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III
RECOMMENDATIONS FOR FURTHER RESEARCH: PARTICULAR SECTORS OF THE CAPITAL MARKET

A. The Markets for Corporate Securities

At the end of 1962, the market value of outstanding corporate stock amounted to over $600 billion, well over 40 per cent of the total of all outstanding credit and equity market instruments. Corporate bonds, actually the favored method of postwar external corporate finance relative to stock financing, totaled over $100 billion. The Committee feels, particularly in view of the magnitude of these figures, that our knowledge of the functioning of these markets—especially the market for equities—could be substantially improved. One bright spot on the horizon is the substantial volume of recent research and research currently under way into various aspects of the stock market (see, for example, Part B 1 in Part IV below). It is to be hoped that these research efforts, and research along the lines indicated below, will help to remedy the present serious deficiencies in our knowledge.

What is really needed in the equities market is a full-scale historical and analytical exploration of the flow of funds through equity channels, including the secondary market, the new-issues market, the over-the-counter market, local and informal arrangements, and the organized securities exchanges. Who does the buying, and for what reasons? Who are the sellers, and why? What forces are significant in the determination of stock prices? How does the efficiency of the over-the-counter market compare with the organized exchanges? What cyclical and secular influences are evident? Finally, enough up-to-date data should be provided to permit the continuation of the analysis on a current basis. The specific research recommendations which follow are designed, when taken together and in conjunction with other current research, ultimately to achieve these objectives.

1. Demand for Equities

Who are the buyers of stocks including new issues and outstanding shares? Could this information be obtained annually or even quarterly? A great deal of work needs to be done on the determinants of stock ownership, on risk-taking attitudes of major purchasers, on the role of expectations in this market, and on the reasons for cyclical and secular changes in the distribution of stock ownership.

The recent outstanding study of share-ownership by Cox (200) and the work currently in progress at the Wharton School (205) are most promising in this connection, but we are still a long way from being able to identify shifts in ownership on any reasonably current basis. For understanding financial processes, it is essential to have more knowledge than we now have regarding the size distribution of stock ownership.

A number of statistical problems need to be worked through before we can begin to understand the functioning of this market. Among them are the dominance of the classification "consumers and nonprofit organizations" in the flow-of-funds accounts, where about 90 per cent of total stock holdings are lodged; shifts in ownership within this category cannot be detected until we get a finer breakdown. This breakdown should include individuals, personal trust funds administered by banks, personal trust funds administered by others, pension funds (perhaps subdivided), eleemosynary institutions, and nonprofit foundations. Another problem, both conceptual and statistical, is associated with the distinction between realized and unrealized capital gains; and there are related problems of the handling of capital gains in the flow-of-funds accounts. Holdings might be recorded on both a market-value basis and on a book-value basis, so that capital gains and losses could be distinguished from net investment in stocks.

Much equity financing of small business is on an informal basis and thus never gets into the published figures. "Backers" of many local small businesses are friends, relatives, and acquaintances of the operator or the initiator of the venture. Very few studies have been undertaken of the nature of these local and informal equity arrangements (for an example, see 175 below), or of their size and extent. This is a truly neglected area which deserves more intensive study.

Of special interest are trends and cycles in investment in common stocks by financial institutions. Several types of institutions are in the process of developing means whereby they can participate more fully in the equity market, of which the variable annuity is only one example. The implication of these developments for future trends in the stock market merit thorough exploration. It would, of course, also be helpful to have more current data than we now have on institutional investment in equities.

2. Supply of Equities

For the secondary market, explorations of risk attitudes and better data on cyclical and secular shifts in ownership would obviously throw light on the supply side as well as the demand side. In addition, special work could fruitfully be done on the role of the estate tax in expanding the market supply of equities through forced sales, and on institutional policies toward disposing of securities.

Data on the new-issues market are also inadequate. We lack current information on new stock issues by size of issuer, method of flotation (privileged subscription, public sale, etc.), cost of flotation, and breakdown between common and preferred. It should be noted, however, that considerable information of this type is contained in Chapter IV of the SEC's Special Study of the Securities Markets (see 7 below). A regular time series on the cost of equity financing by size of issue, size of firm, and quality rating would be particularly useful, as would an analysis of the influence of cost and availability of funds as determinants of the volume of new stock financing.[4] What are the determinants of the cyclical variability of common stock financing and the secular trends therein? What accounts for different reliance on the part of various firms in utilizing common stock financing? The relative decline in new shares of equity as an external source of corporate funds, for example, has occasioned frequent comment. All this has bearing, in terms of corporation finance, on the problem of corporate financial economies of scale and capital structure, as well as on the flows of funds through the equity market.

A last point worth mentioning as background data which would be useful in analyzing the supply of new issues is that, although some statistical data are available, we presently lack detailed information on issues of convertible bonds and on the amount of conversions. Convertible bonds obviously form a bridge between the bond and stock markets.

3. Investor Experience with Common Stocks

A reading of Hickman's volumes on the Corporate Bond Research Project (see 11 below) leads one to wish that something along similar lines might be done for common stocks. The design of such a study should be broad in scope and cover a considerable time period. It should endeavor to determine the experience of investors with common stocks during successive time periods, in the aggregate and by industry classifications, as well as by other characteristics. It would be extremely useful to examine the *ex post* results of investments in equities of different quality or other characteristics. Yields after losses, including capital gains, might be studied as a function of risk. In addition, it would be useful to study the behavior of return on equities over time as contrasted with yields on bonds (see 55, for example). An analysis of the behavior of the differentials might be extremely revealing. An interesting subsection of this study could be to examine the meaning of "return" on a stock: dividend-price ratio, earnings-price ratio, rate of capital gain, etc. It is to be hoped that the University of Chicago's current stock market study (see 9 below) will fill a number of these gaps.

4. Economics of the Securities Industry

The Committee is reluctant to recommend further large-scale research in this area, in view of the recent report of the Securities and Exchange Commission. Recommendations will necessarily have to await evaluation of the considerable analysis and body of data contained in the SEC study report on brokers and dealers, market-making in the over-the-counter

4. We have actually retrogressed in statistics on cost of issuance of securities, since such statistics were regularly compiled by the SEC before World War II.

market, commission rates, etc. Furthermore, as a result of the report, there may be some changes in the data gathering of the SEC in this field.

However, although many of the questions raised below are discussed in the SEC report, it is rather surprising that in the past we have had so little systematic knowledge about the securities industry *as an industry,* or about securities brokers and dealers *as business firms.* How many people are employed in this industry? Where are they located? Are there cyclical fluctuations or trends in the level of employment? What is the scope of operations in inventories of securities, volume of transactions, and number of issues traded? What are wage, profit, and cost levels? How are employment, costs, wages, and profits in this industry affected by market fluctuations? Are there economies of scale in this industry? How many firms are there of various size classifications? What are the capital positions of the securities brokers and dealers and how adequate are their equity cushions as safeguards against market fluctuations? Are there any differences between member firms and nonmember firms in these respects? How great is the degree of specialization in this industry, the degree of concentration, and the freedom of entry?

Firms in this industry have been filing extensive balance-sheet and income data, but these data have not been well adapted to systematic research. For example, the Securities and Exchange Commission requires that balance-sheet data be filed annually, but aggregate data are not readily available because firms file reports for different dates scattered throughout the calendar year. In addition, balance-sheet data may not be representative of typical positions because of window-dressing practices. Income statements are not required by the SEC and when collected by the exchanges are held in confidence.

It is hoped that implementation of the SEC's market study will result in the regular publication of more data along the lines indicated above, and that other organizations in the securities industry will make additional data available. Such developments should make possible a range of constructive research projects in the economies of the securities business.

5. Comparison Between Listed and Over-the-Counter Markets

The Committee believes that an analysis of the performance of listed and over-the-counter securities markets would be of substantial value. How do the listed markets compare with the over-the-counter markets in efficiency of operation, price fluctuation, ease of transfer, depth, and resiliency? It is usually assumed that an organized auction market is superior to an over-the-counter negotiated market for the shares of large nonfinancial business corporations. On the other hand, the government bond market is an efficient over-the-counter market, and insurance companies and banks have generally avoided listing. A study of the relative advantages and disadvantages of each type of market—for different types of securities and for various sizes of issuers—can now be undertaken with more adequate data and background information than was available before the completion of the SEC study.

6. Investment Banking and the New-Issues Market

Because of the full-scale studies now under way at the Wharton School, and those recently completed by the SEC, including studies of the over-the-counter markets (see 7, 204, and 206), the Committee is reluctant to recommend large-scale research in these fields at the present time. It is worth mentioning in passing, however, that the intrastate distribution of and dealing in new issues deserve further examination. (Chapter IV of the SEC's Special Study of Securities Markets discusses this problem and makes recommendations for legislation.) State regulatory statutes vary and the effectiveness of enforcement varies even more. In some instances, state laws seem to constrain rather severely the intrastate distribution of small companies, and in other states extreme laxity seems to prevail.

The arrangements between originators and dealers, and selling and pricing techniques, deserve systematic analysis.

7. Determinants of Stock Prices

In addition to bringing the data and analysis of the projects mentioned above to bear on the determinants of stock values, such interrelated empirical and analytical inquiries as the following would be relevant as well as important in their own right: the relationship between stock prices and economic activity; the influence of the money supply, wealth, and interest rates on stock prices; the relationships between risk, marketability, and rate of return; the empirical relationships between profits, cash flow, dividends, and stock prices; the underlying reasons for differential rates of discount of future revenue streams by different investors, and trends and cycles therein; trends and cycles in corporate debt-equity ratios by sectors, and their influence on stock prices; the effects of changes in stock prices on methods of corporate finance. Such an inquiry would not only augment our understanding of the determination of stock prices, but would simultaneously contribute an empirical base relevant to the growing theoretical literature on the cost of funds, financial economies of scale, corporate capital structure, and related matters in corporation finance (see section B 3 in Part IV below).

B. Mortgage Market

1. Market for Multifamily and Commercial Mortgages

By far the greater part of research in the mortgage market has been confined to single-family residential mortgages, with the result that our knowledge of the operation of that market far exceeds our knowledge of multifamily residential and nonresidential commercial mortgage financing practices. Nonfarm *commercial* mortgages, for example, amounted to $33 billion at the end of 1960, 15 per cent of total outstanding mortgages. Nevertheless, we have very little information on how this market functions. We are aware, however, that it functions very differently from the residential mortgage market. In Goldsmith's words: "In view of the size and importance of that [nonresidential nonfarm mortgage] market the degree of our lack of relevant statistics and the almost complete absence of analysis of what happens in that market is truly astonishing. Not the least to be gained from reading a description and analysis of the market for residential mortgages, which Klaman's book provides, is the realization of how great is the need for a similar study of the market for nonresidential nonfarm mortgages."[5]

The full range of commercial real estate financing deserves thorough study in view of the innovations, not all equally legitimate, introduced by land development companies, real estate syndicates, real estate investment companies, and other efforts to obtain public participation in real estate equity ownership. The volume of such transactions in the future seems bound to increase greatly.

A thorough analysis of supply and demand factors, institutional arrangements, financing practices, and yield patterns in the commercial and the multifamily mortgage markets are long overdue. This should, of course, include credit standards, debt ownership, historical developments in financing techniques, sale and lease-back financing, directly placed bond issue financing of real estate, high-credit bond issues, condominium financing, the terms involved in alternative financing practices, and breakdowns by type of real estate involved (commercial, industrial, etc.). The pattern of gross and net flows of funds through this market over time, and the reasons for changes in volume and price, should be examined in depth.

2. Secondary Mortgage Market

The future significance of the growth of a more highly developed secondary mortgage market should be explored for its implications for flows of funds, institutional and individual portfolio management, and the allocation of real resources. As a prelude to such a study, we need better information on the nature and extent of the secondary mortgage market today. For instance, to what extent is it confined to government underwritten mortgages? What is the current magnitude of this market and how has it been changing in recent years?

C. Market for State and Local Government Securities

1. Tax Exemption Privilege

For years the subject of the special tax treatment of interest on municipal bonds has been a topic of heated and often emotional debate. Although several notable studies have been made (see 308, 310, and 312), the surface has barely been scratched. Alternative assumptions about investor behavior, tax rates, and other factors lead to different conclu-

5. Foreword to Saul B. Klaman, *The Postwar Residential Mortgage Market,* Princeton for NBER, 1961, p. xxv.

sions on the likely effects of removing the tax-exemption feature. A thoroughgoing impartial analytical and empirical analysis of the full range of alternatives involved would be helpful, particularly in view of the recent sharp growth of industrial aid revenue bonds. Indeed, that growth itself, as well as the issues involved in using tax-exempt municipal bonds to help finance private industrial plants, deserves thorough study. Most recently, the advance refunding of revenue bonds has raised related questions.

2. Historical and Current Data

There are four notable gaps in the available data which it would be desirable to fill: first, historical yield data by maturity classes; second, detailed information on ownership, preferably a quarterly or even monthly series of ownership, by maturity breakdown; third, data on the volume of trading in the municipal market; and fourth, data on retirements of state and local securities.

The best source of data on ownership (302) needs to be supplemented with more up-to-date information. Specifically, it would be helpful to have a monthly series of holdings by commercial banks. Currently state and local securities are lumped together in an "all other" category in commercial bank monthly data. In the flow-of-funds data, similarly, the "consumer and nonprofit" sector, which typically is the largest single holder of state and local securities, is too broad and all-inclusive to be very meaningful.

D. Market for Federal Government Securities

Of all the sectors of the capital market, we undoubtedly have the most complete information on the functioning of the market for federal government securities (see studies as 321, 322, 324, and 329). In addition, current and historical data on yields, ownership, and related matters are as complete as one could expect. We know how many securities have been issued, of what type, and at what yields, with reasonable accuracy. Shifts of ownership are also fairly traceable (although even here an ownership breakdown within the present large "all other" category would be extremely helpful).

This abundance of factual information provides a solid basis for research directed toward finding workable solutions to the pressing problems of public policy in this area. For example, should countercyclical debt-management policies (i.e., lengthening the debt structure in boom periods and shortening it in recessions) be utilized to make a positive contribution to over-all economic stabilization? Or is the optimum function for debt management simply not to interfere with the objectives of monetary policy, perhaps by the purposeful maintenance of a debt of constant maturity, with refundings routinized and scheduled far in advance. Alternatively, perhaps all the federal debt should be in long-term form, as some have proposed? Is it really impossible to issue consols in this country, as is often asserted? The Committee feels that the time has come to take a fresh analytical look at the functioning of the government securities market, specifically for its implications for debt management (and monetary policy). To this end the following three interrelated research projects form a minimum program.

1. Extent of Market Segmentation and Substitutability

A crucial question at the heart of much of the controversy on debt management, and also closely involved in the recent monetary policy dispute about "bills only," is the extent to which purchasers of government securities are willing and able to shift funds into and out of such securities. What is needed is a study of changes in holdings of Treasury securities by different categories of investors and of conditions associated with such changes. Do market participants regard Treasury issues as unique? Are they willing to shift funds into or out of them when a small yield differential appears between them and other securities? Or does the differential have to be substantial, and if so, how substantial? Such questions are relevant not only for federal government obligations vis-à-vis other capital market instruments, but also for long- and intermediate-term government securities relative to Treasury bills and other money market instruments. In order to get at such matters, it will be necessary, as mentioned above, to construct an ownership series, preferably monthly and by maturity, with a much finer breakdown than the present catch-all "all other" category.

A number of subsidiary questions are also involved here: What is the "depth" of the long-term government bond market? Are quoted bids stable for substantial volume? How willing or reluctant are holders to realize capital losses on the securities in their portfolio? Is the so-called "lock-in" effect of any significance? Are there differences in these matters in the behavior of different types of holders of Treasury securities? What role do expectations of future interest rates play in the portfolio policies of market participants? How significant have Treasury debt management and Federal Reserve monetary policies been in altering the shape of the yield curve and the structure of yields on various types of capital market instruments? Has the demand for long-term government securities shrunk significantly in the postwar period? Until we have reasonable approximations of answers to such questions, it will be difficult to improve our debt management programs.

2. Debt Management and Flows of Funds Through the Financial System

In 1959, market rates on short-term government securities rose above the interest rates on deposits at most savings institutions. The result was said to be a sharp disruption of flows to savings institutions, as the public shifted dramatically to the higher-yielding alternatives. The implications of this experience—in the effects on flows of funds through the financial system, on forward commitments of savings institutions, and on the direction of real expenditures—deserve more thorough exploration and analysis than they have received thus far. Broad issues are involved in the kind of thoroughgoing Treasury competition for long- and short-term funds which is often recommended.

Advocates of "sound" government debt management often suggest that Treasury debt-management problems could be solved if only the Treasury would pay the "going rate," and that Treasury difficulties in marketing long-term issues could easily be overcome if the Treasury would simply price its issues "realistically." The 1959 experience, however, suggests that this would have widespread effects on the term structure of interest rates, on the flow of funds throughout the financial markets, and perhaps also on the pattern of real expenditures. Such implications deserve intensive impartial empirical and analytical examination.

3. Speed of Reaction to Changes in Debt Structure

The time lag between debt-management decisions and consequent alterations in the level and structure of interest rates, the volume and direction of financial flows, and ultimately the level and pattern of real expenditure, is a subject which remains largely unexplored. Quite aside from the magnitude of these effects, it is important to have some idea of the speed with which they take place and the factors important in determining that speed. It also may be relevant, for such time lags, whether changes in the debt structure take place because of actions of the Treasury or because of actions undertaken by the Federal Reserve. The nature of the institutional arrangements are such that the initial action will take place through somewhat different market channels, involving perhaps different market expectations, depending on the agency responsible, thereby producing different results.

E. Market for Foreign Securities

The United States is now widely recognized as the leading financial center for international capital market transactions. The volume of long-term foreign securities floated here—and the volume of long-term American securities sold to foreigners—had reached substantial proportions before the interest equalization tax was proposed in mid-1963, so much so that it directly affected public policy and promises to continue to do so indefinitely. Nevertheless, we know relatively little about the operation of this segment of the capital market, which is rather surprising since so much discussion of public policy in this area necessarily involves assumptions about the nature and characteristics of this market. It is possible that our lack of understanding of its technical structure and functioning may be leading us to incorrect conclusions about the determinants of international capital flows, both short- and long-term, and hence to inappropriate public policies.

For these reasons, the Committee believes that high priority attaches to systematic and fundamental research into the nature and implications of international financial markets and flows of funds. This involves, of course, not one but several markets: the U.S. market for new foreign issues, the U.S. market for outstanding securities of foreign issuers (especially foreign common stocks), term loans to foreigners, the foreign market for new U.S. issues, and the foreign market for outstanding securities of U.S. firms. Also included should be so-called "soft loans" and their effects on the balance of payments. Among the important matters requiring clarification are the following:

1. Basic Data on Demand, Supply, and Prices

Who buys the securities? What legal factors—including legal restrictions on institutional purchase—are in effect? Who sells the securities (private or governmental borrowers), and at what yields? It would be helpful to have comprehensive yield and ownership data for at least five years back. Regarding ownership, it is important to find out how many of the foreign flotations are "permanently" lodged here and how many are not, i.e., how much of what appears to be tapping our savings stream is actually tapping foreign funds temporarily lodged in the U.S. Term loans to foreigners are also an important area of inquiry.

2. Market Characteristics and Facilities

The Securities and Exchange Commission could usefully publish data on the proportion of foreign securities privately placed and publicly floated. Further questions that should be investigated are: Who does the underwriting, and at what cost? What is the volume of trading in the secondary market, and who makes markets in these issues? What legal and tax factors are involved? How do the institutional facilities here compare with similar facilities abroad? A comparative analysis of the structure of the money and capital markets here and abroad may throw light on many of the factors underlying international flows of funds.

3. Determinants of Foreign Flotations in the U.S. and Domestic Borrowing Abroad

The following factors should be examined: the influence of interest rates, credit availability, and other market conditions in the U.S. capital markets on the volume of foreign borrowing here and on the volume of foreign purchases of U.S. securities; the role of business conditions here and abroad, tax factors, stock prices, profits, cyclical and secular trends, etc. Of particular interest, of course, is the relative importance of interest rate differentials, both long- and short-term.