.0 | 14.0 |
| Miscellaneous Assets[5/] | 1.5 | 1.8 | 1.9 |
| Total Assets (percent) | 100.0 | 100.0 | 100.0 |
| Total Assets (in $ billion) | 2514 | 4143 | 7428 |

1/ Gold, foreign exhcnage, and treasury currency.
2/ Bank loans n.e.c., other loans, trade credit, consumer credit, taxes payable, and interbank items.
3/ Claims on life insurance, pensions, and personal trusts.
4/ New worth of farm and nonfarm unincorporated business.
5/ Includes direct investment.

Source: NBER Report, Appendix I, Table IB-1

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Table III-2

Distribution of National Assets and Chief Components Among Main Sectors; 1952, 1960 and 1968

All Domestic Sectors = 100

| | Household (1) | Nonprofit Institutions (2) | Nonfinancial Business | | | | Government | | Financial Institutions (9) |
|---|---|---|---|---|---|---|---|---|---|
| | | | Total (3) | Corporations (4) | Unincorporated Agriculture (5) | Unincorporated Other (6) | Federal (7) | State and Local (8) | |
| I. Total Assets | | | | | | | | | |
| 1952 | 43.9 | 1.3 | 25.6 | 16.2 | 5.8 | 3.6 | 4.9 | 6.2 | 17.8 |
| 1960 | 43.1 | 1.6 | 23.5 | 15.8 | 4.5 | 3.2 | 4.2 | 7.2 | 18.2 |
| 1968 | 45.4 | 1.7 | 21.9 | 15.1 | 3.7 | 3.1 | 3.5 | 7.8 | 19.7 |
| II. Tangible Assets | | | | | | | | | |
| 1952 | 34.6 | 2.1 | 44.2 | 25.2 | 12.4 | 6.6 | 6.5 | 12.1 | 0.5 |
| 1960 | 36.2 | 2.4 | 39.8 | 24.1 | 9.7 | 6.1 | 6.4 | 14.4 | 0.7 |
| 1968 | 34.2 | 2.8 | 39.8 | 24.6 | 8.6 | 6.6 | 5.4 | 16.8 | 0.9 |
| 1. Land | | | | | | | | | |
| 1952 | 29.4 | 3.2 | 49.8 | 10.6 | 33.8 | 5.4 | 5.4 | 11.9 | 0.3 |
| 1960 | 36.1 | 3.6 | 40.6 | 13.6 | 22.6 | 4.4 | 4.5 | 14.7 | 0.6 |
| 1968 | 35.1 | 4.0 | 39.8 | 14.4 | 21.3 | 4.1 | 4.7 | 15.5 | 1.0 |
| 2. Reproducible Assets | | | | | | | | | |
| 1952 | 35.8 | 1.8 | 43.0 | 28.4 | 7.7 | 6.9 | 6.7 | 12.2 | 0.5 |
| 1960 | 36.3 | 2.1 | 39.6 | 27.1 | 6.0 | 6.5 | 7.0 | 14.3 | 0.8 |
| 1968 | 33.9 | 2.5 | 39.9 | 27.7 | 4.8 | 7.4 | 5.6 | 17.2 | 0.9 |
| III. Financial Assets | | | | | | | | | |
| 1952 | 51.3 | 0.7 | 10.8 | 9.0 | 0.6 | 1.2 | 3.6 | 1.5 | 31.6 |
| 1960 | 52.2 | 0.9 | 10.3 | 9.0 | 0.3 | 0.9 | 2.4 | 1.3 | 32.3 |
| 1968 | 53.2 | 0.9 | 9.0 | 8.2 | 0.2 | 0.2 | 2.1 | 1.4 | 32.9 |
| 1. Short Term Claims | | | | | | | | | |
| 1952 | 28.9 | 0.0 | 24.1 | 19.8 | 1.4 | 2.9 | 9.2 | 2.3 | 34.2 |
| 1960 | 32.0 | 0.0 | 25.0 | 21.8 | 0.8 | 2.4 | 6.2 | 2.5 | 32.6 |
| 1968 | 35.3 | 0.0 | 22.2 | 20.2 | 0.4 | 1.6 | 5.7 | 3.0 | 32.3 |
| 2. Long Term Claims | | | | | | | | | |
| 1952 | 45.5 | 0.7 | 2.1 | 2.1 | - | - | 0.6 | 2.0 | 49.1 |
| 1960 | 46.5 | 0.7 | 0.9 | 0.9 | - | - | 0.7 | 1.6 | 49.7 |
| 1968 | 44.2 | 0.5 | 0.6 | 0.6 | - | - | 0.7 | 1.5 | 52.3 |
| 3. Corporate Stock | | | | | | | | | |
| 1952 | 76.8 | 3.3 | - | - | - | - | - | - | 19.9 |
| 1960 | 73.5 | 3.0 | - | - | - | - | - | - | 23.5 |
| 1968 | 74.8 | 2.3 | - | - | - | - | - | - | 22.9 |
| IV. Liabilities | | | | | | | | | |
| 1952 | 9.8 | 0.4 | 19.8 | 17.0 | 1.4 | 1.3 | 25.1 | 3.4 | 41.7 |
| 1960 | 13.9 | 0.6 | 20.9 | 17.7 | 1.5 | 1.7 | 16.9 | 4.8 | 42.8 |
| 1968 | 14.7 | 0.7 | 22.0 | 17.9 | 1.8 | 2.2 | 11.9 | 4.0 | 45.9 |
| 1. Short Term Debt | | | | | | | | | |
| 1952 | 8.3 | | 20.3 | 17.9 | 1.5 | 0.9 | 15.1 | 0.5 | 55.8 |
| 1960 | 11.2 | 0.1 | 20.9 | 17.4 | 1.6 | 1.9 | 13.6 | 0.5 | 53.1 |
| 1968 | 15.2 | 0.3 | 25.5 | 20.9 | 2.2 | 2.3 | 11.7 | 0.9 | 46.4 |
| 2. Long Term Debt | | | | | | | | | |
| 1952 | 12.1 | 0.7 | 16.3 | 13.0 | 1.6 | 1.7 | 37.1 | 6.5 | 27.2 |
| 1960 | 17.8 | 1.2 | 17.5 | 14.1 | 1.7 | 1.8 | 21.9 | 9.2 | 32.4 |
| 1968 | 18.3 | 1.3 | 20.1 | 15.3 | 2.1 | 2.7 | 15.2 | 9.2 | 35.9 |
| V. Net Worth | | | | | | | | | |
| 1952 | 65.4 | 1.9 | 29.3 | 15.7 | 8.6 | 5.1 | -7.9 | 8.0 | 2.7 |
| 1960 | 63.8 | 2.1 | 25.0 | 14.6 | 6.3 | 4.1 | -3.4 | 8.6 | 3.4 |
| 1968 | 63.7 | 2.2 | 21.7 | 13.3 | 4.8 | 3.6 | -1.6 | 9.7 | 3.9 |

SOURCE: NBER Report, Chapter 3, Table 3-15

Table III-3

FUNDS RAISED IN CREDIT MARKETS BY NONFINANCIAL SECTORS: SELECTED COMPONENTS
(In Percent)

| | 1953-1957 | 1957-1960 | 1960-1964 | 1965-1968 |
|---|---|---|---|---|
| Total funds raised by nonfinancial sectors | 100.00 | 100.00 | 100.00 | 100.00 |
| By U.S. Government | .73 | 5.83 | 7.86 | 9.27 |
| By all other nonfinancial sectors | 99.27 | 94.17 | 92.14 | 90.73 |
| Capital market instruments | 77.11 | 71.38 | 64.02 | 55.97 |
| of which: Corporate shares | 6.86 | 5.78 | 2.72 | 1.00 |
| Corporate bonds | 13.12 | 13.90 | 9.44 | 14.47 |
| Other private credit | 22.16 | 22.79 | 28.12 | 34.76 |
| of which: Bank loans | 8.27 | 7.52 | 9.38 | 15.14 |
| Memo: Funds raised by business | 35.94 | 36.48 | 34.53 | 44.35 |
| of which: Corporate business | 30.40 | 29.21 | 24.46 | 33.21 |
| Funds advanced directly by | 100.00 | 100.00 | 100.00 | 100.00 |
| Private domestic nonfinancial sectors | 22.27 | 19.55 | 6.86 | 11.62 |
| Private domestic financial sectors | 73.67 | 74.53 | 87.70 | 82.19 |
| Federal credit agencies | .62 | .65 | .64 | .19 |
| Federal Reserve System | -.29 | 1.35 | 3.77 | 5.04 |
| Commercial banks | 19.38 | 21.51 | 31.80 | 37.31 |
| Nonbank finance | 53.96 | 51.02 | 51.49 | 39.65 |
| Savings institutions (net) | 22.31 | 22.46 | 24.90 | 16.54 |
| Insurance and pension | 31.41 | 29.12 | 27.26 | 25.10 |
| Finance, n.e.c. (net) | .24 | -.57 | -.67 | -1.99 |
| Other | 4.06 | 5.92 | 5.44 | 6.19 |
| Funds advanced indirectly by private domestic nonfinancial sectors | 36.77 | 36.17 | 51.22 | 49.79 |
| Demand deposits | 4.74 | 1.16 | 5.59 | 10.70 |
| Time deposits | 32.03 | 35.01 | 45.63 | 39.09 |

1/ Includes foreign.

Source: Calculated from data in Board of Governors of the Federal Reserve System, Flow of Funds Accounts, 1945-1968, Washington, D.C., 1970, pp. 4-5. Figures are averages over period shown.

## B. THE FINANCING OF NONFINANCIAL CORPORATE BUSINESS

### 1. Changes in the Corporate Balance Sheet, 1952–1968

The data in Table III–4 indicate that the relative shares of tangible and financial assets in the balance sheet of nonfinancial corporations have not changed appreciably over the period of interest. Any tendency for rising land values to increase the ratio of real to financial assets has been largely offset by the decline in the fraction of assets devoted to inventories and to buildings. Within financial assets, the increase in "miscellaneous" reflects in part increased direct investment abroad. Other developments of interest are the substitution of time deposits for short-term Treasury securities as interest-bearing liquid assets, and the decline in the share of cash in the portfolio. On the liability side, debt increased somewhat relative to equity; and long-term debt, particularly mortgage debt, became increasingly important.

Until the 1960's, the stock market valued these nonfinancial corporations at less than the estimated replacement cost or market value of their tangibles. In recent years, however, the securities markets have assigned a higher value to corporations than that given by the replacement value of their assets. It is unwise to attribute too much significance to the precise numerical relationship between net worth and share value. The assumptions on which the estimates of tangible assets are based obviously influence this relationship, and a full discussion of these assumptions and their implications here is well beyond the scope of this chapter.[5] It is the case, however, that during the 1950's, the price-earnings ratio increased almost two-fold, and this reflected the market's attempt to correct a previous undervaluation of these securities.[6]

### 2. The Role of Equity Issues Since 1952

Perhaps the most remarkable feature of corporate finance in the aggregate over the period is the limited extent to which capital formation was financed by security issues, especially by stock issues. Of the $676 billion by which the market value of the outstanding stock of domestic nonfinancial companies increased between 1952 and 1968, only $23 billion can be accounted for by newly issued shares.

Table III–5 indicates that the bulk of corporate expenditure on capital account is devoted to the acquisition of physical assets. To a lesser extent corporations acquire financial assets, both their own securities and those of other issuers. While over the period debt retirement has declined as a percent of total uses, retirements of equity securities have increased over the period.

The major source of funds for the financing of these acquisitions of real and financial assets has been, for the period as a whole, internal funds including depreciation reserves. Relative increases in external financing since 1965 have not taken the form of security issues, with the exception of the increase in bond issues since 1966. Rather it is bank loans, trade credit, commercial paper, and other short-term financing which have been important.

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[5] See *NBER Report,* appendix I and appendix VI, *passim.*
[6] See *NBER Report,* ch. 5, sec. 4.a.

Corporate reluctance to issue new equity securities has long been observed; seemingly, it has persisted even during periods when high stock price multiples and high interest rates would appear to offer attractive opportunities for new equity issues. Explanations which have been offered for this phenomenon include the incentives provided by the Internal Revenue Code either for internal financing or for debt, if outside funds are used; the existence of transactions costs which are likely to be higher for stock issues than for other forms of financing; and such considerations as the unwillingness of existing owners or managers to dilute the extent of their equity or control.[7]

The tax rates under the Internal Revenue Code are lighter on the recipient of income in the form of capital gains than on the recipient of income arising from current economic activity. Furthermore at various times in the past it has been deemed socially desirable to encourage a high level of investment in plant, equipment, and resource exploration. Such efforts have involved the liberalization of provisions for deducting capital consumption charges, that is, depreciation and depletion, from taxable income. Interest payments to the owners of debt instruments are tax deductible by the disbursing corporation, while dividends are not.

Internal funds typically involve lower transactions costs than do external sources of financing.[8] In addition to the underwriting costs and other expenses associated with securities flotation (which seem to be higher for equity than for debt securities), public offerings are subject to registration procedures which have an economic cost to the issuer, especially in terms of the period that may elapse between the time at which an issue is planned and the time at which it can actually be sold. For the investor, there are obvious costs in brokers' fees and the like involved in the acquisition of new shares which can be avoided if the same "equity" is acquired by, in effect, leaving earnings in the firm rather than receiving them as taxable dividends which are then reinvested. Even if funds are raised externally, private placements, bank loans, and other nonpublic sources are generally faster and less complex administratively than are public offerings. They may also be less expensive and more flexibly managed, although the evidence on these points is mixed.

A third set of forces which may have helped to reduce business reliance on the stock market as a source of new capital are those associated with the desire of existing owners or managers to avoid disturbing existing control relationships. Internal financing does not subject existing managements to the disclosure requirements of the Securities Act, and, therefore, to either the market's or a private lender's assessment of its past performance.

Thus there are a number of factors which can explain the unwillingness of corporate financial officers to issue stock even when relative market yields would seem to indicate the advantages of doing so. Some of these factors merely serve to change the relative costs of alternative financing methods in ways which are not reflected in comparisons of aggregate bond and stock yields; thus the observed insensitivity

[7] For a discussion of these matters see *NBER Report,* ch. 3, sec. 4, and the literature cited therein, as well as W. Baumol, P. Heim, B. Malkiel, and R. Quandt, "Earnings Retention New Capital and the Growth of the Firm," *Review of Economics and Statistics,* at 345–355 (November 1970). The discussion here goes beyond that in the *NBER Report.*

[8] See ch. XIV of the Study.

of corporations in the aggregate to these cost differentials may be more a reflection of the inadequacy of our price measurements than of true insensitivity to prices on the part of corporate issuers. However, to the extent that differences between yield to investors and cost to corporations do not reflect the true costs of the intermediation services provided, the ability of the securities markets to fulfill their allocation function tends to be lessened.

### 3. A Statistical Test of the Price Sensitivity of Financing Decisions

Chapter IV of the *NBER Report* explores statistically some determinants of the composition of aggregate external financing for nonfinancial corporations. The model takes as given the desired level of total funding for physical investment and additions to financial assets and postulates that the funds will be obtained in such a way as to minimize their cost. Since no transactions costs are involved in the use of internal funds, external financing presumably is required only to the extent that internal sources are not sufficient to meet the desired level of total funding. Similarly, the cost of funds probably differs among sources of external funds.[9] Debt often has tax advantages over equity, and "other financing" may involve lower transactions costs than does the public issuance of debt securities.

To the extent that these differences exist over some range of total external financing, there will be some level of required funding below which only "other financing" will be used and a higher critical value below which only debt will be used. The model then seeks to explain each of these three dependent variables: (1) aggregate "other" financing; (2) aggregate "bond" financing; and (3) aggregate "equity" financing, in terms of a common set of independent variables. These independent variables are (1) total external financing; (2) the interest rate on AAA corporate bonds; (3) Standard & Poor's earnings-price ratio; and (4) the earnings-price ratio plus a trend rate of growth in earnings per share.

The results of this investigation are summarized in Table III–6. These results take the form of the estimated coefficients of several regression equations.[10] The fraction of variances explained ($R^2$'s) in the equations reported in Table III–6 confirms the notion that the commonly accepted hierarchy of cost of fund curves does exist. The use of aggregate external financing rather than a measure which allows

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[9] See *NBER Report*, ch. 4, parts 3 and 4 for a discussion of the model. It reflects many of the considerations discussed in the previous section of this chapter.

[10] Since this technique is used extensively elsewhere in the Study, a brief introduction to the terminology for those unfamiliar with it is not inappropriate here. Such equations relate the observed value of the dependent variable to a weighted sum of the values of those indepenent variables which are presumed to explain it. The coefficient associated with any one of these explanatory variables measures the change in the value of the dependent variable associated with a one unit change in the independent variable in question.

Intuitively one would expect those independent variables with the greatest explanatory power to have the largest coefficients. While this is roughly true, these coefficients are not estimated without error; indeed a variable having no explanatory power at all may have an estimated coefficent which is quite different from zero. The standard error of a regression coefficient is a measure of the precision with which the value of the coefficient can be established. Dividing regression coefficients by their standard errors produces the "t-ratios" shown in Table III–6 below the coefficients. Generally a "t-ratio" of two or better indicates that the true value of the coefficient differs significantly from zero. Finally the $R^2$ statistic is a measure of how well the equation as a whole explains the dependent variable. If this statistic has a value of one, all the variation in the dependent variable can be explained by the variables included in the equation; if $R^2$ equals zero, the equation's explanatory variables tell us nothing about the dependent variable. Actual $R^2$'s, of course, lie between these two extremes.

one to distinguish among firms with financing requirements in the three categories of total external financing described above means that the explanatory power of the equation is likely to be best for "other" financing and poorest for equity financing. In the latter case, the external financing variable covers many firms whose external financing requirements fall in the range where equity financing is too costly. Similar reasoning applies in the case of bonds versus other debt.

On *a priori* grounds the issuance of any given instrument would be expected to be inversely related to its own yield, i.e., the cost of such funds, and positively related both to the yield of competing instruments and to the level of external financing. The coefficients here do not conform well to these hypotheses. The bond yield is positively related to bond issues, although the signs are correct in the other equations; either stock yield measure is related negatively to other financing, though it is not significant. The *NBER Report* hypothesizes that the results for the bond yield can be explained by credit rationing which reduces availability of bank credit as interest rates rise and forces firms to issue debt securities. Similarly, this negative relationship between stock yields and other financing may reflect the fact that easy money and a rising stock market often are associated with one another.

The equity equation performs well neither as a whole nor for individual variables. Equity financing seems to be quite price-inelastic. The *NBER Report* concludes, therefore, that equity financing is a choice of last resort, to be used only after other sources of funds have run dry.[11]

Growth in retirements is explained in part by mergers and liquidations. To the extent that retirements are not so accounted for, it stands to reason that a firm will retire stock only when it has internal funds in excess of opportunities for employing them at a rate of return greater than that on holding their own securities. One would expect repurchases to be high when internal funds were high and stock prices low. Unfortunately the data did not permit an adequate test of this "excess liquidity theory" of retirements. The other important category of retirements, exchanges for debt, was regressed on the value of mergers; although the expected positive relationship exists, it provides only a relatively weak explanation in and of itself.[12]

### 4. The Stock Market and Corporate Finance; Further Comments

The results reported thus far indicate that corporations rely very little in the aggregate on the equity market as a source of new financing; that when they do avail themselves of this source of funds they pay little attention to relative costs as measured by market yields; and finally that they do indeed enter the market as purchasers of stock and thus help convert what would be a modest increment to the supply of equities into an occasional reduction.

There are, however, several additional considerations not all of which are covered in the *NBER Report.* First, the overview of 19th and early 20th century economic history indicates that the importance of stock issues varies from industry to industry over time. Thus, one might expect to find that during recent years, some industrial subgroups of the aggregates engaged more heavily in equity financing

[11] See *NBER Report*, ch. 4, sec. 3.
[12] *Id.*, sec. 5.

than did others, either because of tradition, size of the typical firm, state of the industry, or other reasons.

Second, the stock market gains of the postwar period allowed and then in many cases made virtually mandatory the inclusion of "equity kickers" in debt offered to institutional and other investors. While relatively little aggregate information exists about many of the forms that such equity components may take, some data on issues of convertible debt are available.[13] This type of security has been quite important in the last few years both as a financial instrument in mergers and as a financing vehicle in its own right.

Third, good performance in the stock market may enable a firm to borrow on more favorable terms than might otherwise be possible. In the aggregate, this may be reflected in the simultaneous occurrence of easy money and a bullish stock market, although lines of causation would seem to run from easy money to the stock market rather than the reverse. It also is possible that corporations find it easier to retain a large portion of earnings if shareholders are confident of their ability to realize temporarily foregone income in the form of capital gains.

*a. Interindustry differences*

From Table III–7 it can be seen that the aggregate statistics examined so far cover a diversity of behavior. The manufacturing data come from the S.E.C.–F.T.C. surveys, utilities from the F.P.C., and communication from the F.C.C.; the "miscellaneous" sector is derived as a residual from the F.R.B.'s Flow of Funds statistics.

Over the period, all sectors increased the rate at which they were retiring equity securities. Utilities retired debt as well, and in fact they appear to have found the retirement of securities increasingly attractive relative to the acquisition of physical assets. The miscellaneous sector also chose to repay debt in the 1960's to an even greater extent than during the 1950's. Reliance on internally generated funds decreased sharply for manufacturing, though it increased for all other groups. Manufacturing's increase in external financing, however, came not through security issues, but through other debt. Only the miscellaneous sector actually increased its reliance on security issues. Internal funds are not as important for utilities and communications; such companies typically have a high payout rate.

Over the entire period, manufacturing accounted for the largest share of stock issues, although this phenomenon developed only during the 1960's. For the decade as a whole, utilities and communications together were the major suppliers of equity securities. The "miscellaneous" or "other" corporate business subsector—which includes trade, services, extractive, and real estate—has been increasing its share of total equity issues rather steadily over time. The size of issues also varies among sectors; while equity issues in excess of $15 million have averaged 30 percent of all equity issues during the period, they have accounted for 51 percent of utility issues, 30 percent of all communications equity issues, 24 percent of those in manufacturing, and 18 percent of those in other corporations.[14]

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[13] When such securities are in fact converted, debt is retired and equity increased in the net change series. Thus such issues are included, if at all, only with a lag in the aggregate statistics for equity issues.

[14] See *NBER Report*, Tables 4–2 and 4–4 for the figures cited here.

With the exception of communications, the regression results for the more disaggregated corporate sectors are quite similar to those for the corporate sector as a whole. For communications the equity equation is significant, and the "other finance" equation is not. Stock issues are negatively related to bond and stock yields, while bond issues are positively related to these same yields.[15] A study of the security issues of individual manufacturing firms led to similar conclusions.[16] Thus with the exception of communications, where the results are strongly influenced by the activities of a single company, security issues in general and equity issues in particular are financing sources of last resort, utilized only when tight money and other credit rationing events make other financing impossible.[17] Security issues seem to be somewhat insensitive to relative yields as well.

*b. Convertible debt*

It is virtually impossible to ascertain the extent to which equity elements have appeared in the published debt financing statistics. Very little is known in the aggregate about many of the characteristics of mortgages, bank credit, other loans and the like outstanding at one date or offered during a particular period of time. The presence of equity kickers is no exception to this. In the case of corporate security offerings, however, there does exist a time series on convertible debt securities going back to 1956.

Table III–8 shows the shares of corporate security issues represented by straight equity, straight debt, and convertibles. The share of convertibles seems to have fallen until 1965 when it began to rise as did the share of straight equity. An examination of the yield series in Table III–9 should provide an explanation for this. Comparing the equity yields in the last column with the cost of various forms of debt over the period covered by the securities offerings statistics of Table III–8, it is clear that it has not been until the last few years that the relative cost of equity has been attractive to corporate issuers. If, however, one looks at the share of straight debt in Table III–8 there does appear to be a tendency for its supply to move in the expected way in response to the spreads between equity and various debt yields.

These data do not permit any very sensitive analyses; the observations presented here on both issues and yields are too few and too aggregated to reveal much about financing decisions. It should be pointed out, however, that some portion of what has been included in the debt statistics has equity features. Manufacturing's share of convertible issues exceeds its share of all debt issues, and thus the extent of its dependence on the equity market has been somewhat understated in the data of Tables III–5 and III–7.

*c. The stock market and internal financing*

It has been hypothesized above that the differential treatment accorded dividend and capital gains income by the personal income tax places a premium on financing internally, rather than by new equity issues. The existing shareowner will not be indifferent between an increase in his equity which results from financing new assets out of retained earnings and the opportunity to buy an equivalent amount of

[15] See *Id.*, Tables 4–14, 4–15, and 4–16.
[16] *NBER Report*, ch. 4, sec. 4.
[17] *Id.*, sec. 4.

stock out of the dividends paid to him from earnings. A simple extension of this reasoning would suggest that there will be more willingness to accept earnings as a capital gain rather than as dividends if the stock market has been producing capital gains for a particular corporation or for all corporations rather consistently over the recent past. The data in Table III–10 indicate that although there may be some truth in this, there has been remarkably little variation in retention rates since the end of World War II. In 1929 corporations paid dividends of $5.8 billion, retained $2.8 billion directly, and claimed $4.2 billion in capital consumption allowances. During the 1930's, retained profits generally were negative. The major change since 1946 has been the shift from undistributed profits to capital consumption allowances as a means of retaining funds; there seems to have been only a slight decline in the share of gross earnings after taxes devoted to dividends.

### 5. Summary

The *NBER Report* concludes that in the aggregate corporations rely very little on the equity market as a source of funds, and the results further indicate that relative costs of funds play less of a role in their financing choices than do other aspects of credit availability. This seems to be true for broad subsectors of this aggregate as well.

Other channels by which the stock market might affect corporate financing decisions were hypothesized and some evidence examined. While there are differences among broad industrial groups in the extent to which equity financing is used, the limited disaggregation employed here does not qualify the previous paragraph substantially. Payout rates have changed little over quite a long period of rising stock markets. Finally, the separation of straight debt issues from convertibles yields suggestive, but inconclusive, results.

Table III-4

Balance Sheet of Non-financial Corporate Business

| | In Billions of Dollars | | | In Percent of Total Assets | | |
|---|---|---|---|---|---|---|
| | 1952 | 1960 | 1968 | 1952 | 1960 | 1968 |
| Total Assets | 407.7 | 652.9 | 1,115.2 | 100.0 | 100.0 | 100.0 |
| Tangible Assets | 281.4 | 446.2 | 757.9 | 69.0 | 68.3 | 68.0 |
| Land | 21.2 | 55.9 | 102.9 | 5.2 | 8.6 | 9.2 |
| Residential Structures and Nonresidential Structures | 116.1 | 172.6 | 272.4 | 28.5 | 26.4 | 24.4 |
| Producers' Durables | 78.0 | 129.9 | 233.3 | 19.1 | 19.9 | 20.9 |
| Inventories | 66.1 | 87.8 | 149.3 | 16.2 | 13.4 | 13.4 |
| Financial Assets | 126.3 | 206.7 | 357.2 | 31.0 | 31.7 | 32.0 |
| Demand Deposits and Currency | 28.8 | 32.2 | 28.1 | 7.1 | 4.9 | 2.5 |
| Short-Term Claims | 70.6 | 129.2 | 247.9 | 17.3 | 19.8 | 22.2 |
| Time Deposits | 0.9 | 2.8 | 24.8 | 0.2 | 0.4 | 2.2 |
| Treasury Securities | 10.7 | 15.1 | 9.8 | 2.6 | 2.3 | 0.9 |
| Other | 59.0 | 111.3 | 213.3 | 14.5 | 17.0 | 19.1 |
| Bonds | 9.9 | 6.8 | 8.7 | 2.4 | 1.0 | 0.8 |
| Miscellaneous Assets | 17.0 | 38.5 | 72.6 | 4.2 | 5.9 | 6.5 |
| Total Liabilities | 165.6 | 275.0 | 499.9 | 40.6 | 42.1 | 44.8 |
| Other Short-Term Claims | 82.0 | 120.0 | 222.1 | 20.1 | 18.4 | 19.9 |
| Long-Term Claims | 60.2 | 108.3 | 204.1 | 14.8 | 16.6 | 18.3 |
| Bonds | 44.1 | 76.3 | 136.8 | 10.8 | 11.7 | 12.3 |
| Mortgages | 16.1 | 32.0 | 67.3 | 3.9 | 4.9 | 6.0 |
| Miscellaneous Liabilities | 23.4 | 46.6 | 73.8 | 5.7 | 7.1 | 6.6 |
| Net Worth | 242.1 | 377.9 | 615.3 | 59.4 | 57.9 | 55.2 |
| Memorandum: Market Value of Corporate Shares | 152.8 | 348.4 | 828.9 | 37.5 | 53.4 | 74.3 |

SOURCE: NBER Report, Appendix I, Table IB-4

Table III-5

CORPORATE SOURCES AND USES OF FUNDS, ANNUAL AVERAGES
(As per cent of total Uses)

| | 1953-57 | 1957-60 | 1960-64 | 1965-68 |
|---|---|---|---|---|
| Total uses of funds | 100.0 | 100.0 | 100.0 | 100.0 |
| Capital expenditures | 72.6 | 71.4 | 70.0 | 71.9 |
| Net acquisition of financial assets | 17.4 | 20.2 | 20.8 | 19.4 |
| Retirement of securities | 10.0 | 8.4 | 9.2 | 8.7 |
| Bonds 1/ | 7.5 | 6.5 | 6.4 | 5.0 |
| Stocks 1/ | 2.4 | 1.8 | 2.8 | 3.7 |
| Total sources of funds | 100.0 | 100.0 | 100.0 | 100.0 |
| Gross internal funds | 65.6 | 67.1 | 66.1 | 60.3 |
| External funds | 34.4 | 32.9 | 33.9 | 39.7 |
| Stock issues 1/ | 7.6 | 6.5 | 5.0 | 4.5 |
| Bond issues 1/ | 19.8 | 18.2 | 15.2 | 17.2 |
| Other borrowing | 6.8 | 8.2 | 13.7 | 18.0 |

1/ Exchanges are included only insofar as they involve the issuance and retirement of different types of securities.

SOURCE: Calculated from annual data in NBER Report, Chapter 4, Table 4-7.

Table III-6

Estimated Financing Equations, All Nonfinancial Corporations — 1952-1967

| Total funds raised in the form of | Constant | Total External Financing | Corporate Bond Rate | Earnings-Price Ratio | Earnings-Price Ratio Adjusted for Trend | $R^2$ |
|---|---|---|---|---|---|---|
| 1) Other external financing | 15.910 | .859<br>(8.42) | -4.770<br>(2.875) | -1.017<br>(1.607) | ---- | .892 |
| 2) Bond financing | -18.099 | .116<br>(1.365) | 4.586<br>(3.304) | 1.045<br>(1.975) | ---- | .742 |
| 3) Equity financing | 2.189 | .025<br>(.806) | .184<br>(.361) | -.028<br>(.144) | ---- | .226 |
| 1) Other external financing | 7.821 | 1.000<br>(7.936) | -4.400<br>(3.068) | ---- | -.296<br>(1.838) | .890 |
| 2) Bond financing | -8.524 | -.002<br>(.018) | 3.893<br>(3.204) | ---- | .254<br>(1.867) | .733 |
| 3) Equity financing | 1.041 | .004<br>(.102) | .412<br>(.965) | ---- | .041<br>(.854) | .269 |

Source: Adapted from Table 4-13 of NBER Report, Chapter 4.

Note: Figures in parentheses are t ratios.

Table III-7

Comparative Sources and Uses of Funds, Annual Averages, 1952-59 and 1960-68
(percent of total uses)

| | All Nonfinancial Corporations | | Manufacturing | | Utilities | | Communications | | Miscellaneous | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1952-59 | 1960-68 | 1952-59 | 1960-68 | 1952-59 | 1960-68 | 1952-59 | 1960-68 | 1952-58 | 1960-68 |
| Increase in Assets | 90.7 | 91.0 | 92.1 | 92.9 | 89.2 | 85.8 | 79.6 | 92.5 | 86.6 | 77.5 |
| Retirement of debt securities | 7.3 | 5.8 | 5.4 | 4.0 | 9.9 | 11.0 | 19.8 | 6.2 | 6.6 | 6.6 |
| Retirement of equity securities | 2.0 | 3.2 | 2.5 | 3.1 | .8 | 3.2 | .7 | 1.3 | 1.6 | 3.2 |
| Net Reduction in other liabilities | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 5.2 | 12.7 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Internal funds | 64.8 | 63.5 | 70.9 | 57.9 | 27.7 | 38.4 | 22.5 | 34.9 | 75.8 | 79.3 |
| External funds | 35.2 | 36.5 | 29.1 | 42.1 | 72.3 | 61.6 | 77.5 | 65.1 | 24.2 | 22.7 |
| Equity | 7.5 | 4.8 | 4.3 | 2.8 | 17.5 | 8.7 | 35.6 | 23.7 | 2.9 | 3.0 |
| Debt securities | 19.4 | 16.1 | 14.9 | 9.7 | 41.0 | 34.5 | 40.3 | 32.9 | 14.5 | 16.2 |
| Net increase in other liabilities | 8.3 | 15.6 | 9.1 | 30.3 | 13.8 | 18.5 | 1.9 | 8.5 | 6.8 | 3.5 |

Source: Table 4-8 of NBER Report,

Table III-8

CORPORATE CASH OFFERINGS OF SECURITIES

| | Total $ millions | Percentages | | |
|---|---|---|---|---|
| | | Debt | | Equity |
| | | Straight | Convertible | |
| 1956 | 10,939 | 64.69 | 8.46 | 26.85 |
| 1957 | 12,884 | 69.02 | 8.26 | 22.72 |
| 1958 | 11,558 | 73.45 | 10,07 | 16.48 |
| 1959 | 9,748 | 67.32 | 6.44 | 26.24 |
| 1960 | 10,154 | 75.02 | 4.56 | 20.42 |
| 1961 | 13,165 | 66.16 | 5.39 | 28.45 |
| 1962 | 10,705 | 79.62 | 4.16 | 16.22 |
| 1963 | 12,211 | 85.98 | 2.92 | 11.10 |
| 1964 | 13,957 | 74.81 | 3.04 | 22.15 |
| 1965 | 15,992 | 77.89 | 7.90 | 14.21 |
| 1966 | 18,074 | 75.74 | 10.36 | 13.90 |
| 1967 | 24,798 | 70.48 | 18.05 | 11.47 |
| 1968 | 21,966 | 64.20 | 14.93 | 20.87 |
| 1969 | 26,744 | 53.49 | 15.11 | 31.40 |

Source: Calculated from S.E.C. Series.
Convertibles: S.E.C. Statistical Bulletin, July 1970, p. 15.
Other: Federal Reserve Bulletin, August 1970, and Economic Report of the President, 1970, p. 266.

Table III-9

DEBT AND EQUITY YIELDS, 1952-1969
(in percent per annum)

| Date | Corporate Bond Yield AAA | Corporate Bond Yield BAA | Business Loan Rate | Commercial Paper Rate | Earnings Price Ratio |
|---|---|---|---|---|---|
| 1952 | 2.96 | 3.52 | 3.49 | 2.33 | 9.55 |
| 1953 | 3.20 | 3.74 | 3.69 | 2.52 | 10.32 |
| 1954 | 2.90 | 3.51 | 3.61 | 1.58 | 8.89 |
| 1955 | 3.06 | 3.53 | 3.70 | 2.18 | 8.69 |
| 1956 | 3.36 | 3.88 | 4.20 | 3.31 | 7.12 |
| 1957 | 3.89 | 4.71 | 4.62 | 3.81 | 7.76 |
| 1958 | 3.79 | 4.73 | 4.34 | 2.46 | 6.01 |
| 1959 | 4.38 | 5.05 | 5.00 | 3.97 | 5.87 |
| 1960 | 4.41 | 5.19 | 5.16 | 3.85 | 5.85 |
| 1961 | 4.35 | 5.08 | 4.97 | 2.97 | 4.75 |
| 1962 | 4.33 | 5.02 | 5.00 | 3.26 | 6.00 |
| 1963 | 4.26 | 4.86 | 5.01 | 3.55 | 5.68 |
| 1964 | 4.40 | 4.83 | 4.99 | 3.97 | 5.53 |
| 1965 | 4.49 | 4.87 | 5.06 | 4.38 | 5.85 |
| 1966 | 5.13 | 5.67 | 6.00 | 5.55 | 6.70 |
| 1967 | 5.51 | 6.23 | 6.00 | 5.10 | 5.71 |
| 1968 | 6.18 | 6.94 | 6.68 | 5.90 | 5.84 |
| 1969 | 7.03 | 7.81 | 8.21 | 7.83 | 6.05 |

Source: Economic Report of the President, 1970, pp. 242 and 267.

Table III-10.

CORPORATE SAVING AND DIVIDEND PAYMENTS

| Date | Profits after Tax plus Capital Consumption Allowances ($ billions) | Capital Consumption Allowances | Undistributed Profits | Dividends |
|---|---|---|---|---|
| | | As per cent of (1) | | |
| | (1) | (2) | (3) | (4) |
| 1946 | 20.2 | 23.27 | 49.01 | 27.72 |
| 1947 | 26.0 | 22.31 | 53.46 | 24.23 |
| 1948 | 29.7 | 23.57 | 52.53 | 23.57 |
| 1949 | 26.5 | 29.81 | 42.64 | 27.17 |
| 1950 | 33.7 | 26.11 | 47.48 | 26.11 |
| 1951 | 31.8 | 32.39 | 40.88 | 27.04 |
| 1952 | 31.0 | 37.10 | 35.48 | 27.74 |
| 1953 | 33.5 | 39.40 | 34.33 | 26.57 |
| 1954 | 35.5 | 42.25 | 31.83 | 26.20 |
| 1955 | 44.4 | 39.19 | 37.16 | 23.65 |
| 1956 | 46.1 | 41.00 | 34.49 | 24.51 |
| 1957 | 46.8 | 44.44 | 30.34 | 25.00 |
| 1958 | 44.3 | 49.66 | 24.38 | 26.18 |
| 1959 | 52.0 | 45.19 | 30.58 | 24.23 |
| 1960 | 51.6 | 48.26 | 25.58 | 25.97 |
| 1961 | 53.5 | 48.97 | 25.23 | 25.79 |
| 1962 | 61.3 | 49.10 | 26.10 | 24.80 |
| 1963 | 64.8 | 49.07 | 25.62 | 25.46 |
| 1964 | 72.3 | 46.89 | 28.49 | 24.62 |
| 1965 | 82.9 | 43.91 | 32.20 | 23.88 |
| 1966 | 89.5 | 44.13 | 32.51 | 23.24 |
| 1967 | 90.0 | 47.33 | 28.78 | 23.89 |
| 1968 | 95.7 | 47.96 | 27.90 | 24.14 |
| 1969 | 99.9 | 49.15 | 26.33 | 24.62 |

Source: Calculated from data given in Economic Report of the President, 1970, page 260.

C. HOUSEHOLD SAVINGS AND PORTFOLIO DECISIONS

## 1. Balance Sheet Relationships, 1952–1968

Household assets and liabilities are shown in Table III–11. During the 1950's, proprietor's equity accounted for a larger share of household assets than did corporate shares; this situation more than reversed itself during the 1960's. The portion of assets accounted for by tangibles fell over the period as did the shares of long-term claims and cash. The decline in the share of long-term claims was particularly heavy in bonds; "other long-term claims" consisting of claims on life insurance, pensions, and personal trusts, increased slightly over the period. Again the share of short-term claims increased, particularly in the form of time deposits. Although there was a sharp relative increase in debt during the 1950's, the debt-net worth relationship has remained relatively stable since then; mortgages predominate among the liabilities.

The major phenomena which can be observed here are the substitution of corporate equity for proprietor's equity, a shift from long-term to short-term claims in the portfolio, and, within the category of long-term claims, a shift out of directly held securities and into claims on financial institutions.

## 2. Saving Behavior in the Post-War Period

Balance sheet relationships are not as sensitive an indicator of financial behavior as one would like, however. They are influenced by relative prices and by past accumulations, and thus they may indicate little about changes in the disposition of new funds. Table III–12 attempts to provide such information.

The decline of equity in unincorporated business is equally dramatic here. However, households have been net liquidators of corporate shares as well. Indeed, the only reason that the share of new funds committed to intermediated rather than direct saving did not continue to rise during the last half of the 1960's is the shift out of savings accounts and into bonds which occurred primarily during the tight money years of 1966 and 1969.

The form in which households choose to hold wealth obviously has far reaching implications for the capital markets. Not only are individuals direct suppliers of funds to the securities markets, but the specific channels of intermediation through which their indirect financing goes are also important. Chapter V of the *NBER Report* attempts to construct a model of household financial saving. The dependent variables consist of household acquisitions of the following assets: (1) demand deposits, (2) savings deposits, (3) claims on life insurance reserves, (4) claims on pension reserves, (5) mutual fund shares, (6) fixed income securities (bonds and mortgages), (7) corporate shares (excluding investment company shares), (8) odd lot net purchases on the NYSE, (9) household round lot net purchases on the NYSE, and (10) household round lot less estimated net purchases by personal trusts and nonprofit institutions. Each of these is then related to personal income, to the rate of return on 3–5 year government bonds, to the yield (both dividends and capital gains) on the Standard & Poor 500 stock price index, and to time. All dependent variables are ex-

pressed as a per cent of personal income. The model assumes that actual and desired levels of asset holdings coincide in any time period; an attempt to specify a lagged stock-adjustment model was rejected on both conceptual and statistical grounds.

The estimated equations generally include changes in interest rates or stock yields as explanatory variables. It is not possible statistically to say whether the resulting savings flows represent a reaction to changing rates of return or to changes in the market value of wealth. The formulation of the model also assumes that causation runs from income and interest rates to saving, rather than the reverse. Some of the results are given in Tables III–13 and III–14. If a variable is not included in an equation, the presumption is that it proved statistically insignificant.

The model as a whole indicates that strong temporal influences dominate the acquisition of both pension funds and mutual fund shares; a less pronounced tendency to increase acquisitions over time has existed for demand deposits as well. In all three instances time is positively related to the share of income devoted to the acquisition of such assets.

Interest rates, that is, the bond yield, appear in two forms in these equations. The first is the interest rate prevailing during the period in question; this is positively related to the share of income going into savings deposits, but negatively related to inflows into life insurance, mutual funds, and direct stock holdings. The percentage change in bond yields, however, is significant in many of the equations. Rising interest rates lend to outflows from both demand and time deposits and from life insurance; direct acquisitions of bonds, mortgages, mutual fund shares, and corporate stock increase, however, when interest rates rise.

Changes in income also affect the share of income devoted to the various forms of financial saving. Increases in income are associated with increases in demand deposits, and with greater inflows to life insurance and to pensions; however, they do not appear to increase the acquisition of either bonds or stock. Finally, neither current nor lagged values of stock yields seem to be very significant in explaining household asset acquisitions.

The individual equations need little further discussion. The demand for money conforms to usual notions of income and interest elasticity. Savings deposits appear to be substitutable for bonds. In periods of rising interest rates, debt market yields rise faster than do the rates paid by thrift institutions; disintermediation takes place and individuals become active directly in the market for fixed income securities. Inflows to pension funds are dominated by time and by changes in income; relative yields appear, on the basis of these data, to have little effect on this form of contractual saving.

Additions to life insurance are measured net of policy loans. Thus the negative coefficients on the bond yield terms reflect the attraction of policy loans as a source of credit during periods of tight money, as well as the disintermediation which occurs. The income term, reflecting broader coverage, has allowed the inflow into life insurance to remain positive despite unfavorable relative yields; its share in financial saving, however, has been declining over time.

Acquisitions of fixed income securities, such as bonds and mortgages, do appear to be sensitive to yields. Changes in bond yields have a strong

positive effect; after a one-year lag, stock yields also are significant. Income change has a strongly negative effect. Further investigation into the substitution among bonds, savings deposits, and life insurance suggests that the funds which flow out of thrift and insurance institutions during periods of high and rising interest rates find their way into direct holdings of fixed income securities.

The set of equations dealing with corporate stock and mutual fund shares is rather disappointing. The aggregate of direct and indirect equity holdings apears to be negatively related to the bond rate; thus the fact that relative yields grew less favorable to stocks during the 1960's may provide some explanation for the net selling by households which occurred. Acquisitions of mutual fund shares are explained by a positive time trend and a negative, lagged, stock price effect.

The four equations for direct purchases of equity securities in Table III—14 show substantially the same phenomena. The level of bond yields affects purchases negatively; interest rate changes, however, have a positive effect. Income changes affect all but adjusted round lot purchases negatively. Current stock-yields affect such "pure household" purchases positively; however, they affect odd lot purchases only with a lag, and the other measures not at all.

With the exception of the current bond yield, which does not appear in the equation for fixed income securities, the circumstances in which saving will take the form of increased stock holdings are the same as those favorable to the acquisition of bonds, namely rising bond yields, falling income levels, and past high levels of stock prices. These conditions are not, however, conducive to the accumulation of claims on financial intermediaries.

### 3. Characteristics of the Wealth Distribution

Appendix V of the *NBER Report* provides information on the distribution of these various assets among individuals grouped by such demographic characteristics as wealth and age. The data of the 1963 Federal Reserve Survey of Financial Characteristics of Consumers [18] were the basic source. Total assets and major asset categories were tabulated by age and wealth of owner.

There are certain difficulties with survey data of this kind; in particular, certain assets are almost certainly going to be understated.[19] However, it is assumed that in the case of most individuals, assets are understated by rather small dollar amounts and that the understatement will have only an insignificant effect on estimates of the distribution of wealth. Unfortunately some components are particularly seriously understated. Chief among them are equity in unincorporated business and equity in pension funds. Here, lack of knowledge on the part of respondents has particularly severe consequences for estimates of total household assets and their distribution.

Table III–15 gives the distribution of total assets by age and wealth classes. Approximately one-third of the assets are accounted for by individuals whose total wealth is $30,000 or less. Another third belongs to those whose wealth lies between $30,000 and $200,000; half of this

[18] *Id.* at 58 et seq; and see *NBER Report*, appendix V.

[19] D. Projector and G. Weiss, *Survey of Financial Characteristics of Consumers* (1966). The sample consisted of 2,557 consumer units and was designed to include a large number of relatively wealthy individuals. Observations refer to the end of 1962.

belongs to those with total assets under $60,000. The remainder belongs to individuals having total assets in excess of $200,000. Concentration also tends to increase with age because of differences in lifetime income reflecting differences in rates of return on both human and nonhuman wealth. Two individuals starting out with identical financial assets at age 25 may have very different wealth at age 65 for several reasons apart from gifts and inheritances. They may differ in their ability to earn labor income as a result of different investments in human capital or returns on scarce types of human capital; they may differ in the fraction of income saved and invested in earnings assets; finally, they may differ in the rate of return which their cumulative past savings can command.

As can be seen in Table III–16, the ownership of stock in 1962 was quite heavily concentrated among the older and more affluent. The data also show that traded stocks account for a larger fraction of total stocks held for the less affluent; the age relationship is somewhat erratic, with traded stocks being more important at the ends of the age scale than in the middle.

However, it is differences among classes of wealth owners in portfolio allocation that are somewhat more relevant here. Tables V–8 through V–11 of the *NBER Report* indicate that there are substantial differences among age and wealth classes. The importance of stock in the portfolio varies directly with age and wealth. The wealthy are more likely to have trust funds than are the less affluent, although the importance of such trusts in the portfolio declines as the age of the wealth-owner increases. For cash and bonds, real estate, and equity in life insurance and pension reserves, however, the reverse would appear to be true. These are more significant in the portfolios of the less affluent and, with the exception of liquid assets, more significant in the portfolios of the young. Mutual fund shares, once the investment vehicle of the small investor, are becoming increasingly a means for the relatively affluent to accumulate retirement income.[20]

These tabulations should be interpreted with extreme caution; many of the cell frequencies are small, response error was particularly severe in the case of insurance and pension equities; and the survey was taken nearly a decade ago. The findings, however, are in all likelihood still broadly true.

### 4. Conclusions

In their aggregate portfolio, households have substituted corporate for proprietors equity, have shifted into short-term claims, and have exhibited a preference for intermediated rather than direct holdings of long-term assets. They have also exhibited a willingness to disintermediate, however, if relative yields make this attractive.

Within the household sector one can observe differences in portfolio composition which are related to the age and wealth of the individual. The older and more affluent are more likely to devote a substantial fraction of their portfolio to direct stock holding, while equity in life insurance and in pension fund reserves are more important for the less well-to-do. This suggests that there are distributional aspects involved in assessing institutionalization of the stock market which are not completely captured by focusing on the share of individuals and institutions in corporate stock outstanding.

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[20] *NBER Report*, Ch. 5, sec. 2.b.6.

Table III-11

Balance Sheet of the Household Sector

| | In Billions Of Dollars | | | In Percent of Total Assets | | |
|---|---|---|---|---|---|---|
| | 1952 | 1960 | 1968 | 1952 | 1960 | 1968 |
| Total Assets | 1,103.2 | 1,867.3 | 3,363.8 | 100.0 | 100.0 | 100.0 |
| Tangible Assets | 386.3 | 670.6 | 1,051.8 | 35.0 | 35.9 | 31.3 |
| Land | 58.7 | 148.6 | 250.9 | 5.3 | 8.0 | 7.5 |
| Residential Structures | 237.3 | 381.2 | 567.1 | 21.5 | 20.4 | 16.9 |
| Consumer Durables | 90.3 | 140.8 | 233.8 | 8.2 | 7.5 | 7.0 |
| Financial Assets | 716.9 | 1,196.7 | 2,312.0 | 65.0 | 64.1 | 68.7 |
| Currency and Demand Deposits | 59.3 | 63.9 | 107.4 | 5.4 | 3.4 | 3.2 |
| Short-Term Claims | 84.4 | 173.1 | 374.7 | 7.7 | 9.3 | 11.1 |
| Time Deposits | 78.5 | 164.4 | 355.1 | 7 1 | 8.8 | 10.6 |
| Treasury Securities | 5.2 | 7.6 | 16.3 | 0.5 | 0.4 | 0.5 |
| Other | 0.7 | 1.1 | 3.3 | 0.1 | 0.1 | 0.1 |
| Long-Term Claims | 211.0 | 358.5 | 593.8 | 19.1 | 19.2 | 17.7 |
| Bonds | 58.6 | 78.0 | 93.6 | 5.3 | 4.2 | 2.8 |
| Mortgages | 17.3 | 29.6 | 34.5 | 1.6 | 1.6 | 1.0 |
| Other | 135.2 | 251.0 | 465.6 | 12.3 | 13.4 | 13.8 |
| orporate Shares | 142.8 | 320.9 | 828.0 | 12.9 | 17.2 | 24.6 |
| Equity in Unincorporated Business | 210.3 | 269.2 | 392.2 | 19.1 | 14.4 | 11.7 |
| Miscellaneous | 9.1 | 11.1 | 15.9 | 0.8 | 0.6 | 0.5 |
| Total Liabilities | 95.4 | 216.6 | 409.8 | 8.6 | 11.6 | 12.2 |
| Other Short-Term Claims | 38.1 | 77.4 | 161.4 | 3.5 | 4.1 | 4.8 |
| Mortgages | 56.1 | 136.8 | 244.1 | 5.1 | 7.3 | 7.3 |
| Miscellaneous | 1.2 | 2.4 | 4.3 | 0.1 | 0.1 | 0.1 |
| Net Worth | 1,007.8 | 1,650.7 | 2,954.0 | 91.4 | 88.4 | 87.8 |

SOURCE: NBER Report, Appendix I, Table IB-2.

Table III-12

HOUSEHOLD SAVING AND INVESTMENT
(As percent of personal disposable income)

| | 1950-1954 | 1955-1959 | 1960-1964 | 1965-1969 |
|---|---|---|---|---|
| Personal Saving (National Income Accounts Basis) | 7.0 | 6.4 | 5.4 | 6.5 |
| Gross Saving (Flow of Funds Basis) 1/ | 22.3 | 22.1 | 21.2 | 23.5 |
| Capital Expenditure | 20.6 | 20.4 | 18.7 | 18.3 |
| Acquisition of Financial Assets | 8.3 | 9.1 | 9.3 | 10.0 |
| Intermediated | 6.7 | 7.5 | 9.6 | 9.7 |
| Demand deposits and currency | .8 | .3 | .7 | 1.2 |
| Savings accounts | 2.6 | 3.6 | 5.1 | 4.3 |
| Life insurance reserves | 1.2 | 1.0 | 1.0 | .9 |
| Pension fund reserves | 1.9 | 2.2 | 2.4 | 2.6 |
| Investment company shares | .2 | .4 | .4 | .7 |
| Direct | 1.6 | 1.6 | .4 | .2 |
| Credit market instruments | .9 | 2.0 | .2 | .6 |
| U.S. Government securities | -.2 | .4 | .2 | 1.0 |
| State and local government securities | .5 | .8 | .4 | .2 |
| Corporate and foreign bonds | -.1 | .3 | * | .6 |
| Corporate shares | .3 | * | -.7 | -1.4 |
| Mortgages | .4 | .6 | .3 | .2 |
| Investment in noncorporate business | .5 | -.5 | -.7 | -.7 |
| Security credit | * | * | * | * |
| Miscellaneous | .2 | .1 | .1 | .3 |
| Increase in Liabilities | 5.1 | 5.5 | 5.6 | 5.2 |

1/ Includes credits from government insurance, capital gains dividends, savings through consumer durables purchases, and capital consumption allowances.

* Less than .05 percent.

SOURCE: Flow of Funds Accounts, op. cit.

Table III-13

ESTIMATED FINANCIAL SAVINGS EQUATIONS FOR HOUSEHOLDS

| Percent of Personal Income Used to Acquire | Constant | Time | Yield on US Govt. Bonds | Percentage Change in Bond Yield | Percentage Change in Pers. Income | This Year's Stock Yield | Last Year's Stock Yield | $R^2$ |
|---|---|---|---|---|---|---|---|---|
| Demand Deposits | -99.00<br>(1.33) | .4807<br>(1.76) | | -43.63<br>(1.91) | 13.60<br>(1.58 | | | .4970 |
| Savings deposits | 81.22<br>(3.38) | | 7.398<br>(3.86) | -70.60<br>(2.89) | | | | .5574 |
| Pension claims[1/] | 2.44<br>(27.69) | .0271<br>(8.40) | | | .1610<br>(1.76) | | | .8378 |
| Life insurance claims | 5.574 | | -1.526<br>(5.99) | -9.794<br>(1.86) | 19.16<br>(1.98) | -.0349<br>(1.94) | | .7469 |
| Bonds and mortgages | 96.16<br>(1.56) | | | 74.51<br>(3.29) | -160.9<br>(2.38) | | .2129<br>(2.48) | .6068 |
| Stock & mutual fund shares | 16.83 | | -4.165<br>(7.696) | | | | | .7476 |

Source: NBER Report, Chapter V passim.

1/ This varible expressed logarithmically.

Note: Figures in parentheses are t ratios.

Table III-14

ESTIMATED SHARE PURCHASE EQUATIONS FOR HOUSEHOLDS

| Percent of Pers. Income Used to Acquire | Constant | Time | Yield on US Govt. Bonds | Percentage Change in Bond Yield | Percentage Change in Pers. Income | This Year's Stock Yield | Last Year's Stock Yield | $R^2$ |
|---|---|---|---|---|---|---|---|---|
| Mutual fund shares | .00053 | .2537<br>(8.76) | | | | | -.0179<br>(1.685) | .8137 |
| Other stock | 20.52 | | -6.301<br>(13.95) | 27.90<br>(3.552) | -26.17<br>(1.568) | | | .9210 |
| Odd lot stock purchases | 7.555 | | -.8987<br>(4.978) | 7.525<br>(2.303) | -10.79<br>(1.659) | | -.0220<br>(2.029) | .7035 |
| Round lot stock purchases 1/ | 54.65<br>(2.10) | | -4.8971<br>(8.85) | 21.967<br>(2.68) | -58.536<br>(1.96) | | | .9043 |
| Round lot adjusted 2/ | -27.68 | | -8.048<br>(4.00) | 49.92<br>(1.78) | | .4050<br>(3.50) | | .7864 |

1/ On New York Stock Exchange.
2/ Round lot purchases less assumed net purchases by personal trusts and nonprofit institutions.

SOURCE: NBER Report, Chapter V passim.
NOTE: Figures in parentheses are t ratios.

Table III-15

DISTRIBUTION OF TOTAL ASSETS OWNED BY INDIVIDUALS OVER AGE AND TOTAL ASSET CLASSES 1962

(percentages of total)

| Total assets owned by individuals | Age of Individual | | | | | | |
|---|---|---|---|---|---|---|---|
| | Under 25 | 25 to 34 | 35 to 44 | 45 to 54 | 55 to 64 | Over 64 | All ages |
| Less than $15,000 | 0.9 | 2.0 | 3.3 | 4.0 | 3.0 | 2.9 | 15.8 |
| $15,000 - 30,000 | 0.2 | 2.6 | 3.9 | 4.7 | 3.4 | 3.1 | 17.9 |
| 30,000 - 60,000 | 0.1 | 1.5 | 3.5 | 4.3 | 5.1 | 3.2 | 17.5 |
| 60,000 - 100,000 | 0.1 | 0.3 | 1.4 | 1.9 | 2.4 | 2.9 | 8.8 |
| 100,000 - 200,000 | 0.2 | 0.1 | 2.5 | 1.5 | 3.0 | 1.3 | 8.6 |
| 200,000 - 500,000 | --- | 0.5 | 1.0 | 2.0 | 2.8 | 3.6 | 9.9 |
| 500,000 - 1,000,000 | 0.1 | 0.1 | 1.0 | 0.9 | 1.7 | 2.4 | 6.3 |
| Over $1,000,000 | --- | 1.6 | 1.6 | 4.0 | 3.8 | 4.1 | 15.0 |
| ALL INDIVIDUALS | 1.6 | 8.7 | 17.9 | 23.2 | 25.1 | 23.5 | 100.0 |

Sources: Table V-5 in Appendix V of NBER Report.

Note: Figures may not add to totals due to rounding.

Table III-16

DISTRIBUTION OF HOUSEHOLD-OWNED CORPORATE EQUITIES AMONG INDIVIDUALS CLASSIFIED BY AGE AND TOTAL ASSETS, 1962

| Total assets owned by individuals | Age of Individual | | | | | | |
|---|---|---|---|---|---|---|---|
| | Under 25 | 25 to 34 | 35 to 44 | 45 to 54 | 55 to 64 | Over 64 | All ages |
| | A. Total amount of corporate equities owned by all individuals in each class (billions of dollars) | | | | | | |
| Less than $15,000 | 0.6 | 0.5 | 0.3 | 0.7 | 0.9 | 0.6 | 3.6 |
| $15,000 - 30,000 | 0.2 | 0.8 | 1.8 | 1.3 | 3.6 | 2.6 | 10.3 |
| 30,000 - 60,000 | 0.1 | 4.7 | 3.4 | 7.0 | 5.6 | 6.3 | 27.0 |
| 60,000 - 100,000 | 0.5 | 3.3 | 2.8 | 4.3 | 11.8 | 6.4 | 29.1 |
| 100,000 - 200,000 | 0.4 | 0.5 | 11.8 | 6.5 | 11.8 | 7.1 | 38.1 |
| 200,000 - 500,000 | 0.1 | 1.1 | 4.3 | 13.8 | 14.7 | 35.1 | 69.2 |
| 500,000 - 1,000,000 | 1.3 | 1.7 | 1.8 | 6.1 | 17.8 | 18.1 | 46.9 |
| Over $1,000,000 | --- | 1.0 | 19.5 | 47.0 | 39.8 | 45.6 | 152.8 |
| ALL INDIVIDUALS | 3.2 | 13.6 | 45.7 | 86.7 | 106.0 | 121.8 | 377.0 |
| | B. Percentage distribution (percent of grand total) | | | | | | |
| Less than $15,000 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.9 |
| $15,000 - 30,000 | --- | 0.2 | 0.5 | 0.4 | 1.0 | 0.7 | 2.7 |
| 30,000 - 60,000 | --- | 1.2 | 0.9 | 1.9 | 1.5 | 1.7 | 7.2 |
| 60,000 - 100,000 | 0.1 | 0.9 | 0.7 | 1.1 | 3.1 | 1.7 | 7.7 |
| 100,000 - 200,000 | 0.1 | 0.1 | 3.1 | 1.7 | 3.1 | 1.9 | 10.1 |
| 200,000 - 500,000 | --- | 0.3 | 1.1 | 3.7 | 3.9 | 9.3 | 18.4 |
| 500,000 - 1,000,000 | 0.4 | 0.5 | 0.5 | 1.6 | 4.7 | 4.8 | 12.4 |
| Over $1,000,000 | --- | 0.3 | 5.2 | 12.5 | 10.5 | 12.1 | 40.5 |
| ALL INDIVIDUALS | 0.9 | 3.6 | 12.1 | 23.0 | 28.1 | 32.3 | 100.0 |

Source: Table V-6 of NBER Report, Appendix V.
Note: Figures may not add to totals due to rounding.

## D. FINANCIAL INSTITUTIONS

### 1. Balance Sheet Developments, 1952–1968

These financial institutions include the flow of funds' private nonbank finance sector, personal trusts, commercial banks, the monetary authorities, and credit agencies sponsored by the Federal Government. Table III–17 indicates that for these institutions, net worth has risen somewhat more rapidly than has their indebtedness. The changing composition of their liabilities reflects the decline in the importance of cash, the increasing popularity of time deposits, and the increase in household claims on insurance and pension reserves and on personal trusts. All of these developments have been discussed previously in this chapter.

Although the real estate holdings of some groups of financial institutions have increased in recent years, tangible assets constitute relatively little of the aggregate portfolio. The decline in short-term assets is largely confined statistically to Treasury securities; other forms of short-term credit have actually increased. Total long-term lending has declined only slightly, but there has been a sharp decrease in bond holdings. Corporate shares have increased in importance as an asset, particularly for nonbank financial institutions.

### 2. Institutions and Equity Purchases

Table III–17 indicates that the share of corporate stock in the aggregate portfolio of financial institutions doubled over the period 1952–1968. This is even more startling, since the aggregate portfolio includes the assets of commercial banks and of savings and loan associations; neither group is active in the stock market. Since these two institutions are so large in terms of assets, there must have been a substantial equity commitment on the part of the other institutions in order for this doubling to have taken place.

Data which give rather strong confirmation of this phenomenon appear in Table III–18. In every case except investment companies, already holders of substantial stock portfolios, and to some extent mutual savings banks, there has been a tendency for an increasing share of portfolio acquisitions to take the form of corporate stock. The heavy purchases made by mutual funds during 1967 reversed the decline in the share of stock in their net acquisition of financial assets. With this exception, the funds have been devoting a declining fraction of their portfolio acquisition to stock for some time.

When one remembers that households have been allocating a substantial portion of their financial saving to acquiring equity in pension funds and in mutual funds, the significance of these percentages becomes clearer. Individuals may have been net sellers of stock, but they were at the same time accumulating claims on institutions which gave them indirect holdings of equity securities to an increasing degree. The growth of these large institutional portfolios coupled with a shift in institutional portfolio preference toward equity securities led naturally to increased institutional activity in the stock market.

## 3. Selected Institutions and Portfolios, 1952–1968

*a. Managers versus portfolios*

The organization of this section follows that of chapter 5 of the *NBER Report.* By doing so it mixes the type of manager (for example a life insurance company) with the type of account managed (for example, a pension fund).

Part Two of the Study presents a new framework which keeps separate class of manager and type of account. The advantages of this framework could not be incorporated in the *NBER Report* because of the lack of time series data on the largest money managers, bank trust departments and investment advisers.

*b. Noninsured pension funds* [21]

The major increase in household's savings flows to institutions was enjoyed by pension funds during this period; by their nature these inflows and outflows are stable and rather predictable. Until 1950 almost one half of private pension funds were insured; but the pension funds managed by life insurance companies have declined in their share of the total over the postwar period. Corporate management earlier, and the overseers of state and local pension funds recently, began to look for higher investment returns in an effort to reduce the costs of providing pension benefits. As the share of noninsured private pension funds rose, so did the portion of these funds administered by bank trust departments. Although almost nothing is known historically about the share of investment advisers in this market, it seems likely that they will in the future compete for corporate funds as well as for a share of the new business from state and local pension funds. The latter have only recently begun to emerge from their former role as a repository for the bonds of the sponsoring jurisdiction and their tradition of conservative, nonprofessional management.

Looking at the summary data on private noninsured funds in Table III–19, it is possible to observe large declines in the share of such assets represented by U.S. government securities, corporate bonds, and cash, with substantial increases in the share of assets devoted both to stocks and to mortgages. The flows, averaged in the lower panel, give a somewhat better representation of decisions to commit new funds. Over the period, corporate stock has been substituted for corporate bonds virtually throughout; indeed the pre-eminence of stocks in total acquisitions was well established by 1959. Home mortgages were popular uses of funds from 1955 until 1965, but after the tight money of 1966, mortgage yields grew less attractive and corporate pension funds rapidly lost interest in acquiring such assets at the old pace. The decline in the importance of U.S. Government securities reflects lack of new acquisitions rather than sustained net selling.

The *NBER Report* found no statistically significant explanation for these developments in corporate pension funds; yield differentials provided little explanation of the portfolio shifts. The long time horizons under which investment decisions are made by these funds undoubtedly imply lags in their response to market conditions; these lags cannot be explored readily with the aggregative set of annual observations available. The *NBER Report* also hypothesized that,

[21] See *NBER Report,* ch. 5, secs. 3.a, 3.b.

given long-term growth as a management objective, yields may in fact play little role in the short run. Increases in pension fund turnover rates, the increased willingness to move money in search of better yields and the banks' development of pooled equity funds in competition with investment advisers and other managers are perhaps evidence that corporations with pension accounts became less risk-averse and more return-conscious in 1967.

State and local pension funds reduced their dependence on cash, Treasury bills, and state and local government securities, and became holders of corporate securities and mortgages. The increase in their stock portfolio has been particularly dramatic during recent years, as Table III–20 indicates. The selling of municipals, the acquisition of bonds and mortgages during the early 1960's, and then of stock during recent years, were made possible by the liberalization of investment restrictions and the increasing use of professional management. The *NBER Report* found a weak negative correlation between stock purchases and interest rates; stock prices were not significant.[22]

The pool of money devoted to pensions and other employee benefit plans is quite large. State and local employee retirement systems still are growing rapidly, and the new forms taken by employee benefit plans will probably give private plans somewhat more growth in the coming years than was once thought likely to occur.

*c. Life insurance companies*

Life insurance companies have historically been conservative investors, with foremost consideration given to safety of principal. Legal requirements have severely restricted both the extent and the nature of their investment in common stock. It is not clear that these regulations have imposed patterns of behavior which would not otherwise have been observed; some studies in the past have found their purchases of stock unresponsive to changes in the regulatory milieu in which they operate.[23]

The portfolio changes shown by life insurance companies can be followed in Table III–21. The liquidity of the immediate postwar years was reduced by the rather heavy net selling of U.S. Government securities. The acquisition of state and local government securities stopped after 1960 when life insurance companies became net sellers. Mortgages have been important in both holdings and acquisitions; the mortgage account's composition has shifted away from home mortgages and into multi-family and commercial mortgages. Insurers have also acquired commercial paper and bonds. Bonds, commercial paper, and mortgages, of course, have been popular external source of funds for corporations during the period. Finally, interest in stocks on the part of life insurance companies seems definitely to have increased since 1965; the share of stock in their portfolio has increased, the fraction of their investment taking this form has doubled over that obtaining during the early 1960's, and the composition of their holdings has shifted away from preferred and railroad and utility shares.[24]

Over the postwar period, inflows into both the life insurance and the pension components of the insurance business have fallen relative to GNP, especially the first of these. The response to the loss of pen-

[22] See *NBER Report*, ch. 5, sec. 3.b.
[23] See *NBER Report*, ch. 5, sec. 3.c.
[24] See *NBER Report*, Tables 5–5 and 5–6

sion business was the development of separate accounts with more investment latitude than was afforded by the regulations on pooled insurance and pension reserves. The declining commitment of new money to life insurance on the part of households has resulted in reductions in contract premiums, the offering of variable annuities, and the use of agency networks for the sale of mutual funds and other financial services. All of these imply for the life insurance companies a somewhat greater commitment to the corporate equity market than has been shown in the past.[25]

*d. Property and liability insurance companies* [26]

These institutions do not enjoy the relatively predictable inflows and outflows of either life insurance companies or pension accounts. Short-run fluctuations in inflows are substantial and are related less to the state of the economy than to random forces. This instability has led to fairly substantial holdings of Government securities; fluctuations in this portfolio absorb the variations in claims. Table III–22 also shows the running down of the war-time buildup of holdings in these securities.

The data of Table III–22 indicate that there has been a decline in the share of property and liability portfolios devoted to cash, to governments, and to mortgages, and an increase in holdings of corporate securities and the bonds of state and local governments. The latter's tax-exempt status has appeal for the stock companies in this field. Purchases of corporate bonds and of state and local securities were found to be sensitive to bond yields and to the net inflow of funds described above. When inflows and bond yields are high, the share devoted to corporate bonds increases and that devoted to municipals falls; relative yields and short-run changes in interest rates proved not significant in explaining these purchases. No statistical explanation was found for the share of funds flows devoted to stock purchases; none of the variables—yields, inflows, capital market changes—proved significant.[27]

Such indicators of the importance of property and liability insurance companies as the annual change in their assets, in their liabilities, or in other measures of inflow as a per cent of GNP show a steady drop until 1965 when the decline is reversed. In 1968 especially property and casualty insurers were very active in the markets for both corporate debt and equity. Whether this reflected a changed investment strategy or was simply a response to an unaccustomed cash inflow remains to be seen.

*e. Open-end investment companies* [28]

The bulk of the inflow into mutual fund shares finds its way directly into corporate stock; the funds' portfolio response to a change in yields would appear to be a marginal adjustment in their cash position. Over the period, the fraction of GNP devoted to the acquisition of mutual fund shares has risen; and thus mutual funds have grown more rapidly than has the economy as a whole.

The data of Table III–23 indicate that the percentages of assets devoted to cash, governments, and corporate securities have been

[25] See ch. VI.
[26] See *NBER Report*, ch. 5, sec. 3.d.
[27] *Id.*
[28] *NBER Report*, ch. 5, secs. 3.e, 4.c.

remarkably stable over time, though there has been an increase in the commercial paper component of the cash position since 1965. During periods of rising stock prices, this constant portfolio composition could be maintained with a declining fraction of net acquisitions devoted to the purchase of equities. Furthermore, to the extent that more volatile growth funds out-performed the market averages during the bull market, changes in the value of the stockholdings of mutual funds would necessarily have been chiefly the result of price appreciation rather than of large net purchases of relatively high-priced securities.

*f. Bank administered personal trusts and estates* [29]

Personal trusts and estates do not constitute all the business handled by bank trust departments by any means. There are personal agency as well as personal trust accounts; and employee benefit accounts represent a growing share of trust department business. The fact that personal trusts and estates are the only accounts under the management of bank trust departments to be discussed explicitly in this chapter reflects the fact that no data are available on other types of accounts until 1963.[30] Personal trusts can be observed over a longer period than the somewhat atypical past few years; and a reasonably good time series exists on a small portion of such assets, those in common trust funds. To the extent that banks manage the pension assets already discussed above, their behavior as portfolio managers of such assets has been covered in an earlier section. Table III–24 gives an indication of the relative sizes of the various types of accounts from 1963 through 1968. Common trust funds are included in the category "personal trusts and estates". In Table III–25 one can examine shifts in the composition of the assets held in bank-managed personal trust accounts. Over the period as a whole, there has been a decline in the share of cash and U.S. Government securities; an increase and then a decrease in the share of state and local government securities, and a decline in mortgage holdings. The period witnessed a steady growth in the holdings of corporate bonds and stocks.

Looking, however, at the net acquisitions associated with these changes in the composition of assets over time, these accounts appear to have been fairly consistent net sellers of U.S. Government securities and heavy net purchasers of state and local government securities since 1960. They also appear to have shifted during the 1960's from being relatively heavy net purchasers of corporate bonds to being relatively heavy net purchasers of stock. It should be noted that these estimates of net purchases have many deficiencies. They embody any inconsistencies in the balance sheet time series, since the net purchases of all assets except corporate stock are, by definition, the change in reported holdings. Net purchases of stock were measured residually as the portion of the change in stock holdings which could not be attributed to capital gains on a portfolio which appreciated as did the Dow-Jones Industrial Average.[31]

It is, therefore, more reliable to examine the portfolio policies of managers of common trust funds, even though the assets in these

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[29] *NBER Report*, ch. 5, secs. 3.f, 4.b.

[30] The estimates discussed in the text were derived from various and discontinuous sources; reported shifts in portfolio composition should be interpreted with special caution. See *NBER Report*, appendix I.

[31] *Id.*, sec. D.2.

accounts constitute only a small fraction of the assets in the personal trust and estates category. Data are given in Table III–26. Common trust funds were instituted in the 1930's as a vehicle for handling small fiduciary accounts at lower cost. Over the period the stock portfolios of these funds have shifted from utility and financial stock to industrial issues; their dependence on preferred stock also has been reduced. Their cash has risen; they have been net sellers of U.S. Government securities. Their relatively heavy acquisitions of tax-exempt securities reflect the growing popularity of funds specializing in municipal bonds. The data in Table III–26 indicate that these funds acquired stock more actively during the late 1950's than in more recent years. There also has been a growing interest in the acquisition of corporate bonds.

The investment strategy of bank trust accounts other than employee benefit accounts is now and has always been somewhat constrained by general legal restrictions on fiduciaries. These accounts always have held considerable assets in the form of stock; and the data suggest that a not inconsiderable portion of their inflow has taken this form.

*g. Mutual savings banks* [32]

Commercial banks and savings and loan associations do not hold stock; mutual savings banks do, and indeed have done so for a considerable period of time. The assets of mutual savings banks have not grown as rapidly as the rest of the economy; inflows into mutual savings banks have been falling as a percent of GNP. Over the period covered by Table III–27 we observe a decline in cash, U.S. Government, and in state and local government securities. Mortgages, stock, corporate bonds, loans and other assets all have increased. During the 1965–1969 period, rising interest rates seem to have induced a shift out of mortgages and into corporate bonds, commercial paper, and corporate stocks. Table 5–14 of the *NBER Report* indicates that they are moving out of financial stocks although the shares of certain jointly-owned investment companies are becoming popular.

## 4. Summary

The *NBER Report* found little in the way of complex econometric explanation for the observed investment policies of the financial institutions and portfolio types discussed. There does seem to have been a decline in the willingness of savers to entrust new money to the more conservative managers of long-term portfolios; furthermore, the movements by households into and out of time deposits in response to yield spreads indicates that individual investors are becoming quite yield conscious. These facts, the relaxation of many of the restrictions on institutional portfolio composition in the early 1960's, and a growing inventiveness on the part of the financial system created a suitable climate for the changes observed during the period since 1965. There does appear to have been a commitment on the part of most institutions to acquire stock. During the latter part of the period they were joined by heavy foreign demand; the only source of supply other than new issues, of course, was net selling by households.[33]

[32] *NBER Report*, ch. 5, sec. 3.h.
[33] See *NBER Report*, ch. 5, sec. 4.a.

Table III-17

Balance Sheet of Financial Institutions

| | In Billions of Dollars | | | In Percent of Total Assets | | |
|---|---|---|---|---|---|---|
| | 1952 | 1960 | 1968 | 1952 | 1960 | 1968 |
| Total Assets | 446.8 | 754.5 | 1,460.8 | 100.0 | 100.0 | 100.0 |
| Tangible Assets | 5.1 | 13.2 | 28.5 | 1.1 | 1.7 | 2.0 |
| Land | 0.6 | 2.3 | 7.2 | 0.1 | 0.3 | 0.5 |
| Structures | 2.5 | 5.6 | 12.3 | 0.6 | 0.7 | 0.8 |
| Producers' Durables | 2.0 | 5.3 | 9.0 | 0.4 | 0.7 | 0.6 |
| Financial Assets | 441.7 | 741.3 | 1,432.3 | 98.9 | 98.3 | 98.0 |
| Monetary Reserves | 27.9 | 22.9 | 19.2 | 6.2 | 3.0 | 1.3 |
| Currency and Demand Deposits | 7.9 | 11.2 | 17.0 | 1.8 | 1.5 | 1.2 |
| Short-Term Claims | 135.4 | 206.9 | 405.6 | 30.3 | 27.4 | 27.8 |
| Time Deposits | 1.2 | 1.3 | 3.2 | 0.3 | 0.2 | 0.2 |
| Treasury Securities | 43.7 | 50.8 | 76.5 | 9.8 | 6.7 | 5.2 |
| Other Short-Term Claims | 90.5 | 154.8 | 325.9 | 20.3 | 20.5 | 22.3 |
| Long-Term Claims | 227.6 | 382.9 | 702.4 | 50.9 | 50.7 | 48.1 |
| Bonds | 156.9 | 212.9 | 350.7 | 35.1 | 28.2 | 24.0 |
| Mortgages | 70.7 | 169.9 | 351.8 | 15.8 | 22.5 | 24.1 |
| Corporate Shares | 37.0 | 102.6 | 253.0 | 8.3 | 13.7 | 17.3 |
| Miscellaneous Assets | 6.0 | 14.6 | 35.2 | 1.3 | 1.9 | 2.4 |
| Total Liabilities | 404.8 | 666.1 | 1,282.2 | 90.6 | 88.3 | 87.8 |
| Currency and Demand Deposits | 137.4 | 152.2 | 211.1 | 30.8 | 20.2 | 14.5 |
| Short-Term Claims | 118.7 | 218.5 | 491.8 | 26.6 | 29.0 | 33.7 |
| Time Deposits | 84.9 | 176.8 | 412.1 | 19.0 | 23.4 | 28.2 |
| Other | 33.8 | 41.7 | 79.7 | 7.6 | 5.5 | 5.5 |
| Long-Term Claims | 125.5 | 249.4 | 479.8 | 28.1 | 33.1 | 32.8 |
| Bonds | 4.4 | 17.8 | 42.6 | 1.0 | 2.4 | 2.9 |
| Mortgages | 0.5 | 1.2 | 2.4 | 0.1 | 0.2 | 0.2 |
| Other | 120.6 | 230.4 | 434.8 | 27.0 | 30.5 | 29.8 |
| Miscellaneous Liabilities | 23.2 | 46.0 | 99.2 | 5.2 | 6.1 | 6.8 |
| Net Worth | 42.0 | 88.4 | 178.6 | 9.4 | 11.7 | 12.2 |

SOURCE: NBER Report, Appendix I, Table IB-9.

TABLE III-18

RATIO OF NET ACQUISITION OF CORPORATE STOCK BY FINANCIAL INSTITUTIONS TO THEIR TOTAL ACQUISITION OF FINANCIAL ASSETS, 1952-69

(Percent)

| | Insurance Organizations | | | | Open-end Investment Companies (5) | Mutual Savings Banks (6) |
|---|---|---|---|---|---|---|
| | Life Insurance Companies (1) | Pension Funds | | Other Insurance Companies (4) | | |
| | | Private (2) | State & Local (3) | | | |
| **Annual Data** | | | | | | |
| 1952 | 3.5 | 26.9 | 1.5 | 13.8 | 85.7 | 6.1 |
| 1953 | 1.8 | 27.1 | 1.5 | 13.2 | 94.8 | 5.0 |
| 1954 | 5.3 | 33.7 | 1.6 | 14.8 | 70.7 | 6.5 |
| 1955 | 1.2 | 32.4 | 2.2 | 16.1 | 75.7 | 4.2 |
| 1956 | - .0 | 34.2 | 2.4 | 22.4 | 70.2 | 2.4 |
| 1957 | .8 | 36.9 | 3.1 | 13.0 | 84.6 | 3.4 |
| 1958 | 1.4 | 43.8 | 3.9 | 11.6 | 78.6 | 3.7 |
| 1959 | 3.4 | 47.6 | 3.8 | 15.3 | 72.5 | -3.3 |
| 1960 | 6.1 | 49.0 | 3.8 | 23.0 | 75.8 | 1.0 |
| 1961 | 7.6 | 55.9 | 6.2 | 19.9 | 71.9 | 2.9 |
| 1962 | 6.4 | 52.3 | 7.8 | 13.3 | 78.0 | 4.5 |
| 1963 | 3.5 | 48.4 | 8.8 | 14.4 | 74.9 | 3.2 |
| 1964 | 7.0 | 45.0 | 9.7 | 10.0 | 67.4 | 2.2 |
| 1965 | 8.1 | 55.9 | 10.5 | 7.1 | 57.0 | 4.2 |
| 1966 | 3.2 | 60.1 | 12.3 | 18.3 | 39.3 | 1.5 |
| 1967 | 11.4 | 74.5 | 14.4 | 25.3 | 133.0 | 4.1 |
| 1968 | 15.3 | 73.8 | 29.8 | 31.8 | 57.7 | 5.5 |
| 1969 | 18.1 | 86.4 | 35.7 | 33.2 | 74.7 | 10.0 |
| **Cycle Average** | | | | | | |
| 1953-57 | 1.8 | 28.7 | 2.2 | 15.9 | 79.2 | 4.3 |
| 1957-60 | 3.0 | 44.4 | 3.6 | 15.7 | 77.9 | 1.2 |
| 1960-64 | 6.1 | 50.2 | 7.2 | 16.1 | 73.6 | 2.8 |
| 1965-69 | 11.2 | 70.1 | 20.6 | 23.1 | 72.4 | 5.0 |

Source: Flow of Funds Accounts, Op. Cit.

Table III-19

Structure of Assets and Transactions of Private Uninsured Pension Funds, 1951-69

(percent)

| | | 1951 (1) | 1955 (2) | 1960 (3) | 1965 (4) | 1969 (5) |
|---|---|---|---|---|---|---|
| I. | Distribution of financial assets | | | | | |
| 1. | Cash | 3.8 | 2.2 | 1.3 | 1.2 | 1.7 |
| 2. | U.S. govt. sec. | 26.9 | 15.8 | 7.1 | 4.6 | 3.2 |
| 3. | State & local govt. sec. | - | - | - | - | - |
| 4. | Mortgages | 1.3 | 1.6 | 3.4 | 4.5 | 4.1 |
| 5. | Loans | - | - | - | - | - |
| 6. | Corporate bonds | 45.1 | 43.2 | 41.2 | 31.3 | 27.5 |
| 7. | Corporate stocks | 17.8 | 33.3 | 43.3 | 54.7 | 59.0 |
| 8. | Miscellaneous assets | 5.1 | 3.8 | 3.7 | 3.3 | 4.5 |
| Total assets | | | | | | |
| 9. | Percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 10. | Billions of dollars | 7.8 | 18.3 | 38.1 | 72.6 | 96.6 |
| II. | Distribution of net acquisition of financial assets[a/] | | | | | |
| 1. | Cash | | 2.4 | 0.6 | 1.3 | 2.4 |
| 2. | U.S. govt. sec. | | 10.8 | -1.9 | 3.5 | -1.2 |
| 3. | State & local govt. sec. | | - | - | - | - |
| 4. | Mortgages | | 1.2 | 5.6 | 8.7 | 2.7 |
| 5. | Loans | | - | - | - | - |
| 6. | Corporate bonds | | 53.0 | 48.4 | 30.3 | 15.7 |
| 7. | Corporate stocks | | 28.9 | 43.5 | 51.9 | 73.7 |
| 8. | Miscellaneous assets | | 3.6 | 3.8 | 4.3 | 6.7 |
| Total net acquisitions | | | | | | |
| 9. | Percent | | 100.0 | 100.0 | 100.0 | 100.0 |
| 10. | Billions of dollars | | 8.3 | 16.1 | 23.1 | 25.5 |

Source: Table 5-2 of NBER Report.

[a/] Period ending with year indicated at top of column; derived from annual figures; hence, occasional small differences compared to final differences between benchmark years.

Table III-20

Structure of Assets and Transactions of State and Local Government Retirement Funds, 1951-69

(percent)

| | | 1951 (1) | 1955 (2) | 1960 (3) | 1965 (4) | 1969 (5) |
|---|---|---|---|---|---|---|
| I. | Distribution of financial assets | | | | | |
| 1. | Cash | 1.8 | 1.9 | 1.0 | 0.9 | 0.9 |
| 2. | U.S. govt sec. | 51.8 | 43.9 | 30.3 | 23.6 | 15.5 |
| 3. | State & local govt. sec. | 30.4 | 25.2 | 22.6 | 7.9 | 4.3 |
| 4. | Mortgages | 1.8 | 2.8 | 7.7 | 11.2 | 11.4 |
| 5. | Loans | - | - | - | - | - |
| 6. | Corporate bonds | 12.5 | 23.4 | 34.4 | 49.4 | 54.3 |
| 7. | Corporate stocks | - | 0.9 | 2.1 | 4.8 | 11.4 |
| 8. | Miscellaneous assets | 1.8 | 1.9 | 2.1 | 2.1 | 2.2 |
| Total assets | | | | | | |
| 9. | Percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 10. | Billions of dollars | 5.6 | 10.7 | 19.5 | 33.0 | 51.0 |
| II. | Distribution of net acquisition of financial assets [a] | | | | | |
| 1. | Cash | | | | | 1.1 |
| 2. | U.S. govt sec. | | 36.7 | 13.6 | 14.7 | 0.6 |
| 3. | State & local govt. sec. | | 20.4 | 19.3 | -13.2 | -2.2 |
| 4. | Mortgages | | 4.1 | 13.6 | 16.9 | 11.7 |
| 5. | Loans | | - | - | - | - |
| 6. | Corporate bonds | | 36.7 | 48.9 | 69.9 | 62.8 |
| 7. | Corporate stocks | | - | 4.5 | 9.6 | 23.9 |
| 8. | Miscellaneous assets | | 2.0 | | 2.2 | 2.2 |
| Total net acquisitions | | | | | | |
| 9. | Percent | | 100.0 | 100.0 | 100.0 | 100.0 |
| 10. | Billions of dollars | | 4.9 | 8.8 | 13.6 | 18.0 |

Source: Table 5-3 of NBER Report.

[a] Period ending with year indicated at top of column; derived from annual figures; hence, occasional small differences compared to final differences between benchmark years.

Table III-21

Structure of Assets and Transactions of Life Insurance Companies, 1951-69

(percent)

| | | 1951 (1) | 1955 (2) | 1960 (3) | 1965 (4) | 1969 (5) |
|---|---|---|---|---|---|---|
| I. | Distribution of financial assets | | | | | |
| 1. | Cash | 1.6 | 1.5 | 1.1 | 0.9 | 0.8 |
| 2. | U.S. govt. sec., | 16.5 | 9.8 | 5.6 | 3.3 | 2.1 |
| 3. | State & local govt. sec. | 1.8 | 2.3 | 3.1 | 2.3 | 1.7 |
| 4. | Mortgages | 28.9 | 33.6 | 41.6 | 39.7 | 37.9 |
| 5. | Loans | 3.9 | 3.9 | 4.3 | 5.9 | 7.8 |
| 6. | Corporate bonds | 41.2 | 42.1 | 36.1 | 39.0 | 38.5 |
| 7. | Corporate stocks | 3.3 | 4.1 | 4.7 | 5.2 | 6.9 |
| 8. | Miscellaneous assets | 2.7 | 2.8 | 3.4 | 3.7 | 4.2 |
| Total assets | | | | | | |
| 9. | Percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 10. | Billions of dollars | 66.7 | 87.9 | 115.8 | 154.0 | 190.0 |
| II. | Distribution of net acquisition of financial assets[a/] | | | | | |
| 1. | Cash | | 1.0 | - | 0.5 | - |
| 2. | U.S. govt. sec. | | -12.1 | -8.1 | -3.8 | -3.6 |
| 3. | State & local govt. sec. | | 4.8 | 5.5 | -0.3 | -0.8 |
| 4. | Mortgages | | 48.8 | 45.2 | 50.0 | 33.8 |
| 5. | Loans | | 3.9 | 8.1 | 7.1 | 19.0 |
| 6. | Corporate bonds | | 46.9 | 41.2 | 35.2 | 33.2 |
| 7. | Corporate stocks | | 3.4 | 2.6 | 6.3 | 12.3 |
| 8. | Miscellaneous assets | | 3.4 | 5.5 | 4.9 | 6.1 |
| Total net acquisitions | | | | | | |
| 9. | Percent | | 100.0 | 100.0 | 100.0 | 100.0 |
| 10. | Billions of dollars | | 20.7 | 27.2 | 36.6 | 35.8 |

Source: Table 5-4 of NBER Report.

[a/] Period ending with year indicated at top of column; derived from annual figures, hence, occasional small differences compared to final differences between benchmark years.

Table III-22

Structure of Assets and Transactions of Non-Life Insurance Companies, 1951-69.

(percent)

| | | 1951 (1) | 1955 (2) | 1960 (3) | 1965 (4) | 1969 (5) |
|---|---|---|---|---|---|---|
| I. | Distribution of financial assets | | | | | |
| 1. | Cash | 8.7 | 6.2 | 4.6 | 3.3 | 2.8 |
| 2. | U.S. govt. sec. | 39.9 | 28.9 | 19.9 | 15.2 | 8.4 |
| 3. | State & local govt. sec. | 10.1 | 19.9 | 28.8 | 28.5 | 32.3 |
| 4. | Mortgages | 0.7 | 0.9 | 0.4 | 0.3 | 0.4 |
| 5. | Corporate bonds | 5.8 | 5.7 | 6.0 | 7.6 | 13.3 |
| 6. | Corporate stocks | 28.3 | 32.7 | 33.5 | 38.6 | 35.1 |
| 7. | Miscellaneous assets | 6.5 | 5.7 | 6.8 | 6.7 | 7.6 |
| Total assets | | | | | | |
| 8. | Percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 9. | Billions of dollars | 13.8 | 21.1 | 28.1 | 39.6 | 49.8 |
| II. | Distribution of net acquisition of financial assets[a] | | | | | |
| 1. | Cash | | 2.0 | - | - | 0.9 |
| 2. | U.S. govt. sec. | | 12.2 | -7.0 | 4.6 | -17.8 |
| 3. | State & local govt. sec. | | 55.1 | 68.4 | 50.8 | 43.9 |
| 4. | Mortgages | | - | - | - | - |
| 5. | Corporate bonds | | 6.1 | 8.8 | 18.5 | 33.6 |
| 6. | Corporate stocks | | 16.3 | 15.8 | 13.8 | 29.0 |
| 7. | Miscellaneous assets | | 8.6 | 14.3 | 12.3 | 10.3 |
| Total net acquisitions | | | | | | |
| 8. | Percent | | 100.0 | 100.0 | 100.0 | 100.0 |
| 9. | Billions of dollars | | 4.9 | 5.7 | 6.5 | 10.7 |

Source: Table 5-7 of NBER Report.

[a] Period ending with year indicated at top of column; derived from annual figures; hence, occasional small differences compared to final differences between benchmark years.

Table III-23

Structure of Assets and Transactions of Open-End Investment Companies, 1951-69

(percent)

| | 1951 (1) | 1955 (2) | 1960 (3) | 1965 (4) | 1969 (5) |
|---|---|---|---|---|---|
| I. Distribution of financial assets | | | | | |
| 1. Cash[a] | 2.9 | 2.5 | 2.4 | 1.8 | 6.0 |
| 2. U.S. govt. sec. | 2.9 | 3.8 | 3.5 | 3.0 | 1.2 |
| 3. Corporate bonds | 8.8 | 6.3 | 7.1 | 7.8 | 7.0 |
| 4. Corporate stock | 85.4 | 87.4 | 87.0 | 87.4 | 85.8 |
| Total assets | | | | | |
| 5. Percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 6. Billion of dollars | 3.4 | 7.9 | 17.0 | 27.1 | 52.6 |
| II. Distribution of net acquisition of financial assets[b] | | | | | |
| 1. Cash[a] | | 4.8 | 3.7 | 10.2 | 31.2 |
| 2. U.S. govt. sec. | | 9.5 | 5.6 | 2.0 | -2.8 |
| 3. Corporate bonds | | 9.5 | 13.0 | 18.4 | 12.8 |
| 4. Corporate stocks | | 76.2 | 77.7 | 69.4 | 58.8 |
| Total net acquisitions | | | | | |
| 5. Percent | | 100.0 | 100.0 | 100.0 | 100.0 |
| 6. Billions of dollars. | | 2.1 | 5.4 | 4.9 | 10.9 |

Source: Table 5-8 of NBER Report.

[a] Includes open market paper.
[b] Period ending with year indicated at top of column.

Table III-24

ASSETS MANAGED BY THE TRUST DEPARTMENTS OF INSURED COMMERCIAL BANKS

| Date | Total Assets | All Agency Accounts | All Trustee Accounts | Employee Benefit Trusts | Personal Trusts & Estates |
|---|---|---|---|---|---|
| | | | (In billions of dollars) | | |
| 1963 | N.A. | N.A. | 144.2 | 43.0 | 101.2 |
| 1964 | 190.7 | 35.0 | 155.7 | 50.3 | 105.4 |
| 1965 | 214.5 | 40.0 | 174.5 | 59.6 | 115.0 |
| 1966 | 221.5 | 47.0 | 174.5 | 61.5 | 113.0 |
| 1967 | 253.3 | 54.2 | 199.1 | 71.9 | 126.2 |
| 1968 | 282.7 | 60.0 | 222.7 | 84.4 | 138.4 |
| 1969 | 280.1 | 60.9 | 219.2 | 86.4 | 132.8 |
| | | | (As a percent of total assets) | | |
| 1963 | N.A. | N.A. | N.A. | N.A. | N.A. |
| 1964 | 100.0 | 18.4 | 81.6 | 26.4 | 55.3 |
| 1965 | 100.0 | 18.6 | 81.4 | 27.8 | 53.6 |
| 1966 | 100.0 | 21.2 | 78.8 | 27.8 | 51.0 |
| 1967 | 100.0 | 21.4 | 78.6 | 28.8 | 49.8 |
| 1968 | 100.0 | 21.2 | 78.8 | 29.8 | 48.9 |
| 1969 | 100.0 | 21.7 | 78.3 | 30.9 | 47.4 |

Source: 1968 and 1969: Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, and Office of the Comptroller of the Currency, Trust Assets of Insured Commercial Banks - 1968, Ibid - 1969. Washington, D.C. ~~1969, 1970.~~

1963-1967: ~~Edwin W~~ Hanczaryk, Bank Trusts: Investments and Performance, Office of the Comptroller of the Currency, Washington, 1970.

Table III-25

Structure of Assets and Transactions of Personal Trust Funds Administered by Banks and Trust Companies, a/ 1951-68

(percent)

| | 1951 (1) | 1955 (2) | 1960 (3) | 1965 (4) | 1968 (5) |
|---|---|---|---|---|---|
| I. Distribution of financial assets | | | | | |
| 1. Cash | 2.2 | 2.4 | 1.0 | 1.0 | 1.0 |
| 2. U.S. govt. sec. | 23.8 | 12.2 | 5.9 | 7.2 | 5.7 |
| 3. State & local govt. sec. | 12.2 | 12.9 | 14.2 | 9.7 | 9.7 |
| 4. Mortgages | 2.7 | 2.1 | 1.4 | 1.2 | 1.5 |
| 5. Corporate bonds | 4.4 | 5.5 | 5.2 | 5.7 | 6.3 |
| 6. Corporate stock preferred | 4.2 | 3.5 | 2.2 | 1.7 | 1.9 |
| 7. Corporate stock common | 44.5 | 56.8 | 65.3 | 67.5 | 67.5 |
| 8. Other assets | 6.6 | 4.6 | 4.8 | 6.6 | 6.4 |
| Total assets | | | | | |
| 9. Percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 10. Billions of dollars | 39.1 | 55.0 | 71.9 | 115.0 | 138.4 |
| II. Distribution of net acquisition of financial assets b/ | | | | | |
| 1. Cash | | 3.5 | 0.0 | 1.7 | 3.3 |
| 2. U.S. govt. sec. | | -3.4 | -16.3 | 12.7 | -13.4 |
| 3. State & local govt. sec. | | 10.3 | 2.1 | 29.1 | 29.6 |
| 4. Mortgages | | 6.5 | 4.0 | 3.7 | 3.3 |
| 5. Corporate bonds | | 59.3 | 74.0 | 29.0 | 27.2 |
| 6. Corporate stock preferred | | 24.5 | -0.2 | 0.1 | 2.0 |
| 7. Corporate stock common | | 4.9 | 36.4 | 22.8 | 46.0 |
| 8. Other assets | | -5.6 | -0.0 | 0.8 | 1.8 |
| Total net acquisitions | | | | | |
| 9. Percent | | 100.0 | 100.0 | 100.0 | 100.0 |
| 10. Billions of dollars | | | | | |

Source: Table 5-10 of NBER Report.

a/ Includes common trust funds; separate figures for these are shown in Table 5-11.

b/ Period ending with year indicated at top of column.

Table III-26

Structure of Assets and Transactions of Common Trust Funds, 1952-68

(percent)

| | | 1952 (1) | 1955 (2) | 1960 (3) | 1965 (4) | 1968 (5) |
|---|---|---|---|---|---|---|
| I. | Distribution of financial assets | | | | | |
| 1. | Cash | - | 0.6 | 0.8 | 1.0 | 1.3 |
| 2. | U.S. govt. sec. | 30.2 | 17.2 | 7.9 | 9.2 | 5.2 |
| 3. | State & local govt. sec. | 75.6 | 1.7 | 1.6 | 14.9 | 16.3 |
| 4. | Mortgages | | 1.1 | 1.6 | 2.4 | 2.4 |
| 5. | Corporate & for. bonds | | 19.2 | 28.8 | 25.0 | 23.9 |
| 6. | Corporate stock preferred | 12.5 | 11.5 | 7.6 | 2.9 | 2.6 |
| 7. | Corporate stock common | 40.1 | 48.7 | 51.7 | 44.2 | 47.7 |
| 8. | Other assets | 1.6 | - | - | 0.2 | 0.6 |
| Total assets | | | | | | |
| 9. | Percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 10. | Billions of dollars | 1.10 | 1.87 | 2.81 | 7.53 | 9.55 |
| II. | Distribution of net acquisitions of financial assets[a/] | | | | | |
| 1. | Cash | | | -8.1 | 2.8 | 3.3 |
| 2. | U.S. govt. sec. | | -314.3 | -37.2 | 28.9 | -3.0 |
| 3. | State & local govt. sec. | | | 47.6 | 6.5 | 17.6 |
| 4. | Mortgages | | 566.6 | -1.5 | 2.5 | 5.8 |
| 5. | Corporate & for. bonds | | | 10.7 | 15.2 | 22.1 |
| 6. | Corporate stock preferred | | 39.9 | -5.0 | 2.8 | 5.4 |
| 7. | Corporate stock common | | -188.8 | 80.3 | 11.2 | 39.2 |
| 8. | Other assets | | -3.5 | 13.3 | 30.1 | 9.6 |
| Total net acquisitions | | | | | | |
| 9. | Percent | | 100.0 | 100.0 | 100.0 | 100.0 |
| 10. | Billions of dollars | | | | | |

Source: Table 5-11 of NBER Report.

a/ Period ending with year indicated at top of column.

Table III-27

Structure of Assets and Transactions of Mutual Savings Banks, 1951-69

(percent)

| | | 1951 (1) | 1955 (2) | 1960 (3) | 1965 (4) | 1969 (5) |
|---|---|---|---|---|---|---|
| I. | Distribution of financial assets | | | | | |
| 1. | Cash | 3.8 | 2.9 | 2.0 | 1.7 | 1.2 |
| 2. | U.S. govt. sec. | 42.1 | 27.5 | 16.5 | 10.7 | 6.3 |
| 3. | State & local govt. sec. | 0.4 | 1.9 | 1.7 | 0.5 | 0.3 |
| 4. | Mortgages | 42.1 | 55.9 | 66.7 | 76.9 | 75.3 |
| 5. | Loans | 0.9 | 0.6 | 1.0 | 1.4 | 2.6 |
| 6. | Corporate bonds | 9.4 | 8.3 | 9.4 | 5.0 | 9.3 |
| 7. | Corporate stocks | 0.9 | 2.2 | 2.0 | 2.4 | 3.1 |
| 8. | Miscellaneous assets | 0.4 | 0.6 | 0.7 | 1.4 | 2.0 |
| Total assets | | | | | | |
| 9. | Percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 10. | Billions of dollars | 23.5 | 31.3 | 40.5 | 58.1 | 74.4 |
| II. | Distribution of net acquisition of financial assets[a/] | | | | | |
| 1. | Cash | | 1.2 | -2.1 | 0.6 | -0.6 |
| 2. | U.S. govt. sec. | | -26.7 | -19.8 | -3.4 | -10.1 |
| 3. | State and local govt. sec. | | 6.8 | - | -2.3 | -0.6 |
| 4. | Mortgages | | 107.0 | 100.0 | 100.6 | 71.1 |
| 5. | Loans | | - | 1.0 | 2.3 | 6.3 |
| 6. | Corporate bonds | | 5.8 | 14.6 | 4.5 | 25.8 |
| 7. | Corporate stocks | | 4.7 | 3.1 | 3.4 | 5.0 |
| 8. | Miscellaneous assets | | 1.2 | 3.1 | 3.4 | 3.1 |
| Total net acquisitions | | | | | | |
| 9. | Percent | | 100.0 | 100.0 | 100.0 | 100.0 |
| 10. | Billions of dollars | | 8.6 | 9.6 | 17.7 | 15.9 |

Source: Table 5-13 of NBER Report.

a/ Period ending with year indicated at top of column; derived from annual figures; hence, occasional small differences compared to final differences between benchmark years.

E. SUMMARY: THE SUPPLY OF AND THE DEMAND FOR CORPORATE STOCK

## 1. Holdings and Net Purchases of Stock

The discussion so far indicates that between 1952 and 1968 corporations did not issue stock to the extent that institutions wished to acquire it, thereby creating a situation in which individuals, statistically at least, were net sellers of equity securities to institutions. This statistical evidence, the growing share of institutional transactions on the New York Stock Exchange, and institutional interest in certain individual issues all combined to produce a vague fear on the part of some observers that there would simply not be enough stock to go around. They warned that eventually, if not at present, there would be such a wave of speculative buying and selling as a result of this scarcity that the value of the underlying assets would no longer be able to justify the expectations of capital gains which caused the demand for these securities to rise in the first place.

Data on the share of individuals and institutions in total corporate stock outstanding are given in Table III–28 in dollar value and in Table III–29 in percentage terms. Although some financial institutions and foreigners hold mutual fund shares and also, presumably, the shares of other investment companies, data on such holdings are spotty. Consequently the tables assume that only households hold investment company shares; all investment company shares are thus subtracted from the residual holdings of individuals. This biases the results toward the conclusion that the household share of outstanding non-investment company stock is falling. Such a decline did indeed occur, but most of it had taken place by the mid-1950's. Since that time households have continued to hold around 70 percent of outstanding stock. The major institutional increases over the period have come in the shares of private noninsured pension funds, state and local pension funds, and open-end investment companies; life insurance companies and mutual saving banks have held their own, while the shares of other institutions have declined. Thus the source of equity for institutional portfolios since the mid-1950's appears to have been other institutions as well as individuals.

When the shares of individuals and institutions in net purchases are considered, however, the concern about the supply of stock seems somewhat more readily justified.

In Table III–30 the assumption is again made that only individuals purchase investment company shares. On that basis, individuals have been heavy net sellers of corporate stock over the entire period and especially since 1965. Particularly heavy increases in purchases have been registered by personal trusts, pension funds, and mutual funds, though all institutions have purchased rather heavily. Foreign investors (the rest of the world), never before a major force, became very active during the last two years of the period.[34] The message is unmistakable; individuals have turned from being slight net purchasers during the 1950's of non-investment company shares to being net sellers during the 1960's. It is nevertheless important to keep in mind the statistical difficulties which may affect the interpretation to be placed on these data.

[34] See *NBER Report*, ch. 3, sec. 6.

## 2. Statistical Problems

The statistical questions have to do with (1) the definition of net issues, (2) the measurement of net purchases for certain institutional groups which do not report their transactions directly and (3) the measurement of stock outstanding. The first of these involves the question of what constitutes the proper measure of equity issued during the period. Household purchases are measured residually; therefore, any underestimate of total net issues is reflected in the extent of apparent net selling on the part of households.

It has been contended that the net new issues series understates the supply of shares available for institutional purchases since retirements are heavily concentrated in small companies selling out to larger ones; and that in fact, if a closely held corporation merges with a publicly traded company, the supply of broadly marketable shares is increased.[35] For such reasons, gross rather than net issues are a better measures of the increment to institutional supply and retained earnings should also be included in a measure of the increase in equity which occurs. In addition, existing estimates of either net or gross new issues cover only equity in publicly held corporations. The equity in closely held corporations does not appear here, though it is included in the series on the value of stock outstanding. This is a partial explanation of the fact that the plight of the individual investor seems almost trivial in balance sheet terms, but not so in flow terms. If retained earnings were added to both total issues and households' share of net purchases, households would become net purchasers in all years.

The second set of statistical problems has to do with the measurement of net purchases for personal trusts, for nonprofit institutions, for other, that is, non-open-end investment companies, and for fraternal life insurance. These institutions have been merged with the Flow of Funds' household sector because of the absence of systematic data on their activities, and thus, the measurement of their purchases is a problem.[36] If the balance sheet series is valid, then the annual changes in holdings valued at market must be accounted for either by realized and unrealized capital gains or by net purchases. If one assumes that capital gains accrue as they would on a stock portfolio such as that represented one of the broadly based market indices, then one has a series on net purchases as a residual. Clearly the more rapid the price appreciation, the smaller the net purchases associated with a given change in holdings.

Thus, the statistical "noise" in the annual series on net purchases so calculated may result from an incorrectly specified balance sheet series, from an incorrect assumption about the rate at which an institution's portfolio appreciates, or from a combination of the two. When averaged over a period of years, however, the estimates are likely to be broadly correct in what they indicate. In the case of the series on personal trusts, the fact that net purchases behave in roughly the same way as those of noninsured pension funds, the bulk of which are administered by these same banks, lends credence to the estimates.

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[35] R. Murray, *Economic Aspects of Pensions: A Summary Report* at 87–88 (1968).

[36] While it is a problem for other institutions as well, the estimates of their stock purchases have been available for some time and their characteristics are better known.

The third set of statistical problems has to do with the measurement of corporate stock outstanding. For many years it has been possible to form quite different impressions about the extent of institutionalization in the stock market depending on whether the source of information was the *Federal Reserve Bulletin* or the *Statistical Bulletin* of the Securities and Exchange Commission. Each of these two agencies produces an estimate of outstanding stock, and the two series have diverged considerably since 1964. They differ primarily in the way in which they derive estimates of the amount of over-the-counter and privately-held stock outstanding. Since institutional holdings are reasonably well-established totals, a measure of institutionalization consisting of institutional holdings as a percent of some estimated total outstanding is quite sensitive to the choice of denominator.

The estimates shown in Table III–28 were developed for the *NBER Report* in an effort to improve on the available series. The major contribution of this new set of estimates is the explicit attention which it pays to the problem of developing consistent time series estimates of unlisted stocks outstanding. In an internal memorandum only recently completed, the Office of Policy Research of the Commission has attempted still further refinements of the estimates for the period 1964–1968.

This Study is not a proper medium for discussing the merits and deficiencies of the various estimates of outstanding stock or for reconciling them. What can be done is to show the extent to which the picture of institutionalization presented in the *NBER Report* is affected by these new data. This is carried out in Table III–31. The NBER estimates indicate a somewhat more rapid pace of institutionalization during the 1950's; the alternative series indicate that the institutional share was increasing well into the 1960's. Only the old S.E.C. series, however, shows the sharp acceleration in institutional holdings as a share of stock outstanding which often is thought to have occurred since 1965. It seems safe to conclude that by 1968, institutional investors held approximately 27 or 28 percent of outstanding corporate stock, and that they had accounted for approximately the same share since at least 1960. The discussion contained in the section which follows will indicate additional reasons for qualifying the notion of rapid institutionalization in recent years, and with it the time series on outstanding stock which gave rise to this belief.

### 3. Institutionalization and the Scarcity Hypothesis

The major task remaining is to provide some conceptual reconciliation for the fact that corporations have for many years supplied less equity securities than institutions wished to acquire and the fact that over this same period, the evidence provided by three somewhat different and at least partially independent estimates of the value of stock outstanding indicates that the institutional share of holdings has not expanded at a corresponding rate. Some statistical explanations have been offered. This section addresses itself to the question of differential rates of portfolio appreciation.

The change in holdings of stock over a particular period must be accounted for either by net purchases or by capital gains; thus a series on holdings and a series on net purchases together define an implicit

price index for the portfolio under discussion. Such indices were calculated for total stock outstanding using the various series shown in Table III–31 and the net issue series shown in Table III–30 which is common to them all. These indices are given in Table III–32. With the exception of the two market indices and the NQB price average for which year-end price relatives are shown, all entries in the table were computed by subtracting cumulated net purchases from end-of-period holdings and expressing this difference as a percentage of initial year holdings. In every case but that of the old S.E.C. series, the implicit price index in recent years has been well above the popular stock price indices.

Similar calculations produced indices for the rest of the world, for "nonbank financial institutions" (which covers all the financial institutions except personal trusts, fraternal insurance, and closed-end investment companies), and a residual from the NBER's total. Foreigners show the same price movement as the Standard & Poor's 500; nonbank finance does somewhat better than this on appreciation; and since the mid-1950's when "households" became net sellers, "households" have done better still.

Since the estimates in Table III–30 of net purchases for nonprofit institutions and the financial institutions not included in the flow of funds financial sector were created on the assumption of a particular market rate of appreciation, it would be circular to use them to rederive the index implicitly. Consequently the household residual was further broken down between individuals and institutions using two assumptions about institutional net purchases. Variant I assumes that one-half the change in holdings resulted from net purchases; Variant II assumes that none of the change in holdings resulted from net purchases. The implicit institutional index for Variant II is much closer to that for the flow of funds series on nonbank finance. Whichever version is used, however, individual portfolios appreciated more rapidly than did the widely useld market indices.

This evidence suggests that the observed net selling by individuals can be explained as the result of institutional purchases of those shares which did not subsequently increase in value during the period studied as rapidly as did the stocks which individuals retained or in which they invested the proceeds. This interpretation also is consistent with the evidence presented later in the Study which documents the institutional concentration of holdings in a subset of NYSE stocks. Large established companies with large capitalization have not grown as rapidly in sales, in earnings, or in market value during recent years as have smaller firms.[37] Shares in the former companies are likely to be included in the portfolios of the more conservative institutions, while equity in the latter appears in the portfolios of small growth funds, and apparently, of individuals.[38]

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[37] *NBER Report*, ch. 5, sec. 4.a.
[38] *NBER Report*, ch. 5, secs. 4.c, 4.d.

TABLE III-28a

Holdings of Corporate Stock Outstanding, 1952-1960

(In millions of dollars)

| | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 | 1960 |
|---|---|---|---|---|---|---|---|---|---|
| Total outstanding | 189,682 | 186,182 | 256,191 | 306,125 | 308,426 | 278,990 | 395,017 | 444,506 | 445,935 |
| Investment company | 7,199 | 7,569 | 10,976 | 13,632 | 14,301 | 13,797 | 19,232 | 22,503 | 23,858 |
| Other domestic | 180,235 | 176,565 | 242,809 | 289,672 | 291,103 | 262,500 | 372,095 | 417,774 | 417,410 |
| Foreign | 2,248 | 2,048 | 2,406 | 2,821 | 3,022 | 2,693 | 3,690 | 4,229 | 4,667 |
| Memo: | | | | | | | | | |
| Domestic nonfinancial | 152,834 | 151,234 | 213,685 | 257,904 | 259,204 | 221,997 | 318,527 | 351,277 | 348,368 |
| Domestic financial (including investment companies) | 34,600 | 32,900 | 40,100 | 45,400 | 46,200 | 54,300 | 72,800 | 89,000 | 92,900 |
| Held by: | | | | | | | | | |
| Households | 142,772 | 138,382 | 191,130 | 225,244 | 222,040 | 198,811 | 288,670 | 323,612 | 320,874 |
| Investment company shares | 7,199 | 7,569 | 10,976 | 13,632 | 14,301 | 13,797 | 19,232 | 22,503 | 23,858 |
| Other | 135,573 | 130,813 | 180,154 | 211,612 | 207,739 | 185,014 | 269,438 | 301,109 | 297,016 |
| Foundations | 4,433 | 4,569 | 5,508 | 6,916 | 7,510 | 6,894 | 7,855 | 9,287 | 8,964 |
| Colleges & universities | 1,770 | 1,808 | 2,478 | 3,064 | 3,354 | 3,098 | 4,014 | 4,294 | 4,165 |
| Personal trusts | 20,767 | 20,282 | 27,772 | 33,201 | 35,921 | 32,391 | 42,965 | 47,514 | 48,473 |
| Mutual savings banks | 336 | 431 | 571 | 655 | 705 | 767 | 862 | 813 | 829 |
| Life insurance cos. | 2,446 | 2,573 | 3,268 | 3,633 | 3,503 | 3,391 | 4,109 | 4,561 | 4,981 |
| Property & casualty insurance companies | 4,326 | 4,459 | 5,942 | 6,930 | 7,219 | 6,664 | 8,374 | 9,149 | 9,372 |
| Fraternal insurance companies | 104 | 94 | 103 | 100 | 98 | 92 | 119 | 133 | 142 |
| Private pension funds | 1,843 | 2,392 | 3,154 | 6,085 | 7,065 | 7,489 | 11,561 | 14,525 | 16,545 |
| State & local pension funds | 56 | 75 | 99 | 127 | 161 | 212 | 270 | 345 | 431 |
| Open-end investment companies | 3,376 | 3,644 | 5,485 | 7,061 | 7,995 | 7,510 | 11,812 | 14,447 | 15,482 |
| Other investment companies | 3,165 | 3,251 | 4,725 | 5,677 | 5,237 | 4,839 | 5,642 | 5,925 | 5,866 |
| Brokers & dealers | 583 | 572 | 702 | 857 | 657 | 741 | 459 | 538 | 509 |
| Rest of the world | 3,705 | 3,650 | 5,254 | 6,575 | 6,[illegible] | 6,091 | 8,305 | 9,363 | 9,302 |

SOURCE: NBER Report, Appendix I, Table IA-21(a).

TABLE III-28b

Holdings of Corporate Stock Outstanding, 1961-1968

(In millions of dollars)

| | 1961 | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 |
|---|---|---|---|---|---|---|---|---|
| Total outstanding | 590,860 | 506,890 | 637,801 | 721,504 | 811,817 | 741,954 | 948,075 | 1,126,238 |
| Investment company | 31,172 | 29,701 | 34,955 | 39,498 | 45,163 | 44,299 | 58,481 | 68,569 |
| Other domestic | 554,086 | 472,475 | 597,701 | 676,736 | 761,606 | 693,331 | 884,356 | 1,051,205 |
| Foreign | 5,602 | 4,714 | 5,145 | 5,270 | 5,048 | 4,324 | 5,238 | 6,464 |
| Memo: | | | | | | | | |
| Domestic nonfinancial | 444,458 | 390,376 | 496,856 | 567,934 | 616,569 | 566,830 | 738,187 | 828,874 |
| Domestic financial (including investment companies) | 140,800 | 111,800 | 135,800 | 148,300 | 190,200 | 170,800 | 204,650 | 290,900 |
| Held by: | | | | | | | | |
| Households | 431,314 | 356,844 | 458,105 | 522,874 | 587,617 | 529,867 | 686,624 | 827,978 |
| Investment company shares | 31,172 | 29,701 | 34,955 | 39,498 | 45,163 | 44,299 | 58,481 | 68,569 |
| Other | 400,142 | 327,143 | 423,150 | 483,376 | 542,454 | 485,568 | 628,143 | 759,409 |
| Foundations | 10,623 | 9,760 | 10,922 | 13,124 | 14,924 | 14,127 | 15,621 | 17,472 |
| Colleges & universities | 5,003 | 4,564 | 5,488 | 6,207 | 7,012 | 6,282 | 7,754 | 8,143 |
| Personal trusts | 61,354 | 57,601 | 68,884 | 72,501 | 79,567 | 76,028 | 86,557 | 95,896 |
| Mutual savings banks | 894 | 1,043 | 1,158 | 1,259 | 1,426 | 1,467 | 1,686 | 1,937 |
| Life insurance companies | 6,258 | 6,302 | 7,135 | 7,938 | 9,126 | 8,755 | 11,779 | 13,230 |
| Property & casualty insurance companies | 11,755 | 11,124 | 12,955 | 14,745 | 15,304 | 13,759 | 17,709 | 18,114 |
| Fraternal insurance companies | 149 | 152 | 180 | 210 | 215 | 221 | 245 | 259 |
| Private pension funds | 22,856 | 21,895 | 27,670 | 33,527 | 39,692 | 38,509 | 49,491 | 59,577 |
| State & local pension funds | 583 | 780 | 989 | 1,262 | 1,614 | 2,102 | 2,772 | 4,051 |
| Open-end investment companies | 21,297 | 19,576 | 23,670 | 25,797 | 33,262 | 31,130 | 43,051 | 50,494 |
| Other investment companies | 6,640 | 6,469 | 7,601 | 7,757 | 6,941 | 6,499 | 8,675 | 9,422 |
| Brokers & dealers | 326 | 444 | 559 | 468 | 518 | 565 | 600 | 137 |
| Rest of the world | 11,808 | 10,336 | 12,485 | 13,835 | 14,599 | 12,643 | 15,511 | 19,528 |

SOURCE: NBER Report, Appendix I, Table IA-21(b).

Table III-29

HOLDINGS OF CORPORATE STOCK OUTSTANDING, 1952-1968

| | Total outstanding[1] ($ billions) | Per Cent Held by: Financial institutions[2] | Nonprofit institutions[3] | Rest of the world | Households (individuals) |
|---|---|---|---|---|---|
| 1952 | 182.5 | 20.3 | 3.4 | 2.0 | 74.3 |
| 1953 | 178.6 | 21.2 | 3.6 | 2.0 | 73.2 |
| 1954 | 245.2 | 21.2 | 3.2 | 2.1 | 73.5 |
| 1955 | 292.5 | 22.1 | 3.4 | 2.2 | 72.3 |
| 1956 | 294.1 | 23.3 | 3.7 | 2.4 | 70.6 |
| 1957 | 265.2 | 24.1 | 3.8 | 2.3 | 69.8 |
| 1958 | 375.8 | 22.9 | 3.2 | 2.2 | 71.7 |
| 1959 | 422.0 | 23.2 | 3.2 | 2.2 | 71.4 |
| 1960 | 422.0 | 24.3 | 3.1 | 2.2 | 70.4 |
| 1961 | 559.7 | 23.6 | 2.8 | 2.1 | 71.5 |
| 1962 | 477.2 | 26.2 | 3.0 | 2.2 | 68.6 |
| 1963 | 602.8 | 25.0 | 2.7 | 2.1 | 70.2 |
| 1964 | 682.0 | 24.3 | 2.8 | 2.0 | 70.9 |
| 1965 | 766.7 | 24.5 | 2.8 | 1.9 | 70.8 |
| 1966 | 697.7 | 25.7 | 2.9 | 1.8 | 69.6 |
| 1967 | 889.6 | 25.0 | 2.7 | 1.7 | 70.6 |
| 1968 | 1,057.7 | 23.9 | 2.5 | 1.8 | 71.8 |

1/ Includes foreign stock held by U.S. residents and domestic stock other than investment company shares and intercorporate holdings.
2/ Includes personal trusts, fraternal insurance and all investment companies.
3/ Includes foundations and college and university endowments.

Source: Tables III-28a and III-28b

TABLE III-30a

ISSUES AND PURCHASES OF CORPORATE STOCK, 1952-1960
(In millions of dollars)

| | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 | 1960 |
|---|---|---|---|---|---|---|---|---|---|
| Total issues | 3,149 | 2,400 | 2,650 | 3,001 | 3,890 | 3,993 | 4,292 | 4,617 | 3,633 |
| Investment company | 648 | 519 | 592 | 935 | 1,231 | 1,245 | 1,833 | 2,046 | 1,851 |
| Other domestic | 2,441 | 1,932 | 1,802 | 1,893 | 2,548 | 2,713 | 2,127 | 2,376 | 1,696 |
| Foreign | 60 | -51 | 256 | 173 | 111 | 35 | 332 | 195 | 86 |
| Memo: Total Domestic Issues | 3,089 | 2,451 | 2,394 | 2,828 | 3,779 | 3,958 | 3,960 | 4,422 | 3,547 |
| Domestic nonfinancial | 2,302 | 1,818 | 1,574 | 1,944 | 2,281 | 2,440 | 2,073 | 2,244 | 1,574 |
| Domestic financial (including investment co.) | 787 | 633 | 820 | 884 | 1,498 | 1,518 | 1,887 | 2,178 | 1,973 |
| Purchased by: | | | | | | | | | |
| Households | -409 | 171 | 2,612 | 1,084 | -791 | 181 | 3,212 | 3,380 | -6,920 |
| Investment company shares | 648 | 519 | 592 | 935 | 1,231 | 1,245 | 1,833 | 2,046 | 1,851 |
| Other | -1,057 | -348 | 2,020 | 149 | -2,022 | -1,064 | 1,379 | 1,334 | -8,771 |
| Foundations 1/ | 180 | 298 | -883 | 239 | 479 | 329 | -1,164 | 134 | 545 |
| Colleges & universities 1/ | 142 | 103 | -103 | 64 | 239 | 168 | 66 | -352 | 273 |
| Personal trusts 1/ | 1,766 | 293 | -1,178 | -309 | 2,169 | 936 | -359 | -2,323 | 5,401 |
| Mutual savings banks | 109 | 95 | 140 | 84 | 50 | 62 | 95 | -49 | 16 |
| Life insurance companies | 164 | 93 | 270 | 65 | -2 | 43 | 78 | 192 | 352 |
| Property & casualty insurance | 181 | 190 | 163 | 163 | 136 | 125 | 134 | 267 | 264 |
| Fraternal insurance cos. 1/ | 0 | -6 | -27 | -22 | -4 | 7 | -4 | -5 | 21 |
| Private pension funds | 478 | 545 | 709 | 739 | 941 | 1,135 | 1,381 | 1,743 | 1,946 |
| State & local pension funds | 15 | 19 | 24 | 28 | 34 | 51 | 58 | 75 | 86 |
| Open-end investment companies | 473 | 563 | 297 | 511 | 560 | 815 | 987 | 1,295 | 1,021 |
| Other investment companies 2/ | 0 | -9 | 360 | 73 | 23 | -90 | 146 | -170 | 452 |
| Brokers & dealers | 49 | -10 | 131 | 155 | -200 | 84 | -284 | 79 | -27 |
| Rest of the world | 1 | 55 | 135 | 127 | 256 | 147 | -54 | 351 | 203 |

1/ Assumes price appreciation as in Dow-Jones Industrial Average.
2/ Assumes price appreciation as in Standard and Poor's Composite.

SOURCE: NBER Report, Appendix I, Table IA-22(a).

TABLE III-30b

ISSUES AND PURCHASES OF CORPORATE STOCK, 1961-1968
(In millions of dollars)

| | 1961 | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 |
|---|---|---|---|---|---|---|---|---|
| Total issues | 6,194 | 3,170 | 1,364 | 3,738 | 3,309 | 5,569 | 6,984 | 5,273 |
| Investment company | 3,219 | 2,381 | 1,673 | 2,513 | 3,639 | 4,653 | 4,671 | 5,999 |
| Other domestic | 2,650 | 688 | -249 | 1,431 | -37 | 1,169 | 2,267 | -900 |
| Foreign | 325 | 101 | -60 | -206 | -293 | -253 | 46 | 174 |
| Memo: Total Domestic Issues | 5,869 | 3,069 | 1,424 | 3,944 | 3,602 | 5,822 | 6,938 | 5,099 |
| Domestic nonfinancial | 2,472 | 592 | -300 | 1,386 | 25 | 1,180 | 2,304 | -843 |
| Domestic financial (including investment co.) | 3,397 | 2,477 | 1,724 | 2,558 | 3,577 | 4,642 | 4,634 | 5,942 |
| Purchased by: | | | | | | | | |
| Households | -1,974 | -4,374 | -4,314 | 5,299 | -1,191 | -16,413 | -3,335 | -13,593 |
| Investment company shares | 3,219 | 2,381 | 1,673 | 2,513 | 3,639 | 4,653 | 4,671 | 5,999 |
| Other | -5,193 | -6,755 | -5,987 | 2,786 | -4,830 | -21,066 | -8,006 | -19,592 |
| Foundations 1/ | -17 | 280 | -462 | 579 | 349 | 2,234 | -636 | 1,134 |
| Colleges & universities 1/ | 55 | 100 | 138 | -76 | 122 | 605 | 504 | 56 |
| Personal trusts 1/ | 3,604 | 2,824 | 1,386 | -6,087 | -832 | 12,747 | -999 | 5,406 |
| Mutual savings banks | 65 | 149 | 115 | 101 | 167 | 41 | 219 | 251 |
| Life insurance companies | 465 | 433 | 246 | 546 | 708 | 268 | 1,064 | 1,427 |
| Property & casualty insurance | 260 | 248 | 156 | 103 | 87 | 391 | 588 | 1,071 |
| Fraternal insurance companies 1/ | -19 | 19 | 2 | 4 | -17 | 51 | -9 | 3 |
| Private pension funds | 2,258 | 2,198 | 2,170 | 2,212 | 3,124 | 3,676 | 4,991 | 4,713 |
| State & local pension funds | 152 | 197 | 209 | 273 | 352 | 488 | 670 | 1,279 |
| Open-end investment companies | 1,131 | 909 | 759 | 1,131 | 1,237 | 1,335 | 2,061 | 1,653 |
| Other investment companies 2/ | -64 | -41 | 619 | 39 | -448 | 416 | 1,129 | 368 |
| Brokers & dealers | -45 | 119 | 115 | -94 | 51 | 35 | 37 | -463 |
| Rest of the world | 323 | 109 | 225 | -292 | -400 | -305 | 700 | 1,968 |

1/ Assumes price appreciation as in Dow-Jones Industrial Average.
2/ Assumes price appreciation as in Standard and Poor's Composite.

SOURCE: NBER Report, Appendix I, Table IA-22(b).

Table III-31

SHARE OF FINANCIAL AND NONPROFIT INSTITUTIONS
IN OUTSTANDING STOCK: ALTERNATIVE MEASURES

(In Percent)

| | NBER | FLOW OF FUNDS | OLD SEC | NEW SEC |
|---|---|---|---|---|
| 1952 | 23.7 | 23.8 | 23.3 | n.a. |
| 1956 | 27.0 | 24.1 | 24.7 | n.a. |
| 1960 | 27.4 | 26.6 | 27.4 | n.a. |
| 1964 | 27.1 | 28.1 | 29.8 | 29.2 |
| 1965 | 27.3 | 28.2 | 31.0 | 29.3 |
| 1966 | 28.6 | 30.0 | 34.0 | 31.3 |
| 1967 | 27.7 | 29.2 | 34.8 | 30.7 |
| 1968 | 26.4 | 28.4 | 36.7 | 29.4 |

Table III-32

IMPLICIT PRICE APPRECIATION COMPARED WITH MARKET INDEXES[1/]

| | 1956/1952 | 1960/1956 | 1964/1960 | 1968/1964 |
|---|---|---|---|---|
| Market Indexes | | | | |
| Standard & Poor 500 | 1.756 | 1.245 | 1.458 | 1.226 |
| New York Stock Exchange | 1.680 | 1.271 | 1.475 | 1.290 |
| National Quotation Bureau | 1.823 | 1.215 | 1.659 | 2.411 |
| Total Stock Outstanding | | | | |
| National Bureau of Economic Research | 1.570 | 1.403 | 1.605 | 1.548 |
| Flow of Funds | 1.765 | 1.290 | 1.503 | 1.493 |
| SEC old | 1.692 | 1.278 | 1.458 | 1.226 |
| SEC new | n.a. | n.a. | n.a. | 1.496 |
| Sector Indexes | | | | |
| Rest of the world | 1.730 | 1.242 | 1.441 | 1.268 |
| F/F nonbank finance | 1.628 | 1.323 | 1.406 | 1.361 |
| NBER "household" residual | 1.555 | 1.421 | 1.634 | 1.579 |
| Breakdown of "household" | | | | |
| Variant I 2/ | | | | |
| New NBER institutions | 1.360 | 1.150 | 1.236 | 1.156 |
| Individuals | 1.599 | 1.489 | 1.725 | 1.666 |
| Variant II 3/ | | | | |
| New NBER institutions | 1.719 | 1.299 | 1.474 | 1.315 |
| Individuals | 1.518 | 1.451 | 1.671 | 1.633 |

1/ Ending year price divided by beginning year price.
2/ Assumes net purchases equal one half the change in holdings.
3/ Assumes net purchases equal zero.

F. CONCLUSIONS

While the trends first discussed in Chapter II did indeed persist throughout the postwar period, these forces had not, by the end of 1968 at least, succeeded in driving individual investors out of the equity market. Corporations have continued to find channels of financing other than equity issues; financial institutions have continued to acquire stock more rapidly than corporations have supplied it. Those classes of institutions and portfolios which have grown most rapidly have been those with the greatest commitment to the equity market, and over the period households have continued their shift toward intermediated rather than direct holdings of equity securities. Yet institutions have not increased appreciably their share of stock outstanding over the period since the mid to late 1950's.

Individuals have held around 70 percent of outstanding corporate stock since the late 1950's, even though they have been net sellers during much of that same period. These facts suggest that the securities which individuals have retained or purchased have appreciated more rapidly than have those which were held or purchased by institutions. While such an investment strategy increases vulnerability to large losses in declining markets, it also leads to better than average gains during rising markets. Thus, individual direct investors have performed better than the market as a whole and better than institutions as a group on a total return basis over the rising market that characterizes most of the period. In addition, some of these institutional portfolios represent the intermediated equity holdings of individuals whose opportunities for direct participation in the stock market are limited by wealth, income, or other circumstances.

Finally, the market value of corporate stock was substantially lower during the decade of the 1950's than estimates of the market value of underlying real assets. By the mid 1960's, however, this differential had been eliminated and during the latter half of the decade was reversed. The legacy of low price-earnings ratios and low interest rates which persisted well into the 1960's made equity a relatively costly source of funds for corporations. These same circumstances also provided an incentive for institutional portfolio managers to avail themselves of the higher returns available in the equity market.

Rising interest rates over the last few years and the rising stock market which, for a while, accompanied these rates changed many of the price relationships to which participants in the capital markets had become accustomed. Corporations lately have begun to issue relatively more equity securities than they had over prior decades. Individuals in search of higher returns moved funds from those institutions to which they had traditionally entrusted their savings when yield differentials of sufficient size developed. Faced for the first time in many decades with disintermediation and increased mobility of investible funds by households and corporate savers alike, the managers of large institutional portfolios necessarily became more conscious of rates of return, or investment performance, than had previously been the case.

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