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STATE AND LOCAL PUBLIC FACILITY
NEEDS AND FINANCING

STUDY PREPARED FOR THE
SUBCOMMITTEE ON ECONOMIC PROGRESS
OF THE
JOINT ECONOMIC COMMITTEE
CONGRESS OF THE UNITED STATES

Volume 2
PUBLIC FACILITY FINANCING



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LETTERS OF TRANSMITTAL

DECEMBER 21, 1966.

To Members of the Joint Economic Committee:

Transmitted herewith for the use of the Joint Economic Committee and other Members of Congress is a study of State and local public facility financing over the next 10 years. It is the second part of the staff study prepared for the Subcommittee on Economic Progress with the assistance of a number of experts from Government departments, private industry, and trade associations. Only two of the many organizations that were asked to help failed to respond and, while any such omission is highly regrettable, neither, fortunately, was critical to the value of the final report.

The first volume estimated capital requirements over the next decade for essential public facilities. The present volume analyzes the prospective sources of credit funds to finance construction of these facilities. It was prepared independently of the first volume. The massive challenge facing this Nation in respect to meeting growing requirements for transportation, schools, health facilities, public utilities, water pollution, and the many other needs, demands that our experts and scholars devote increasing attention to these problems. Foremost among the relevant issues is the question of financing, which obviously will have a basic effect on the success of the Nation's efforts. It is hoped that these two studies will stimulate inquiry and prove valuable to policymakers, economists, public administrators, urban planners, scholars, and legislators.

The committee is grateful to the many experts who gave generously of their time to help us in this important work, and, in particular, to Dr. Arnold H. Diamond, Assistant Director, Office of Economic and Market Analysis, Department of Housing and Urban Development who, as consulting economist to the committee, undertook the major responsibility for preparing and assembling this study. We are also grateful to the Department of Housing and Urban Development for making him available to the committee. The views expressed in these materials are those of the individual contributors and do not necessarily represent the views of the agencies with which they are connected, this committee, or its individual members.

WRIGHT PATMAN.

Chairman, Joint Economic Committee.

DECEMBER 19, 1966.

HON. WRIGHT PATMAN,
*Chairman, Joint Economic Committee,
Congress of the United States,
Washington, D.C.*

DEAR MR. PATMAN: Transmitted herewith is a study of the prospective availability of credit to finance State and local public facilities over the next decade. It was prepared by staff of the Subcommittee

on Economic Progress with the aid of a number of highly qualified experts on the various types of institutions that provide funds for the municipal bond market. The study also contains comprehensive descriptive materials on the municipal bond market and the trends that have affected it and are continuing to affect it. It represents the second volume of the subcommittee's comprehensive study of public facility needs and financing. The first volume projected public facilities needs in the United States over the next 10 years. This volume analyzes potential sources of credit.

The amount of State and local government obligations now outstanding is slightly more than \$100 billion. By 1975 this figure will double according to our best estimates. Such massive credit requirements have tremendous implications for the economy and will warrant increased study and attention in the coming years. While the individual projections underlying this study indicated that sufficient funds would be available for requirements projected, it is equally clear that this is only possible through heavy and growing reliance on commercial banks and to a lesser extent on two or three other specific sources of funds, e.g., personal trusts and fire and casualty companies. Obviously it will be fruitful to explore this factor in relation to the broader credit requirements of the economy and anticipated growth of the public sector.

The individual chapters in this extensive study were prepared by professional experts who have been unstinting in giving of their time and energy. The committee is grateful to them and to their organizations for so graciously making available their time and talents. Participating experts are identified at the beginning of each chapter and in the table of contents.

The committee is particularly grateful to Dr. Arnold H. Diamond, Assistant Director, Office of Economic and Market Analysis, Department of Housing and Urban Development, who, as consulting economist to the committee, undertook the major responsibility for planning the scope of research, editing, and coordinating this study. Eleanor Aeschliman assisted with the editing. The study was under the general supervision of John R. Stark, Deputy Director.

JAMES W. KNOWLES,
Executive Director.

STATE AND LOCAL PUBLIC FACILITY NEEDS AND FINANCING

Volume 2. Public Facility Financing

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STATE AND LOCAL PUBLIC FACILITY NEEDS AND FINANCING

Volume 2. PUBLIC FACILITY FINANCING

Introduction and Summary*

INTRODUCTION

Volume 1 of this study focused on the Nation's public facility needs, providing detailed information on the existing capital plant, costs and user charges, trends of capital outlays over the past two decades, and estimated capital requirements during the next decade. In a sense, the volume presented comprehensive data on the demand for capital funds from the public facilities sector.

In contrast, the present volume is concerned mainly with the availability of funds to finance State and local public facilities, especially credit resources. The major emphasis of this volume is upon the sources of financing of capital outlays by State and local public agencies, with particular reference to the municipal securities market. Because of its growing importance, some attention is given to the financing of private nonprofit organizations. While most of the volume deals with the availability of private credit resources and the structure and trends of private credit markets, there are also several chapters describing State assistance programs.

A. PLAN OF THE STUDY

1. *Objectives of Study*

(a) *Future Capacity of Capital Market*

According to the material presented in volume 1, by 1975 State and local public facility capital requirements are expected to reach a level that is almost double the volume of capital outlays in 1965, especially in the State and local public agency sector. If these capital requirements are to be met, there must be corresponding increases in available financial resources, including a substantial step-up in private investments in municipal securities and in obligations of private, nonprofit organizations.

Such expansions in credit resources will depend upon (a) whether the various financial institutional groups are prepared to increase their holdings of these securities or obligations (which, in turn, largely depend upon net inflows of funds, alternative investments, and comparative yields) and (b) the capacity of the organizational frame-

* By Dr. Arnold H. Diamond, consulting economist, Joint Economic Committee.

work of the respective sectors of the capital market to handle the expected increasing volume of securities or obligations with minimum strain.

Thus, the chief objective of the present volume is to ascertain the likelihood that the requisite private credit resources will be available to meet the anticipated capital requirements over the next decade. To help answer this question, the various chapters present a wealth of descriptive materials and statistics on the sources of funds, institutional forces, and emerging trends in the municipal securities market during the past 20 years. Particular attention is focused on such ancillary matters as (a) which of the major pools of institutional funds are likely to invest in municipal or private, nonprofit securities, (b) whether the marketing machinery hitherto developed can expand sufficiently to accommodate an increasing volume of securities, and (c) whether the credit instruments now in use, e.g., tax-exempt municipal securities and the diversity of instruments employed by private, nonprofit organizations, are best suited to meet future capital requirements.

(b) Linkage of Statistical Data

Those who have occasion to study State and local government capital outlays or review the municipal securities market are often dismayed by the diversity of statistics available, each series seemingly unrelated to the others. Major data inputs are provided by (1) the Governments Division, Bureau of the Census (capital outlays, construction expenditures, outstanding debt, new debt issued, debt retired), (2) the Construction Statistics Division, Bureau of the Census (construction put in place), (3) the Treasury Department (distribution of holdings of State and local government obligations), (4) the Board of Governors of the Federal Reserve System (similar distribution), (5) the Bond Buyer (municipal bond sales), and (6) the Investment Bankers Association (municipal bond sales and characteristics of bonds sold). While each statistical series may be internally consistent, they do not tie into each other or with other data.¹ Thus, the analyst has the unhappy choice of either using isolated statistical series without bothering about consistency with other data or attempting to reconcile the various series through "adjustment factors" or "statistical discrepancy" notes.

Several efforts are made in this volume to link together some of the disparate statistical series. Chapter 1 relates for State and local governments (a) capital outlays to total expenditures, (b) construction expenditures to construction put in place, and (c) borrowing to capital outlays; and it also provides details regarding the composition of capital outlays, construction expenditures and long-term borrowing. Chapter 5 provides newly revised comprehensive data on new municipal bonds sold in 1957-65 by type of offering, bond, maturity, issuer, use of proceeds, size of issue, and State distribution, with appropriate cross tabulations. Supplement B of this chapter traces the relationships of capital outlays to long-term bond sales (net of refundings), bond retirements, outstanding debt, and net changes in outstanding debt for State and local governments. Supplement C presents a tabulation that links outstanding State and local govern-

¹ Aggregate statistics on the asset holdings of financial institutions or public agencies.

ment obligations to reported statistics on holdings of such obligations by identifiable investor groups.

(c) *Shedding New Light on Old Problems*

Over the years, discussions on public facility financing bring forth such questions as: 1. Why can't we make greater use of private, non-profit organizations? 2. Why can't the State governments assume a greater role in helping municipalities finance public facilities? 3. How can we expand municipal bond sales without improving the secondary market? 4. What are the effects of bond ratings in the municipal securities market? 5. To what extent are there defaults (as to payment of interest or principal) on municipal securities? 6. What is the availability (and price) of credit to small municipalities? 7. What happens to municipal borrowing during periods of credit tightness?

Review of the available literature reveals a paucity of factual information on these matters, each of which has an important bearing on the adequacy of financial resources for public facility capital requirements. To overcome these data gaps, chapters have been prepared on financing by private, nonprofit organizations; State aids for public facilities; State credit aids for public facilities; secondary market for municipal bonds; municipal bond ratings; postwar default experience of municipal securities; availability of credit for small municipalities; and credit effects on State and local government borrowing. In the main, these chapters provide new information, not previously available, on these subjects to aid those within the Congress, within the executive branch of the Federal Government and others who may have reason to examine the aforementioned questions further.

(d) *Comprehensive Review of Municipal Securities Market*

The latest comprehensive study of the municipal securities market was prepared by Roland I. Robinson in his notable "Postwar Market for State and Local Government Securities."² That study covered the postwar market through 1956 when long-term bonds sold totaled \$5.4 billion. By 1965, municipal bonds sold rose to \$11.1 billion,³ and within the intervening 9-year period there have been a number of significant developments that warrant analysis.

Accordingly, part 2 of this volume examines the municipal securities market. There is a chapter detailing the characteristics of municipal bonds sold during the past decade and another that traces the trends of municipal interest rates. There are also chapters describing the emerging patterns of bond financing secured by general obligations, pledges of revenues, and lease rentals. Such institutional groups as bond underwriters, financial advisers, bond counsel, and consulting engineers, are covered in separate chapters. In later parts, there are reports on several surveys of financial institution attitudes regarding possible changes in the tax exemption accorded to municipal securities as well as some new statistics on the benefits and cost attributable to such exemption.

² Roland I. Robinson, "Postwar Market for State and Local Government Securities," a study by the National Bureau of Economic Research (Princeton, N.J.: Princeton University Press, 1960).

³ Bond Buyer statistics.

2. *Outline of Study*

The study is divided into four parts, each containing a number of chapters dealing with designated subjects. Part 1 (containing four chapters) provides an overview of the trends in public facility financing. Part 2 (containing 12 chapters) is concerned with the emerging patterns, organizational structure, and certain problem areas of the municipal securities market. Part 3 presents four chapters dealing with municipal bond interest rates and the tax exemption accorded to municipal securities.

Part 4 consists of 10 chapters, each covering a designated investor group in terms of its interest in (a) municipal securities and (b) obligations issued by private, nonprofit organizations. Past trends are reviewed and prospective investments are projected or otherwise explored. In addition, the chapters contain a summary of views regarding portfolio considerations in making municipal security purchases and investor reaction to possible Federal guarantees of municipal securities.

3. *Procedure*

As indicated above, the chapters contained in this volume fall under two general classifications—those dealing with technical or specialized subjects, which appear in parts 1–3, and those dealing with specific financial industry or investor groups, which appear in part 4. To prepare the chapters on the technical or specialized subjects, arrangements were made with various individuals or groups, who were believed to be best qualified, to write authoritatively on the designated subject. In most instances those selected have established reputations or are acknowledged experts in their respective fields.

With respect to the chapters on specific investor groups, efforts were made to have the chapters prepared by the major trade association (or associations) serving the particular industry, since they are in the best position to elicit frank views from their memberships on questions posed by the committee questionnaire. In addition, they usually could provide from their cumulative knowledge, records, and available statistics a comprehensive picture of the industry's postwar growth developments, investment activity, and assess its potential participation in the expected credit expansion. Where there was no such trade association, arrangements were made with a Federal agency having comparable expertise to prepare the requisite chapter, i.e., Securities and Exchange Commission, in the case of "nonfinancial corporations," and Board of Governors of the Federal Reserve System, in the case of "individual investors." In several instances, multiple authorship became the more feasible arrangement. Thus, the chapter on commercial banks was prepared jointly by the Federal Deposit Insurance Corporation (industry description and historical trends) and by the American Bankers Association (surveys and projections). The chapter on life insurance companies was prepared by the Life Insurance Association of America on the basis of a survey conducted by committee staff. The chapter on fire and casualty insurance companies was prepared by committee staff on the basis of surveys conducted by the American Insurance Association, American Mutual Insurance Alliance, and the National Association of Independent Insurers of their respective memberships, plus other available data.

Selection of the subjects or institutional groups to be covered by

chapters was governed by a desire to provide, to the extent feasible, a complete picture of the current means of financing State and local public facilities by State and local public agencies and by private, non-profit organizations and their future prospects. Because adequate published information is already available, it was decided that it would be unnecessary to have chapters on such subjects as evaluation of municipal securities, problems of underwriting syndicates, or commercial bank underwriting of revenue bonds.⁴ The financial institution groups, for which chapters were arranged, comprise either major pools of institutionalized loan funds or pools of funds that seem likely to be significant investors in municipal securities.

Each chapter has been prepared on the basis of an outline of topics or questions, developed by committee staff. To assure uniform coverage, the chapter writers dealing with financial institution groups (pt. 4) were requested to follow a standard outline, set forth in questionnaire form (see supplement A). Where appropriate, a list of economic assumptions for the years 1966-75⁵ was furnished to the writers as a guide for any projections that may be made for these years.

The committee's letter of request prescribed that the requested chapter "should be limited to a factual account of the prevailing or historical situation, supplemented by appropriate estimates and projections. It should omit recommendations, suggestions for changes, or comments on existing or prospective legislation."⁶ The chapters prepared under these instructions were then reviewed and edited by committee staff to delete extraneous materials, or commentary (directly or indirectly) on proposed legislation. Aside from these changes, the materials presented in the various chapters are solely the viewpoints of the respective chapter writers, identified on the first page of the chapter, who presumably took into account all available data.

B. SUMMARY OF FINDINGS

1. *Trends in Public Facility Financing*

(a) *State and Local Government Financing of Capital Outlays*

Over the past 20 years State and local governments have expended approximately \$220 billion for capital outlays of which about half have been financed by borrowing. During recent years capital outlays have accounted for about one-fourth of all expenditures by State and local governments. About four-fifths of these capital outlays is for new construction, about 12 percent is for the purchase of land and existing structures and the remaining 8 to 9 percent involves equipment purchases (including replacements). In recent years slightly over 40 percent of capital outlays has been for highways, including urban streets, local roads, and toll facilities, and nearly one-fourth has been for educational facilities. Whereas expenditures for highways and education have generally paralleled the overall growth of State and

⁴ Cf. Gordon L. Calvert, "Fundamentals of Municipal Bonds" (Washington, D.C.: Investment Bankers Association of America, 1963); Winn S. Curvin, "A Manual on Municipal Bonds" (New York: Smith, Barney & Co., 1956) and prior books on municipal securities; various articles on municipal securities appearing in the *Journal of Finance*, *Municipal Finance*, and the *Bond Buyer* and hearings before the House Banking and Currency Committee on "Increased Flexibility for Financial Institutions" (88th Cong., 1st sess., September-December 1963).

⁵ Supplementary data to introduction and summary of vol. 1.

⁶ Except, of course, where a question in the chapter outline called for suggestions or commentary.

local government capital outlays, the capital expenditures for health and hospitals have lagged considerably.

Total indebtedness of State and local governments at the beginning of July 1965 was approximately \$99 billion, or about 6 times greater than 20 years before. Of the \$110.1 billion borrowed during the 14 fiscal years 1952 through 1964-65, \$101.4 billion, or 92 percent, was used for capital outlays. Over the 8 fiscal years 1958 to 1964-65, long-term debt issued financed about 50.4 percent of State and local government capital outlays. About one-fifth of the capital outlays has, in recent years, been financed by Federal grants-in-aid and the balance has been financed by State and local governments from taxes and other current revenues.

(b) *Financing by Private, Nonprofit Organizations*

In our pluralistic economy communities are free to choose whatever organizational form or ownership pattern seems most suitable for their needs. For most areas of activity private-investor-owned companies (organized as corporations, partnerships, or individual proprietorships) appear most suited. Where public services are involved some form of public agency (State or local governments or instrumentalities thereof) operation seems more practical. However, for an increasing number of functions communities have turned to what is called a private, nonprofit organization. Traditionally, this organizational form has been employed for private hospitals, colleges, schools, and church operations. During the past three decades it has been used extensively for rural water supply systems, rural electrification or telephone facilities (usually through a "cooperative association"). In urban areas it is used as the form of organization for neighborhood centers for recreation (settlement houses), nursing homes, museums, and a growing number of theaters or community art centers. Finally, in the housing sector it is increasingly being employed to provide housing for the elderly, the moderate-income families and now the low-income families.⁷

Despite their rapid expansion, particularly in recent years, relatively little is known regarding the means of financing of these private, nonprofit organizations, especially their credit financing.⁸ By and large, loans to nonprofit organizations are obtained from (a) capital market bond issues, (b) mortgage loans transacted with banks, insurance companies, and other institutional lenders, and (c) loans from the Federal Government. As evidenced by the commentary in the chapters on financial institution groups that appears in part 4, most lending institutions do not distinguish private, nonprofit organization borrowers from other private borrowers, either with respect to their holdings of bonds or mortgage loans. Yet, if we are to have a better appreciation of the apparent growing importance of private, nonprofit organizations, and if the relative costs of bond financing versus mortgage loan financing are to be appraised, some delineations by type of borrower and loan instrument will be needed.⁹

⁷ Under the sec. 202 elderly housing, sec. 221(d)(3) below market interest rate and the rent supplement programs, respectively, all administered by the Department of Housing and Urban Development.

⁸ As distinguished from the "public nonprofit corporations" that are used in some areas to construct facilities that are leased to public bodies. See discussion in ch. 8.

⁹ According to the estimates presented in vol. 1, the public facility capital requirements for private, nonprofit organizations for the decade 1966-75 are estimated at \$53.5 billion. These estimates do not include housing.

As an initial step in overcoming this data gap, chapter 2 describes the sizable bond market financing by private, nonprofit organizations. The estimated volume of obligations issued by such organizations expanded from \$15 million in 1946 to \$52 million in 1955, \$138 million in 1960 and \$237 million in 1965. The loans are usually secured by a mortgage lien on the borrower's property, although there has been an increasing trend in the use of unsecured notes. Repayment periods have gradually lengthened from 10 to 15 years (usually arranged in the immediate postwar years) to a 20-year period, that is now frequently used. Most recently, terms up to 40 years have been arranged. During the years 1946-65 about 42 percent of the funds borrowed have been used to finance hospitals, 31 percent for educational institutions, 20 percent for churches and synagogues, and the remaining 7 percent for nursing and retirement homes or other purposes.

(c) *State Aids for Local Public Facilities*

State aid to local governments for public facilities may take the form of shared taxes, grants-in-aid, direct loans, issuance of State bonds to finance local construction and assumption of responsibility for construction and maintenance of certain facilities (roads, bridges). State aids to local governments for capital outlays rose from \$332 million in 1952 to \$692 million in 1962 and \$956 million in 1964, and may well exceed \$1,150 million by 1970. Of the \$692 million of State aid for local government capital outlays in 1962, \$374 million was used for educational facilities, \$260 million for highways and \$58 million for other purposes (mainly for housing, urban renewal, and water resource projects).

At the end of 1965 there were some 26 State credit assistance programs in 17 States to aid local governments in the financing of public facilities. Of these 26 programs, 17 involved State direct loans, 5 involved State grants to cover debt service (all or part) on local government bond issues and 4 involved State guarantees of local government indebtedness. If account is taken of debt service grants as well as direct loans, between 1946 and 1965 total expenditures under the State credit aid programs amounted to \$3.2 billion, of which \$2 billion was for school construction and \$1.1 billion for public housing. State direct loans alone, including those with contingent repayments,¹⁰ for public facilities only (excluding housing and business development loans) totaled \$1.8 billion during 1949-65.

State direct loans for public facilities, where repayment is firm, rose from \$24 million in 1949 to \$75 million in 1965, and aggregated \$297 million for the 17-year period ending in 1965. While State enactments of credit assistance programs have grown slowly, there is reason to expect such programs to become an increasingly important means of State financial assistance to local governments.

2. *Municipal Securities Market: Patterns, Structure and Problems*

(a) *Emerging Patterns*

(1) *Characteristics of Bonds Sold.*—New issues of municipal bonds (long-term obligations issued by State and local governments and their

¹⁰ According to Census Bureau definitions, where repayment is contingent, such direct loans are not counted as part of the local government indebtedness.

political subdivisions) rose from 3,319 issues for \$1.2 billion in 1946 to 6,059 issues for \$11.1 billion in 1965. Over the 20-year period a total of \$122.8 billion of bonds were sold, of which \$48.7 billion were sold during 1961-65. A comprehensive study of municipal bonds sold during 1957-65 finds that: (1) competitive bidding (as contrasted to negotiated sales) accounted for a rising trend of general obligation and revenue bond issues; (2) there is a heavy preponderance of general obligation issues for the shorter maturities and a dominance of the longest maturities by revenue issues; (3) there has been no marked change in the distribution of purposes for which bonds have been issued (aside from the volatile movements of bond refundings when municipal interest rates were low; that is, 1962-63 fiscal year); (4) while the proportion of borrowing accounted for by school districts has been stable, there has been a pronounced rise in borrowings by special districts and statutory authorities (from \$1.3 billion in 1957 to \$3.8 billion in 1965); and (5) among the regions, the South has increased most rapidly in terms of dollar volume of bonds.

(2) *General Obligation Bonds*.—The dollar volume of general obligation bonds rose from \$1 billion in 1946 to \$7.4 billion in 1965, but as a percent of total bonds issued, it has decreased from 83 to 67 percent over the two decades. The declining relative use of general obligation bonds may be attributed to (1) the narrow spread in interest costs between general obligation and revenue bonds; (2) the growth of public authorities that issue bonds payable solely from revenues of income-producing properties; (3) constitutional, statutory, and home rule charter limitations on general obligation indebtedness (usually expressed as a percentage of the assessed valuation of taxable property); and (4) the comparative ease of authorizing revenue bonds (no approval by the electorate required and no tax increase need be voted upon).

(3) *Revenue Bonds*.—New issues of revenue bonds have grown from \$0.2 billion in 1946, or 17 percent of the total, to \$1.7 billion in 1955, or 29 percent, and to \$3.6 billion in 1965, or 33 percent. In the past two decades the single most important development in revenue bond financing has been the broadened concept of public purpose so that it now embraces, in addition to the traditional water and sewer facilities, such facilities as toll roads, bridges, airports, public parks, recreation areas, power projects, stadiums, rapid transit facilities, public markets, college dormitories, and port facilities. Other major developments have been the growth of public authorities and, more recently, nonprofit corporations; and the increasing use of advance refunding (designed to replace high interest bonds with lower priced obligations). Significant changes in prevailing attitudes regarding bond security requirements include: stricter debt service coverage requirements, provision of a debt service reserve of at least 1 year's debt service (interest plus amortized principal), greater use of a reserve for repairs and replacements, and stricter earnings' tests governing the issuance of additional *pari passu* revenue bonds. Other significant developments include greater use of subordinated liens (in light of the stricter earnings' tests), a gradual lengthening of the repayment period; and more common use of capitalization of interest out of revenue bond proceeds.

(4) *Lease Rental Municipal Bond Financing*.—This is being carried out in three ways: (1) industrial aid revenue bonds wherein a municipality issues bonds to buy or build a plant and equipment that are

leased to private enterprise (now permitted in some 30 States); (2) lease rental authority financing wherein a nonprofit corporation is created to issue bonds to build a school or other public building, which is then leased to a school district or other local government unit; and (3) public authority financing wherein an authority is established by a city or county to issue bonds for a civic building (courthouse, community center) or stadium, which facilities are then leased to the creating city or county. In all three instances, the lease rentals are set at levels sufficient to repay the bond indebtedness.

(b) *Organizational Structure*

The four chapters on institutional factors in the municipal securities market—bond underwriters, financial advisers, bond counsel and consulting engineers—detail the nature and scope of their duties, qualifications and standards of performance, size and structure of the industry, relationships with borrowers, lenders and other institutional factors, and bases of remuneration. Summarized below are the major findings:

(1) *Municipal bond underwriters* purchase bonds from an issuing public body (usually by winning a competitive bid) and, in turn, the bonds are sold to ultimate investors. In fulfilling this distribution function, the underwriter assumes the risk of possible changes in market prices as well as the costs of distribution, for which he is compensated by the spread (difference) between the underwriters' purchase price and the reoffering sales price to investors. In 1965 there were 388 managing underwriter firms, including 295 investment banking firms and 93 municipal departments of commercial banks. In contrast, there were 932 municipal bond dealers (firms that engage in short-run trading and/or underwriting), including 809 dealer firms and 123 municipal departments of commercial banks.

Dealer syndicates (involving two or more underwriting firms) are usually formed to bid for and distribute municipal securities. About 95 percent of general obligation bond issues and around 60 percent of revenue bond issues are sold through competitive bidding. The average number of competitive bids for new bond issues has exhibited a rising trend during the years 1957–65 for various size bond issues (by dollar amounts). In contrast, the average spread for underwritten issues has steadily declined between 1958 and 1965.

(2) *Municipal financial consultants* provide advisory services to State and local public agencies concerning the planning, development, and selling of a prospective bond issue, particularly the assemblage of relevant financial and economic supporting data, specifications of the bond issue (maturities, bidding requirements, repayment conditions) and timing of the bond sale. Currently there are six nationally recognized independent financial consulting firms; also, about 30 investment banking firms engaged in financial consulting work. Altogether, the six independent firms have about 75 professional employees. Financial consultants are compensated for their services by payment of a fee by the employing municipality, determined either on an annual retainer basis or on the basis of a bond issue, with somewhat higher fees for revenue bonds, as compared to general obligation bonds. Expansion of the financial consulting industry to cope with heavy workloads occasioned by the rising trend of bond issues is hampered by the lack of qualified personnel.

(3) *Municipal bond counsel* renders approving legal opinions regarding validity of new bond issues upon initial sales offering, an opinion most investors require before they will buy municipal bonds. In connection with such an opinion, a bond counsel makes a detailed examination of the constitutional provisions, statutes, court decisions, and other legal proceedings relating to the issuance of the bonds under review; and he prepares the requisite ordinances, resolutions, and trust indentures governing the issuance of the bonds. He also prepares, or reviews, the prospectus or official statement, notice of sale, and attends to the other legal aspects of a bond sale. In 1965 there were some 128 firms that were listed in a directory of bond counsel, including 8 firms located in New York City. Many of these firms concentrate in municipal bond work, while others perform other legal functions as well. Approximately 500 partners and associates of the law firms perform the work of bond attorneys, with 7 firms having at least 10 bond attorneys each. Ordinarily, bond counsel is employed by the public agency issuing the bonds, with remuneration generally related to the size and complexity of the bond issue.

(4) *Consulting engineers* provide a wide variety of services to public bodies that undertake construction of a public facility, including preliminary planning, feasibility studies, engineering design, plans and specifications, construction coordination and supervision, and consultation on special problems. There are about 7,000 to 8,000 firms, employing about 40,000 to 50,000 professional engineers, offering engineering services, including some firms with as many as 1,000 employees. Consulting engineers are usually hired on a firm basis for a particular facility, irrespective of the dollar amount of the bonds to be issued.

(c) *Problem Areas*

(1) *Secondary Market*.—Any sales of municipal bonds subsequent to the original underwriting and reoffering by the bond underwriters take place in what is called the secondary market. Institutional or individual investors who, because of liquidity needs or for other reasons, wish to dispose of their municipal security holdings can do so in several ways: (1) sell the securities directly to a dealer, (2) arrange with a municipal bond broker, usually through a dealer, to sell the bonds at the best bid, or (3) contract with a dealer to advertise the bonds for competitive bidding over the dealer's name. Many municipal bond dealers operate trading departments which buy, sell, and trade bonds in the secondary market, with the purchases or sales usually for cash. Most municipal bond trading departments operate subject to a "position" limit which determines the maximum amount of bonds which the department may hold at any one time. Brokers never take a "position" in municipal bonds, but, instead, trade bonds for a commission of one-eighth of a point (\$1.25 per \$1,000 bond) and one-fourth of a point (\$2.50 per \$1,000 bond) on odd lots (\$10,000 or less). For 1965, when new issues totaled \$11 billion, the volume of secondary market transactions is estimated at \$22 to \$25 billion.

(2) *Bond Ratings*.—Confronted with a multiplicity of unfamiliar municipal bond issuers, many investors have come to rely upon the bond ratings assigned by the bond rating services. These bond ratings are a graduated listing of bond issues according to an appraisal of investment quality and reflect the considered opinions of the bond rat-

ing services regarding the ability of an issue to withstand default and capital loss over long periods of time. Two of the bond advisory services use letter symbols to measure bond quality, with the highest grade assigned a rating of Aaa, and the third makes qualitative judgments on principal economic and financial factors affecting credit worthiness. Bonds are appraised according to two basic risk factors—the risk that bond quality will be diluted by an inordinate increase in debt and the risk that ability to meet maturing bond principal and interest may be impaired under depressed business conditions. One of the two bond rating services employs 13 people in its municipal bond department and the other employs 12. Of necessity, both rating services limit their efforts to issuers with substantial bonded debt, at least \$600,000 for one service and \$1 million for the other.

Of the approximately 92,000 issuers of municipal bonds, ratings have been assigned to about 20,000, leaving many issuers (generally small) in the nonrated category. A survey of G.O. bonds sold during 1957–61 found that rated bonds accounted for 85 percent of their value, but only 43 percent of the number of issues. Approximately 70 percent of the issues rated by the two services have similar ratings, but the other 30 percent have different ratings. The difference of a notch in a rating, or between similar bonds, one rated and the other unrated, is reflected frequently by 25 to 50 basis points in the interest rate payable by the public borrower. In recent years there has been much discussion regarding (1) the undue dependence by financial institutions upon ratings in determining municipal bond investments, (2) the higher interest costs to borrowing municipalities because of a lowered rating or the absence of a rating, (3) the lack of verified information to support ratings (resulting from a lack of a uniform financial reporting system among the States, reliance upon the issuers to supply their periodic financial data, and inadequate staff to ascertain completeness or biases), and (4) possible conflicts of interest wherein the bond rating services also function as advisers to investors and as consultants to governmental bodies.

(3) *Postwar Default Experience of Municipal Bonds.*—The record of State governments, municipalities, and special districts in meeting their debt obligations in the World War II period has generally been excellent. Two large defaults have occurred in connection with toll revenue projects; and investor losses on other limited liability municipals have resulted from faulty governing legislation and poor planning. Though somewhat reassuring, the postwar experience stands to be marred further by recent marginal financing and others being planned.

(4) *Credit Problems of Small Municipalities.*—Small municipalities tend to pay higher interest rates on their long-term bond issues because of such factors as (a) unfamiliarity by large investors, (b) inadequate financial information supplied to investors and bond analysts, (c) failure to obtain expert advice regarding bond specifications and mechanics of sale, (d) absence of a bond rating, (e) high overhead costs in bond marketing relative to the small size of issue, and (f) relatively small bond size and infrequent sales that lead to unfamiliarity, lack of technical know-how as to bond marketing and comparatively high marketing and advisory costs on a per bond basis. Earlier studies found that small municipalities need help in preparing

economic and financial data to support bond sales, understanding bond terms and comparative advantages of alternative financing techniques, marketing a bond issue and scheduling or programming capital improvements. Six State governments now provide some administrative supervision over municipal debt, borrowing, and fiscal operations; a number of States prescribe minimum standards for notices of bond sale, and filing of financial reports, and also assist in the preparation of capital improvement programs. Federal assistance to facilitate the sale of bond issues by municipalities has been minimal, and the authorized program of technical advisory services to assist municipalities in budgeting, financing, planning and constructing public facilities has never been put into effect.

3. *Municipal Bond Interest Rates and Tax Exemption*

(a) *Trends in Municipal Interest Rates*

New issue yields of municipal bonds largely result from the interaction of (1) the prevailing yields at the time of similar taxable bonds, (2) the effective income tax rates then applicable to each investor group which determine the value of tax exemption to such groups, (3) the volume of new investable funds flowing to each of these investor groups, (4) the volume of new bond financing desired by States and municipalities at around prevailing yields, (5) expectations regarding future tax rates, volume of tax exempt financing, and flows of new investable funds, and (6) institutional restrictions (laws, customs, liquidity needs) that influence investment decisions.

In the market prevailing in February 1966 tax exemption on municipal securities was advantageous to investors with marginal tax rates above 28 percent, e.g., commercial banks, fire and casualty insurance companies, business corporations, and higher income private investors, which accounted for all of the net increases of municipal bond holdings in recent years. Since the end of 1961, commercial banks have become the dominant buyer of municipal securities. As compared to other net demands for credit, the net volume of new municipal financing has been modest, accounting for about 10 percent during the last 4 years. As compared to private borrowing, where the interest cost is tax deductible (and, hence, partially paid for by the Federal Government), States and municipalities are relatively high cost borrowers.

A crucial yardstick influencing the purchase of tax-exempt bonds is the ratio of municipal bond yields to corporate bond yields of comparable maturity and credit quality, and the relation of this ratio to income tax rates. Between 1946 and 1954 the municipal-corporate yield ratio jumped from 40 percent to 80 percent and then receded to around 75 percent, where it has remained since 1955. Since 80 to 90 percent of all new credit instruments are taxable, it is the taxable yields which dominate bond market trends, and municipal yields adjust accordingly. If there is a rapid increase in the volume of municipal credit demands, the funds of the investor groups now buying might well become inadequate. If so, municipals would have to be repriced—perhaps at yields up to 90 percent of corporate yields. This would mean a 4.50 percent yield for prime municipals, if prime corporates are yielding 5 percent.

Monetary policy action or related rule changes might divert commercial banks away from municipal bonds and thereby would have

an unfavorable effect on the municipal bond market that has recently been dependent on banks for about three-fourths of its new funds. If bank purchases were drastically reduced, it would be difficult to find other buyers, resulting in efforts to sell more municipals to investors in the 20-percent tax bracket. This would raise the municipal-corporate yield ratio—now 75 percent—to perhaps 85 or 90 percent. A rise in this ratio would increase the bonanza of after tax income to investors—institutional, corporate business, or individuals—in the higher income tax brackets.

Historically, rising prime bond yields have coincided roughly with major wars and commodity price inflations. For the next decade, assumptions of no major war, diminution of the Vietnam conflict and related peace efforts, and an end to the superboom of the last 6 years, could lead to a termination of the present bear bond market and a secular trend toward more moderate yields could set in.

(b) *Effect of Credit Conditions on State and Local Bond Sales and Capital Outlays*

Some analysts have concluded that interest rates paid on State and local bonds affect the timing of gross new issues and may have an impact on the amount of issues placed, in the long run. But the latter effect is probably of moderate size, relative to total issues; and after initial impact on borrowing, the States and municipalities tend to adjust their revenue resources to provide for changing interest costs, rather than adjust the volume of their intended borrowing.

A regression model (detailed in ch. 18) explains up to four-fifths of fluctuations in aggregate State and local bond issues around a trend. The interest rate coefficients are interpreted to the effect that State and local borrowers do form and act upon expectations of future interest rates, while buyers of new issues are more influenced by current changes in the spread between yields on municipal bonds and yields on taxable securities.

Also influencing municipal borrowing are Federal grants-in-aid, which have a positive effect, and an index of needs for new construction. The regression study found that the supply of credit funds is positively affected by deviations in the wealth of individuals in the high tax brackets (measured by the ratio of the Standard & Poor's stock price index to total wealth) and increases in the share of total wealth held in the form of time deposits at commercial banks.

(c) *Relative Tax Advantages to Different Investor Groups in Acquiring or Holding Municipal Securities*

The exemption from the Federal income tax accorded to the interest income on obligations of State and local public bodies is of value to investors in such obligations only where their marginal tax rates are higher than one minus the ratio of tax exempt yields to taxable yields of comparable securities. Six of the twelve investor groups reviewed in part 4 frequently find tax exempt securities attractive. They are: commercial banks, fire and casualty insurance companies, nonfinancial corporations, personal trust funds, municipal bond investment funds (which can "pass through" the tax exemption accorded to the interest income) and individuals. Because their effective tax rates are appreciably lower than one minus the ratio of tax-exempt to taxable yields, such investor groups as mutual savings banks, savings and loan asso-

ciations and life insurance companies have little incentive to acquire or hold tax-exempt municipal securities. No tax benefit is derived from investments in municipal securities by such groups as State and local public retirement funds, State and local governments and qualified noninsured pension funds because they are exempt from Federal income taxation.

(d) *Comparison of the Interest Cost Saving and Revenue Loss on Tax-Exempt Securities*

Based on the techniques developed by Ott and Meltzer,¹¹ it is estimated that for early 1966 the yield differential between the yields on tax-exempt securities and taxable securities of comparable maturity and credit quality ranges between 133 and 186 basis points (one basis point equals one one-hundredth of 1 percent). For gross issues of State and local government securities sold in 1965 the aggregate total interest payments over the life of the debt issued during the year are estimated at \$5 billion. If net interest cost for each issue were to be increased by a minimum of 133 and a maximum of 186 basis points, the aggregate interest payments by State and local governments over the life of the debt would have risen by an estimated range of 37.8 to 52.8 percent, or between \$1.9 and \$2.6 billion.

The aggregate average marginal tax rate (based on the approximate average marginal tax rate for each investor group, weighted by the 1965 distribution of holdings of municipal securities) is estimated at 42 percent. This rate suggests that over the life of the municipal debt issued in 1965 the increase in Federal revenue (if the securities were not tax exempt) would have been \$2.9 billion (if the relevant yield differential were 133 basis points) and interest payments would rise by \$1.9 billion because the interest were taxable. The additional revenue would have been \$3.2 billion (if the relevant yield differential were 186 basis points) and the increase in interest payments would have been \$2.6 billion.¹² These revenue consequences are based on an assumption that the present distribution of holdings would remain unchanged. If tax exemption were to be removed from new municipal securities, accompanied by a rise in yields on such securities, investor groups that now refrain from buying municipals because they find tax exemption of little value, might instead step up their purchases (owing to the higher yields), while some investor groups might withdraw from municipal securities, unless they too find the yields attractive.

C. SOURCES OF FUNDS

To develop the requisite information on the availability of credit resources for the financing of State and local public facility needs, specific chapters have been prepared for each of the major pools of investment funds or significant investor groups. These include: commercial banks, mutual savings banks, life insurance companies, fire and casualty insurance companies, State and local public retirement funds, State and local governments, nonfinancial corporations, municipal bond investment funds, personal trust funds, and individuals. The only major

¹¹ David J. Ott and Allen H. Meltzer "Federal Tax Treatment of State and Local Securities" (Washington: Brookings Institution, 1963).

¹² See ch. 20.

institutional investor groups for which there are no chapters are savings and loan associations¹³ and noninsured pension funds.¹⁴

Each of the chapters review, to the extent data are available, the patterns of investments in municipal securities and in obligations issued by private, nonprofit organizations for the years 1946-65. In addition, they provide some projections regarding future investments in these securities during the decade 1966-75.

1. *Relating Municipal Security Investments to State and Local Government Capital Outlays*

Those who have had occasion to analyze the municipal securities market and those who have endeavored to compare statistics on municipal bond sales with State and local government debt outstanding or with capital outlays will appreciate that, while all sorts of data are available on these subjects, very little has been done to link the statistics together. Inasmuch as a systematic linkage of the available data on State and local government capital outlays, outstanding indebtedness, municipal bond sales, and holdings of municipal securities by investor group was needed for this study, supplements B and C (which appear at the end of this chapter) have been prepared.

Supplement B presents four tables that trace the relationships of State and local government capital outlays to State and local government indebtedness and to the annual volume of municipal bonds sold. The first table presents estimates of capital outlays that tie in with construction put in place statistics, on a calendar year basis. The second table relates data on annual municipal bond sales to long-term debt issued by State and local governments, which, in turn, is linked to State and local government capital outlays. The third table compares annual long-term debt issued with estimated retirements and outstanding State and local government debt (long term and short term). On the basis of these three tables which deal with the decade 1956-65, the fourth table translates the projected public facility capital requirements for 1966-75, developed in volume 1, into estimated long-term borrowings. These, in turn, are converted into estimated net changes in State and local government debt for each of the years 1966-75.

Since the distributions of holdings of State and local government obligations heretofore published by the Federal Reserve Board and by the Treasury Department are not sufficiently broken down into identifiable investor groups that tie in with the groups surveyed in part 4 of this study, a "new" set of estimated holdings for the years 1946-65 is presented in supplement C. This distribution of holdings differs from existing series in several respects. First, it shows separately the municipal security holdings of such identifiable institutional groups (that are significant investors in municipal securities) as fire and casualty insurance companies, personal trust funds, and municipal bond investment funds. Second, it delineates the holdings of Federal credit agencies and "other identifiable financial institutions" and removes them from the residual category termed "Households and nonprofit organizations." Third, it distinguishes the holdings of State and

¹³ The U.S. Savings & Loan League did not comply with the committee's request for a chapter on savings and loan associations.

¹⁴ The Securities and Exchange Commission, which is the best source of knowledge on such funds, indicated that it was unable to comply with the committee's request for a chapter on private, noninsured pension funds.

local public retirement funds from those of State and local governments.

2. *Municipal Security Financing: 1946-65*

(a) *Trends*

State and local government debt outstanding increased from \$15.6 billion at the end of 1946 to \$44.8 billion at the end of 1955, a rise of \$29.2 billion, and to \$100 billion at the end of 1965, a further rise of \$55.2 billion.¹⁵ As detailed in the following two tables, among identifiable investor groups commercial banks have become the largest source of municipal security financing, accounting for 28 percent of the net expansion of State and local government debt between 1946 and 1955 and for 47 percent of the growth during 1956-65. Fire and casualty insurance companies accounted for 14 percent of the net flows during 1947-55 and for 13 percent during 1956-65, personal trust funds accounted for 12 percent during each of the decades, while "individuals and others" (excluding personal trust funds) declined in relative importance from 25 percent during 1947-55 to 17 percent during 1956-65.

During the past 4 years, 1962-65, commercial banks materially stepped up their acquisitions of municipal securities (to a large extent attributable to the effects of the Federal Reserve amendments of Regulation Q in 1961, 1963, and 1964, that raised the maximum interest rate that may be paid on commercial bank time deposits) so that they accounted for 74.9 percent of the net expansion of municipal debt holdings in these years. Owing to the dominant role played by commercial banks as a buyer of municipal securities during 1962-65, the share of the market accounted for by "individuals and others" dropped to 3.7 percent, and the share of fire and casualty insurance companies declined to 9 percent. On the other hand, personal trust funds accounted for 13.4 percent of the net increase in municipal debt outstanding during 1962-65.

Over the past two decades commercial banks have experienced a steady increase in the proportion of loans and investments represented by holdings in municipal securities, with the ratio rising from 3.8 percent in 1946 to 12.1 percent in 1964. Analysis of the municipal security investments by commercial banks¹⁶ finds (a) a growing interest in revenue bonds, (b) a rising trend (especially in recent years) in investments in long-term (maturities over 10 years) municipal securities, and (c) a decline since 1960 in the proportion of municipal security holdings¹⁷ represented by holdings of speculative issues or issues in default.

Owing to their predominant orientation toward mortgages, mutual savings banks have not purchased many municipal securities. Their greatest postwar activity in municipals occurred during the mid-1950's, when municipal securities accounted for about 2 percent of assets. Since then, there has been a marked decrease so that by the end of 1965 mutual savings banks held \$320 million, or only 0.55 percent of assets. Analysis of their investments in municipal securities

¹⁵ Supplement table C4 traces yearend holdings of State and local government obligations by significant identifiable investor groups for each of the years 1946-65.

¹⁶ Detailed in ch. 21.

¹⁷ Of commercial banks subject to examination by the Federal Deposit Insurance Corporation.

finds (a) a favoring of revenue bonds and (b) a preference for high-grade bonds with long maturities.¹⁸

Life insurance companies have evidenced a somewhat larger investment interest in municipal securities, which accounted for 3.1 percent of assets in 1961. But since, then there has been a noticeable dropoff in both municipal security investments and year-end holdings, with the latter falling to 2.2 percent at the end of 1965.¹⁹ Most life insurance company acquisitions of municipal securities have been in the form of revenue bond purchases (because of the higher yields), with most of the maturities in the 20 to 40 year range. A survey of individual companies indicated that bond ratings do not have a major influence on their municipal security purchases, nor do intended use of proceeds or geographical location of borrower.

TABLE 1.—*Holdings of State and local government obligations by investor groups, 1946-75*

[Dollar amounts in billions]

Investor group	Yearend holdings				Percent change		
	1946	1955	1965	1975	1946-55	1955-65	1965-75
1. Commercial banks.....	\$4.4	\$12.7	\$38.7	\$107.5	189	205	178
2. Mutual savings banks.....	.1	.6	.3	.4	500	(-50)	33
3. Life insurance companies.....	.6	2.0	3.5	3.8	233	75	9
4. Fire and casualty insurance companies.....	.2	4.2	11.4	21.4	2,000	171	88
5. State and local retirement funds.....	.8	2.7	2.6	.5	238	(-4)	(-81)
6. State and local governments.....	1.6	2.5	2.1	1.1	56	(-16)	(-48)
7. Municipal bond investment funds.....	(1)	(1)	.2	2.6	-----	-----	1,200
8. Personal trust funds.....	3.0	6.7	13.2	33.0	123	97	150
9. Other financial institutions.....	.8	.9	1.6	2.2	13	78	38
10. Other corporations.....	.3	1.2	3.6	6.0	300	200	67
11. Federal credit agencies.....	.4	.7	2.8	5.4	75	300	93
12. Individuals and others.....	3.4	10.6	20.0	27.1	212	89	36
Total ²	15.6	44.8	100.0	211.0	187	123	111

¹ Nonexistent, 1946-60.

² Totals may not equal sum of figures due to rounding.

Source: Supplement tables C4 and D1.

¹⁸ See ch. 22.

¹⁹ See ch. 23.

TABLE 2.—*Net flows in State and local government obligations by investor groups, 1946-75*

[Dollar amounts in billions]

Investor group	1946-55		1955-65		1965-75	
	Amount	Percent	Amount	Percent	Amount	Percent
1. Commercial banks.....	\$8.3	28	\$26.0	47	\$68.8	62
2. Mutual savings banks.....	.6	2	(-3)	(-1)	.1	(1)
3. Life insurance companies.....	1.4	5	1.5	3	.3	(1)
4. Fire and casualty insurance companies.....	4.0	14	7.2	13	10.0	10
5. State and local retirement funds.....	1.9	7	(-1)	(2)	(-2.1)	(-2)
6. State and local governments.....	.9	3	(-4)	(-1)	(-1.0)	(-1)
7. Municipal bond investment funds.....			3.2	(1)	2.4	2
8. Personal trust funds.....	3.6	12	6.5	12	19.8	18
9. Other financial institutions.....	.1	(1)	.7	1	.6	1
10. Other corporations.....	.9	3	2.4	4	2.4	2
11. Federal credit agencies.....	.3	1	2.1	4	2.6	2
12. Individuals and others.....	7.2	25	9.4	17	7.1	6
Total ⁴	29.2	100	55.2	100	111.0	100

¹ Under 1 percent.² Between 0 and -1 percent.³ Municipal bond investment funds began to operate in 1961.⁴ Total may not equal sum of figures due to rounding.

Source: Supplement tables C4 and D1.

For fire and casualty insurance companies, municipal security investments have become increasingly important, accounting for 30 percent of their assets in 1962. Since then, municipal securities as a percentage of assets have decreased to 27.4 percent in 1965. Analysis ²⁰ of municipal security investments by fire and casualty insurance companies finds (a) a rising proportion of such investments in revenue bonds (almost 50 percent in 1965), (b) a tendency to purchase longer maturities (over 10 years), (c) that, while bond ratings are considered by some, many companies prefer to perform their own credit analysis of municipal borrowers, and (d) that intended use of bond proceeds does influence purchases, but geographical location of borrower has little effect.

Through 1960, State and local government public retirement funds continued to increase their holdings of municipal securities, but, since then, municipal holdings have decreased, while assets continued to rise. At the end of 1965 municipals accounted for less than 9 percent of total assets. Analysis ²¹ of public retirement fund investments in municipal securities finds (a) they are mainly in general obligation issues, with revenue bonds accounting for about 15 percent of investments, (b) a preference for medium-term and long-term issues, (c) neither bond ratings nor intended use of proceeds have been material factors influencing investment decisions, and (d) purchases were made primarily of bonds issued by local municipalities, due to pressures to induce investments in local projects. State and local governments have also experienced a steady decline in municipal security holdings, both in absolute amounts and as a percentage of assets, in recent years. To some extent, these declines have been offset by a rise in State government direct loans to municipalities.²²

²⁰ See ch. 24.²¹ See ch. 25.²² Detailed in ch. 26.

A recent innovation in municipal security financing has been the development of municipal bond investment funds. These are registered investment companies, the assets of which are invested in municipal securities.²³ The tax exemption of the interest income on the municipal securities is "passed through" to the holders of the shares in these bond funds, which by the end of 1965 aggregated \$249 million.

While personal trust funds have expanded their holdings of municipal securities over the past two decades, municipal securities as a percentage of assets have varied but little, rising from 10.4 percent in 1946 to 13.2 percent in 1955 and to 13.7 percent in 1965. However, in recent years many of the commercial banks (that administer these personal trusts) have established common trust funds for investments in municipal securities, with the number of such "tax-exempt" funds rising from 24 in 1962 to 104 in 1965. Analysis of personal trust holdings of municipal securities²⁴ finds (a) an increasing trend in revenue bond investments, (b) considerable investments in maturities of 10 to 20 years, with some investments in maturities over 20 years, (c) while there is some reliance upon bond ratings, most trust departments prefer to do their own credit analysis, and (d) neither intended use of proceeds nor geographical location of borrower have much influence on municipal security investment decisions.

To round out the picture, chapters 29 and 30 present materials on "nonfinancial corporations" and "individuals" as sources of funds for investments in municipal securities. As shown in table C4, "other corporations" have expanded their holdings of municipal securities (mainly short term) from \$0.3 billion in 1946 to \$1.2 billion in 1955, and to \$3.6 billion in 1965. "Individuals and others" (a residual calculated by subtracting all identifiable investor groups from total holdings shown in column 1 of table C4) have grown from \$3.4 billion in 1946 to \$10.6 billion in 1955 and to \$20 billion in 1965.

(b) *Portfolio Considerations*

Most of the foregoing investor groups buy municipal securities because they find the tax-exempt yields more attractive than the "after tax" yields obtainable on investments where the income is taxable. These comparative yield considerations come into play after appropriate allowance has been made for what may be called "portfolio considerations."

Commercial banks must necessarily consider their liquidity requirements, the demand for loans from business and consumer borrowers and their legal needs to hold Government securities as collateral for Government accounts. Funds that remain after these needs have been accommodated are then invested in "bonds," with municipal security investments depending upon a comparison of the tax-exempt yields with the bank's particular tax situation (income subject to tax). During periods of credit tightness, since commercial banks generally seek to accommodate their business and consumer customers first, their net expansion in municipal security investments tends to diminish.

Fire and casualty insurance companies similarly have to review their cash flows and income picture as well as comparative yields in

²³ See ch. 27 for a description of these funds.

²⁴ See ch. 28.

determining whether to buy municipals. These companies necessarily consider whether their insurance underwriting is at a profit (or loss) and the amount of their taxable portfolio income before seeking municipal securities that yield a tax-free income. When, as in recent years, underwriting losses are heavy, many of the companies have less need for tax-exempt income and their purchases of municipals have fallen off correspondingly.

In the case of personal trusts (and, as appropriate, individual investors), comparative yields as contrasted to marginal tax rates is the principal determination governing investments in municipal securities, after due allowance has been made for the expenditure requirements of the income beneficiary (or individual). The higher the tax bracket of the personal trust (or individual investor), the greater is the need for tax-exempt income. Many nonfinancial business corporations, after considering their cash flow requirements, invest a portion of their cash balances in municipals so long as the tax-exempt yield compares favorably to the after tax returns on alternative short-term investments.

For institutional investors such as life insurance companies or mutual savings banks (which have appreciably lower marginal tax rates than high income individuals, most nonfinancial corporations, commercial banks or fire and casualty insurance companies) the prime consideration is a comparison of tax-exempt municipal yields with taxable investment yields. Generally, these institutions have less immediate liquidity or expenditure requirements. In the case of life insurance companies, as detailed in chapter 23, investments in municipals take place if their yields are from 60 to 90 percent of taxable yields (mainly if the ratio is above 80 percent) or if the tax-exempt yield is 50 to 100 basis points lower than the taxable yield.

State and local public retirement funds and State and local governments, because of their tax-exempt status, have little reason to acquire municipal securities when their yields are lower than those on taxable securities. Since the restrictions on investments by these public funds are increasingly being relaxed, there has been a corresponding decrease in their holdings of municipal securities, with an even sharper fall off in new investments. So far, private noninsured pension funds, which, if qualified, are also tax-exempt, have not invested in tax-exempt municipal securities.

3. *Projected Municipal Security Financing: 1966-75*

According to the materials presented in volume 1, State and local public agency capital requirements for public facilities for the decade 1966-75 are estimated at \$327.8 billion, of which \$31.6 billion is estimated for 1970 and \$40.7 billion for 1975. With interpolations for the remaining years of the decade, assuming an annual rate of increase of about 5.5 percent, and assuming that the financing patterns during 1956-65 will continue in the following decade,²⁵ supplement B translates these capital requirements into estimated annual net changes in State and local government debt outstanding. Such annual net changes in debt are projected to rise from \$8.5 billion in 1966 to \$11.3

²⁵ Long-term borrowing will account for about 50 percent of capital outlays; long-term borrowing for capital outlays represents 92 percent of all long-term borrowing; and the rate of annual debt retirements will rise gradually each year at an incremental rate of 0.05 percent per year from an estimated level of 5.60 percent in 1965. Evaluation of these and other assumptions appear later in the text.

billion in 1975 (see col. 1 of table 3), and by 1975 the outstanding debt is projected at \$198.8 billion.

On the basis of the data furnished in chapters 21 to 30 concerning future holdings of State and local obligations by various investor groups, supplemented by discussions with the respective chapter writers and the analysis of holdings of State and local obligations by investor groups during 1946-65 set forth in supplement C, projected yearend holdings of such obligations for 1966-75 are presented in supplement D. As detailed in table D1, these holdings are projected to rise from \$100 billion at the end of 1965 to \$211 billion at the end of 1975. Annual net changes of these projected holdings (shown in col. 2 of table 3) rise from \$8 billion in 1966 to \$14.3 billion in 1975.

TABLE 3.—*Projected net demand for, and net supply of, State and local government obligations, 1966-75*

[In billions of dollars]

Year	Projected supply ¹	Projected demand A ^{2 3}	Projected demand B ^{2 4}
	(1)	(2)	(3)
1966.....	8.5	8.0	7.2
1967.....	8.7	8.8	8.0
1968.....	9.0	9.3	8.6
1969.....	9.3	10.2	9.3
1970.....	9.7	10.8	9.9
1971.....	10.0	11.2	10.3
1972.....	10.3	12.1	11.1
1973.....	10.9	12.6	11.5
1974.....	11.1	13.7	12.6
1975.....	11.3	14.3	13.0

¹ Represent State and local government borrowing requirements (col. 10 of table B4).

² Represent funds available for municipal securities.

³ Annual net change derived from col. 1 of table D1.

⁴ Adjustment of commercial banks, personal trust funds, and "individuals and others" (per footnote 28).

In effect, these two sets of projections provide (a) estimated net additions to the supply of State and local government obligations that would be generated by the estimated State and local government public facility capital requirements, and (b) estimated net demands for municipal securities by various investor groups that reflect expected growth patterns of their assets and the proportions to be invested in municipal securities.²⁶ Comparison of the projections shown in columns 1 and 2 of table 3 indicates that during the decade 1966-75 the demand for municipal securities by various investor groups is expected to be higher than the supply arising from projected public facility capital requirements.²⁷

Between 1965 and 1975 State and local government indebtedness is projected to increase by \$111 billion. As shown in the last two columns of table 2, \$68.8 billion, or 62 percent of the expansion, is accounted for by commercial banks; \$19.8 billion, or 18 percent, is accounted for by personal trust funds; \$10 billion, or 10 percent, by fire and casualty insurance companies; and \$7.1 billion, or 6 percent, by "individuals and others." All told, these four investor groups account for 96 percent of the projected increase in municipal securities.

²⁶ While annual aggregate gross long-term borrowings by State and local governments are also projected, gross acquisitions by each investor group could not be developed owing to the limitations of financial institution data. At the present time municipal security gross acquisitions are available only for life insurance companies and municipal bond investment funds.

²⁷ Except in 1966.

Conceivably, each of the projections developed in supplement D may be unduly optimistic as to likely municipal security investments by the respective investor groups. Accordingly, the projections for commercial banks, personal trust funds and "individuals and others" (three of the largest) have been revised on the basis of less optimistic assumptions.²⁸ Under these revised projections, outstanding State and local government debt is projected at \$201.5 billion in 1975 and the annual net demand rises from \$7.2 billion in 1966 to \$13 billion in 1975 (shown in col. 3 table 3). Comparison of the revised annual projected demands with the projected annual net supplies of municipal securities finds that over the 10-year period the demand will still be slightly greater than the supply, but not during 1966-70. Under the revised projections commercial banks would account for \$61.3 billion of the net expansion, or 60 percent of the total, and personal trust funds would account for \$14.8 billion, or almost 15 percent.

From these projections it would seem that long-term borrowing by State and local governments for public facilities during 1966-75 can be successfully financed by capital market resources, if commercial banks continue to acquire most of the municipal securities generated. However, if for any reason²⁹ there is a slowdown in commercial bank asset expansion or if commercial banks find alternative investments more attractive,³⁰ then a shortage of credit resources for State and local government debt financing seems likely to develop. As detailed in chapter 17, such a shortage could be alleviated by increasing the yield on tax-exempt municipal securities to a ratio higher than the current 75 percent of the yield on taxable securities, say, to 80-90 percent.

4. *Tax Exemption and Federal Guarantees*

Municipal securities differ from all other credit instruments in one major respect in that the interest income arising from municipal debt is exempt from the Federal income tax. Much has been written or said on whether this tax exoneration is constitutional or statutory, the value of tax exemption to borrowing State and local governments and the revenue losses to the Federal Treasury,³¹ the equity effects of such exemptions upon the Federal income tax, and the debilitating effects upon State and local governments, if such exemptions were to be terminated. Each side in the long-continued debate on tax exemption for municipal securities has marshaled an imposing array of arguments, statistics, and related analysis in support of its views; and little purpose would be served in reexamining them in this volume.

Nonetheless, there appears to be one aspect of the tax exemption accorded to municipal securities that has not been thoroughly explored before; namely, the effects of Federal guarantees upon such tax exemption. To shed some light on this subject, the committee questionnaire that served as the outline for chapters 21 to 30 included several questions on the relationships of Federal guarantees to tax exemption for municipal securities. The questions inquired as to the effects of a

²⁸ For commercial banks the 1975 municipal security holdings are projected at \$100 billion, instead of \$107.5 billion (the lower projection in ch. 21) and for personal trust funds the 1975 holdings are projected at \$28 billion, instead of \$33 billion (the lower projection in ch. 28). In light of the revised statistics presented in supp. C, the annual net expansion of municipal security holdings of "Households" are projected at 0.375 of 1 percent of annual personal income (instead of the 0.4 percent employed in ch. 30).

²⁹ Such as restrictive credit policies that affect bank reserves or money supply or curtailed expansion of time deposits reflecting changed patterns of savings flows.

³⁰ Business loans, consumer loans, or mortgage loans.

³¹ Current estimates of such benefits and costs are presented in ch. 20.

Federal guarantee in addition to the tax exemption or in lieu of tax exemption. Six ³² of the ten chapters contain commentary that respond to the questions raised.

Each of the six chapters concluded that a Federal guarantee added to tax exemption would increase the credit quality of municipal securities and reduce the yield on the securities. According to the chapter on commercial banks, Federal guarantees might lower municipal interest rates by about 0.25 percent (ranging from 0.11 percent for AAA rated municipal bonds to 0.42 percent for BAA rated bonds). Most of the respondents advised that a reduction of municipal security yields due to a Federal guarantee would make municipal securities less attractive as investments. Confronted with such lower yields many of the surveyed institutions intimated that they would probably turn to alternative investments in taxable securities.

Interestingly, each of the investor groups to whom tax exemption has a value ³³ expressed a preference for continuation of the present arrangements without a Federal guarantee so that investors can make their own judgments regarding credit risks and thereby obtain the necessary yield differentials to compensate for such risks. Some responding institutions even contended that a Federal guarantee "would do more harm than good."

With respect to substitution of a Federal guarantee in lieu of tax exemption, each of the responding private investor groups expressed opposition to such an exchange, with the greatest hostility voiced by the commercial banks. According to the canvass of investor reactions (detailed in the respective chapters), if municipal securities were to be guaranteed by the Federal Government, and the interest income were to be taxable, the resultant yield on municipal securities would be around the yield of Federal agency securities or perhaps somewhat higher. Investor groups such as fire and casualty insurance companies and life insurance companies would find yields at these levels unattractive, causing them to turn to alternative investments. On the other hand, public retirement funds would find the higher yields (on "taxable" municipal securities) more attractive, as might mutual savings banks.³⁴ However, commercial banks and personal trusts, the major sources of municipal credit in the current market, would turn to alternative investments where yields are more attractive.

As might be expected, the investor groups that benefit most from the tax exemption accorded to municipal securities voiced the strongest objections to any intimation of possible removal of such exemption.

The committee questionnaire also inquired as to how municipal securities could be made more attractive to investors. The most emphatic responses called for retention of tax exemption of interest income as the most important attraction. Other suggestions include State guarantees of municipal obligations, more complete economic and financial information to be furnished by borrowing State and local public agencies, uniform municipal accounting and reporting and codification of State laws governing the issuance of municipal securities.

³² Chapters on commercial banks, mutual savings banks, life insurance companies, fire and casualty insurance companies, public retirement funds, and personal trusts.

³³ All of the investor groups responding, except public retirement funds.

³⁴ By analogy, one might infer a similar reaction on the part of noninsured pension funds and savings and loan associations, the remaining major pools of loan funds.

5. *Obligations of Private, Nonprofit Organizations*

As detailed in supplement A, several questions posed for the chapters on sources of funds dealt with the obligations issued by private, nonprofit organizations. It was hoped that quantitative information could be developed on the extent of investments in such obligations by the major investor groups, coupled with some description of the factors influencing their investments. Unfortunately, aside from life insurance companies and mutual savings banks, such data are not available because the various investor groups do not distinguish obligations of private, nonprofit organizations from other investments.

A survey of 18 life insurance companies found that during 1946-65 they had acquired \$875 million of obligations of private, nonprofit organizations, including \$129 million in 1965. The obligations are being used to finance hospitals, churches, schools, colleges, nursing, retirement or rest homes, college dormitories, office buildings, YM and YWCA's, community buildings, and seminaries. Mortgage notes have been the usual instrument for many of the companies, with bonds less frequently used. The major factors influencing investment decisions have been yield, security of debt service, credit standing, and project feasibility.

During 1950-63, mutual savings banks in New York made \$234 million of mortgage loans to private organizations to finance hospitals, houses of worship, schools, libraries, and fraternal buildings. Some of the fire and casualty insurance companies reported that they buy a few church and hospital bonds. The chapters on public retirement funds and personal trust funds advise that they make some purchases of nonprofit organization obligations, while the chapter on commercial banks advises that data are not available on bank acquisitions of such obligations.

6. *Appraisal*

According to the data presented above, during the decade 1966-75 the demand for municipal securities by identifiable investor groups is expected to be higher than the supply of State and local government debt obligations that would be generated by the projected public facility capital requirements of such public agencies during these years. Such a conclusion rests on the following major assumptions: (a) That public facility capital requirements developed in volume 1 fully reflect the Nation's public-facility needs, (b) that housing and urban renewal capital outlays of State and local governments will expand by 5.5 percent per year, (c) that 50 percent of total State and local government capital outlays will continue to be financed by borrowing, (d) that commercial banks will account for over 60 percent of the increased demand for municipal securities, and (e) that all other investor groups will actually acquire municipal securities to the extent projected.³⁵

Although considerable data are presented in volumes 1 and 2 to support these assumptions, it does not necessarily follow that they will actually materialize during the next decade. The reader, of course, is free to make alternative assumptions and to adjust the estimates accordingly. In this connection, the following commentary may be helpful.

³⁵ Other assumptions include: (a) That long-term borrowing for capital outlays will continue to account for 92 percent of all long-term borrowing, and (b) that the rate of annual debt retirements will rise gradually each year at an annual incremental rate of 0.05 percent.

(a) The aggregate public facility capital requirements presented in volume 1 reflect the considered opinions of a large group of experts, with the underlying assumptions explicitly stated and historical trends fully documented. While one may feel that some of the projections for specific facility categories are either too high or too low, it is conceivable that there may be offsetting adjustments among other categories so that the aggregate capital requirements are hardly changed. Thus, unless it could be shown that there has been a coincidental bias among the over 50 experts, or groups of experts, who prepared the chapters in volume 1, it would seem that the projections developed are reasonable.

(b) To permit this study to be manageable yet sufficiently detailed to serve adequately its intended purposes, it became necessary to distinguish between "public facilities" capital outlays and other capital outlays of State and local public agencies, such as those for public housing and urban renewal.³⁶ But any meaningful analysis of State and local government indebtedness and the municipal securities market must in some way take into account capital requirements for public housing and urban renewal. Accordingly, an allowance has been made for these capital requirements by assuming that they will grow at the same annual rate as that projected for GNP, i.e., 5.5 percent per year (in current dollars). This growth rate for public housing and urban renewal may be too high or far too low, considering the tremendous needs of the Nation's cities. Or it is conceivable that, while urban development outlays may expand more rapidly, a larger portion may be financed from sources other than borrowing; e.g., State and local government tax resources or Federal grants.

(c) It remains to be seen whether or not State and local governments continue, as they have during the past 14 years, to finance 50 percent of their capital outlays by borrowing. On the one hand, constitutional and statutory limitations on general obligation indebtedness and legislative reluctance to increase taxes may impede the growth of general obligation debt, but rising incomes, sales, and property valuations (and at times higher ratios of assessment) may nonetheless enlarge the debt-incurring capacity of State and local governments. Moreover, the rising trend of revenue bond financing lends further support to the projected growth in borrowing.

As will be recognized, this study did not examine the growth prospects of State and local government tax revenues nor did it consider the possible expansion of Federal grant assistance. Instead, it was assumed that together these resources will continue to finance 50 percent of State and local government capital outlays, with the relative proportions to be determined. To do otherwise would have required a comprehensive analysis of State and local government fiscal resources and alternative ways of providing Federal financial assistance—categorical grants-in-aid, block grants (for broad groups of purposes) or tax sharing. Such analyses were beyond the terms of reference set for the present two-volume study.

³⁶ Public housing and urban renewal activities are best examined within the context of "housing and other real estate" inasmuch as public housing is one of several alternative ways to meet our housing needs and publicly financed urban renewal is but one of several routes to achieve urban development (or redevelopment).

(d) The plentiful demand for municipal securities projected largely depends on projected holdings for commercial banks, the dominant force in the municipal securities market. Given the severe jolt to this market occasioned by periods of credit tightness, one may be justifiably concerned about this heavy reliance upon commercial banks. If for any reason commercial banks were to become less active in the municipal market, the apparent sufficiency of demand for municipals could be turned overnight into a shortage.

It should be recognized that by focusing attention upon municipal security holdings and developments within the municipal securities market, this study may have unwittingly induced the participating analysts to lose sight of the credit needs of the other sections of the capital market. While the materials presented in the respective chapters on financial institutions evidence that these alternative needs were considered, it is conceivable that little allowance was made for any large expansion of credit for housing, business, or consumers, or perhaps by the Federal Government, such as might have been made had there been a comparable detailed analysis of these other sectors. Large credit requirements for these other purposes could "crowd out" municipal securities in commercial bank portfolios.

Aside from these alternative loan considerations, there is the possibility that commercial bank asset expansion may be less than projected. Or, it is conceivable that the credit authorities may be reluctant to permit large-scale commercial bank credit expansion, if a sizable portion of the expansion were to be invested in tax-exempt municipal securities.

(e) Similar conjectures may be raised regarding the future investment activity of other investment groups. Or one may inject the possibility of lower Federal income tax rates, which would cause a wholesale reexamination of the value of tax-exempt income to the respective investor groups.

Making projections is a hazardous occupation, albeit necessary, if our economic planners and policymakers are to have some notion of what to expect as the economy continues to grow. But our economy has become so large, and there are so many variables to contend with, that, if we are to study economic forces in detail, we must necessarily do so through a sector-by-sector approach, while making certain assumptions regarding the other sectors.

The present study has endeavored to explore the prospects of the relatively small but vital sector relating to the needs and credit financing of the Nation's infrastructure of State and local public facilities. It is hoped that similar studies will be undertaken for other delineated sectors so that policymakers and economic planners, be they in government, business, labor, or in the academic community, will be able to assess meaningfully their intended decisions or recommendations before they are put into effect, rather than await judgments from subsequent historical reviews.

SUPPLEMENT A

Financial Institutions

In order to assure uniform coverage, the writers submitting chapters on financial institution groups in part 4, were requested to follow the standard outline set forth below.

CHAPTER OUTLINE

INTRODUCTION

Describe briefly the nature of the financial institution to be covered in terms of purpose, functions, number of firms and assets, sources of funds received and relative quantities, and major categories of loans and investments. For this introductory section, 1964 statistical information should be used to the extent available.

A. SUPPLY OF CAPITAL FUNDS

1. Trace the annual dollar volume of loans and investments made during the years 1946 through 1965 to finance State and local public works through acquisitions of—

- (a) State and local government bonds (municipal securities);
- (b) Obligations of private, nonprofit organizations issued to finance such facilities as private hospitals, schools, colleges, nursing homes, community buildings, and other local buildings or facilities operated not for profit.

NOTE.—Acquisitions should be shown on a “gross basis;” and if “gross acquisitions” are not available, use “net change in holdings” of such securities.

2. With respect to the municipal securities acquired—

(a) What were the relative proportions of (1) general obligation bonds, (2) revenue bonds (secured solely by tolls, leases, or user charges), and (3) other bonds (special assessment or limited tax bonds) during these years? If the relative proportions varied, explain the changes.

(b) What maturities are generally purchased—(1) under 1 year, (2) 1 to 5 years, (3) 5 to 10 years, (4) 10 to 20 years, (5) 20 to 40 years? Why?

(c) To what extent are bond purchases influenced by the availability and level of bond ratings assigned by the municipal bond rating services? Are unrated bonds purchased? Are bonds with ratings below the top four ratings purchased? Can these responses be quantified?

(d) To what extent are bond purchases influenced by the intended uses of the bond proceeds? Are there any notable preferences or prejudices?

(e) To what extent are bond purchases influenced by the geographical location of the borrowing city, county, district, or State?

3. With respect to obligations of private, nonprofit organizations—
 - (a) What types of facilities or buildings are generally financed?
 - (b) How are the loans evidenced—in the form of (1) bonds, (2) mortgage notes, (3) other (identify)?
 - (c) To what extent are purchases of such loans influenced by (1) availability of bond ratings, (2) intended use of proceeds, (3) geographical location of borrower, (4) public relations considerations.

B. PORTFOLIO CONSIDERATIONS

1. Provide annual statistics for the years 1946-65 showing the proportions of the yearend holdings of loans and investments represented by (a) obligations issued by States and local governments (municipal securities) and (b) obligations issued by private, nonprofit organizations.

(a) Explain the variations, if any.

2. With respect to municipal security holdings,

(a) Are there any guidelines established regarding the proportion of such holdings to the holdings of other loans and investments?

(b) To what extent are municipal securities competitive with mortgage loans in portfolio determinations?

3. Inasmuch as the interest income on municipal security holdings is tax exempt, whereas the interest income on other security holdings is not tax exempt, at what interest rate levels, as compared to the interest rates on taxable loans and investments, are municipal securities attractive as prospective investments?

(a) What is needed to make municipal securities more attractive as investments?

(b) Considering the negligible amount of defaults among municipal borrowers, aside from clearly speculative loans, would a Federal Government guarantee of municipal securities make them more attractive as investments? Why?

(c) If a Federal Government guarantee of municipal securities were available in exchange for making the interest income on such securities subject to the Federal income tax, would such guaranteed securities be attractive as investments? At what level of interest rates—yields obtainable on Federal agency obligations, yields obtainable on AAA rated corporate bonds, or other level (for comparable maturities)? Why?

C. PROSPECTIVE LOANS AND INVESTMENT

1. A large part of the capital requirements of the Great Society over the next decade is expected to be financed by security flotations by State and local public bodies and by private, nonprofit organizations.

(a) On the basis of past experience and emerging trends, what amounts (in hundreds of millions of dollars) are likely to be invested during each of the next 10 years, 1966-75, by the institutions under review in (1) municipal securities and (2) obligations issued by private, nonprofit organizations?

(b) What is the basis for these projections?

(c) Under what circumstances can these investments be expanded?

SUPPLEMENT B

Relationship of Indebtedness to Capital Outlays for State and Local Governments

At the present time there are no internally consistent statistics relating to State and local government capital outlays, bond sales, and outstanding indebtedness. Instead, there are independently compiled series on (a) capital outlays and construction expenditures (collected by the Governments Division, Bureau of the Census, on a fiscal-year basis); (b) construction put in place (collected by the Construction Statistics Division, Bureau of the Census, on a calendar-year basis); and (c) bond sales and refundings (two different series, both on a calendar basis; one compiled by the Bond Buyer, and the other by the Investment Bankers Association), and debt outstanding, new debt issued, and retirements (collected by the Governments Division, Bureau of the Census, on a fiscal-year basis).

The purpose of this supplement is to ascertain the relationships, if any, among the aforementioned statistical series in order to provide a basis for translating the public facility capital requirements of State and local public agencies for the years 1966-75 into estimated required annual net changes of State and local government indebtedness. Availability of such estimated required annual net changes of indebtedness, when compared to the annual sums of projected net changes of holdings of State and local government obligations developed in supplement D, would provide a measure of the extent to which the capital requirements can be financed by borrowings in the capital market given the existing complex of tax rate, alternative market yield, and institutional portfolio considerations.

This supplement consists of four tables, with appropriate explanation regarding data sources, methodology, and assumptions. These tables are: (1) Estimated Annual Capital Outlays of State and Local Governments, Calendar Years 1956-65; (2) Municipal Bond Sales Related to Capital Outlays, 1956-65; (3) Relationship of Long-Term Debt Issued to Outstanding Debt, 1956-65; and (4) Projected Net Increases in Debt Outstanding, 1966-75.

1. ESTIMATED ANNUAL CAPITAL OUTLAYS, CALENDAR-YEAR BASIS

Table B1 shows the relationship of State and local government construction expenditures to capital outlays for the fiscal years (of the reporting governments) 1956-65, as collected each year by the Bureau of the Census. According to the material presented in chapter 1, the annual construction expenditure figures, as compiled by the Governments Division, and the construction-put-in-place figures, as compiled by the Construction Statistics Division, showed a high degree of historical consistency for the decade 1954-63, after the latter had been converted into annual data for years ending June 30.¹

¹ Beginning in 1963, the construction-put-in-place statistics for State and local governments have been based on construction expenditures data collected by the Governments Division, Bureau of the Census.

Because the data presented in this volume are largely calendar-year figures, it became necessary to develop capital outlay figures for calendar years. This is done in table B1 by (a) determining the average ratio of construction expenditures to capital outlays for the 2 fiscal years falling in each calendar year, and (b) applying the reciprocals of such average calendar-year ratios to the annual construction-put-in-place data. Since these capital outlay figures embrace public housing and urban renewal as well as the various public facility categories, the estimated proportions of capital outlays accounted for by public housing and urban renewal are also shown.

2. MUNICIPAL BOND SALES RELATED TO CAPITAL OUTLAYS

During the years 1956-60 the annual long-term municipal bond sales figures published by the Bond Buyer were higher than those published by the Investment Bankers Association. Since then, the Investment Bankers Association annual bond sales figures have been higher. Inasmuch as both series are based entirely on reported information, there is reason to believe that through 1960 the Bond Buyer data were more comprehensive, and since then IBA data have been more comprehensive. Accordingly, columns 1 to 3 of table B2 show gross bond sales, estimated bond refundings, and net bond sales for the years 1956-65 on the basis of the annual bond sales that are the most comprehensive (larger figures).²

Municipal bonds sold toward the end of a calendar year frequently are not delivered until sometime in the next year. To adjust for this timelag, the long-term bond sales, net of refundings, are compared to the annual bond delivery figures, compiled by the Investment Bankers Association,³ and the resultant figures are shown in column 5 as "net long-term bond issues."

Owing to underreporting to both the Bond Buyer and the Investment Bankers Association, the net long-term bond issue figures do not fully reflect the total volume of long-term indebtedness incurred each year by State and local governments. A measure of this underreporting is revealed by column 6 which shows the annual difference between net long-term bond issues and estimated long-term debt issued (col. 7). The latter figures represent the annual averages of the long-term debt issued for the 2 fiscal years falling in the respective calendar year, as compiled by the Bureau of the Census.⁴ The annual difference reflects nonreported (to IBA and the Bond Buyer) competitive bond sales, negotiated sales or private placements (for example, to public retirement or trust funds), and Federal Government loans. For the 9-year period 1956-64 these unreported differences accounted for about 11.5 percent of total long-term debt issued.⁵

Table 6 of chapter 1 provides Census Bureau estimates of the long-term debt issued applicable to capital outlays for fiscal years 1958 through 1964-65. These fiscal-year figures were converted into cal-

² For purposes of internal consistency, the bond refunding figures shown are derived from the same respective source as the bond sales data. Refunding bonds are necessarily subtracted from gross sales, since such bonds merely replace existing bonds and therefore do not constitute new capital.

³ Discontinued by IBA beginning in 1966.

⁴ Reported on a fiscal-year basis in Government Finances (table entitled "Indebtedness and Debt Transactions of State and Local Governments").

⁵ Average of the annual ratios obtained by dividing col. 6 by col. 7.

endar-year figures by averaging the two fiscal-year figures falling in the respective calendar year; and the respective calendar-year figures are entered in column 8. The differences (col. 9) between total long-term debt issued and long-term debt issued for capital outlays represent long-term debt issued to finance veterans' bonuses, State direct loan programs (for example, for housing) and other noncapital outlay purposes, including increases in undistributed bond funds. For the 7-year period 1958-64 "long-term debt issued for capital outlays accounted for 92.6 percent of total long-term debt issued." This relationship ties in with the materials presented in chapter 1, which showed that of the \$110.1 billion of long-term borrowing by State and local governments during the 14 fiscal years from 1952 through 1964-65, \$101.4 billion, or 92.1 percent, was issued to finance capital outlays.

Comparison of the "long-term debt issued for capital outlays" (col. 8) with "estimated capital outlays" (col. 10) for each of the years 1958-64 results in an average ratio of 50.1 percent; that is, about half of State and local government capital outlays are financed by long-term borrowing. This average ratio is fairly close to the 50.4 percent average ratio of capital outlays accounted for by long-term borrowing, reported in chapter 1 (table 6).

3. LONG-TERM DEBT ISSUED COMPARED TO OUTSTANDING DEBT

The only reported data on retirements (repayments) of State and local government debt are those compiled by the Census Bureau on a fiscal-year basis. On the assumption that the debt-outstanding figures, as of the beginning of the fiscal-year period (as reported by the Census Bureau), and the reported annual retirements are reasonably consistent with each other,⁸ it is possible to derive estimated annual rates of debt retirement (col. 3 of table B3). These fiscal year rates of retirement were then converted into calendar-year rates by averaging the two overlapping fiscal-year ratios (col. 4).

Columns 5-8 of table B3 provide a simple gross flow compilation of State and local government indebtedness on a calendar-year basis. Debt outstanding at the beginning of the calendar year (col. 5) represents the estimates shown in the Federal Reserve "Flow of Funds Accounts." Estimated retirements (col. 7) reflect application of the annual rates of retirement (col. 4) to the beginning of year outstanding debt figures and net changes of outstanding debt (col. 6) are derived by subtractions of column 5 data. The annual sum of "net change" plus "debt retirement" equals "estimated new debt issued" (col. 8).

By definition, "estimated new debt issued" equals new long-term debt issued plus the net change in outstanding short-term debt.⁹ Con-

⁸ The figures for long-term debt issued for capital outlays for 1956, 1957, and 1965 were estimated by the writer by applying 92.6 percent to the respective annual figures on total long-term debt issued.

⁷ Average of the annual ratios obtained by dividing col. 7 by col. 8.

⁸ Comparison of annual net change of long-term debt outstanding of State and local governments (by subtraction of successive annual outstanding-debt figures) with derived annual net-change figures (long-term debt issued less long-term debt retired) finds a number of disparities. Similar disparities are found when the comparisons are made for State governments or local governments separately.

⁹ There is no Bureau of the Census tabulation of new short-term debt issued.

ceptually one might expect that total new debt issued each year would exceed new long-term debt issued by a small amount—reflecting slight increases in outstanding short-term debt. However, this has not always been the case over the past 10 years. Comparison of long-term debt issued (col. 9) with total new debt issued (col. 8) results in differences that range from \$1 billion to a negative \$1.2 billion (col. 10). To some extent, fluctuations of these annual differences reflect increases or decreases in outstanding short-term debt and, to some extent, the fluctuations are due to statistical discrepancies that arise from the manner of Census Bureau tabulations.¹⁰

Be that as it may, the algebraic sum of the differences between total new debt issued and new long-term debt issued for the entire 10-year period 1956–65 is calculated as a negative \$1.7 billion (algebraic sum of col. 10). A discrepancy of about \$170 million per year would seem to be reasonable, considering the magnitudes of the new debt issued each year and the margins of error allowable because many of the Census Bureau figures are based on sample surveys.

4. PROJECTED NET INCREASES IN DEBT OUTSTANDING, 1966–75

The capital requirements for public facilities by State and local public agencies for the decade 1966–75 are estimated¹¹ at \$327.8 billion, of which \$31.6 billion is estimated for 1970 and \$40.7 billion for 1975. Estimates for the remaining years of the decade have been interpolated, assuming an annual rate of increase of about 5.5 percent. These estimates are shown in column 1 of table B4. Since by definition public housing and urban renewal are excluded from “public facilities,” an appropriate allowance has to be made for public housing and urban renewal capital requirements in order to obtain total capital requirements of State and local public agencies. This is done in column 2 by assuming an annual rate of increase of 5.5 percent from the 1965 level of capital outlays for housing and urban renewal (per table B1). Total capital requirements of State and local governments are shown in column 3.

On the basis of the experience during 1958–64, it is assumed that long-term borrowing (col. 4) will account for about 50 percent of annual capital outlays (requirements). Conversely, it is assumed that 50 percent of the rising trend of capital requirements will be financed by increases in State and local government tax and other revenue resources and in Federal grants-in-aid (the mix being indeterminate).

It is further assumed that long-term borrowing for capital outlays will continue to account for about 92 percent of total long-term borrowing and that the discrepancy between long-term borrowing and total new debt issued will average \$170 million per year. Application of these two assumptions results in estimates of total long-term borrowing (col. 5) and new debt issued (col. 6). The rate of annual debt retirements is expected to rise gradually each year at an incremental rate of 0.05 percent per year, i.e., 5.60 percent in 1965, 5.65 percent in 1966, 5.70 percent in 1967, etc.

¹⁰ Adjustments are not made in prior year tabulations for debt, that had been previously outstanding, but is reported for the first time in the current year.

¹¹ See introduction and summary chapter of vol. 1.

Columns 7-11 of table B4 present estimated gross flows of State and local government debt for the years 1966-75, based on the assumptions set forth above. As will be noted, total new debt issued, reflecting the estimated capital requirements, is expected to rise from \$14.2 billion in 1966 to \$22.7 billion in 1975 and the net change in outstanding debt is estimated to grow from \$8.5 billion in 1966 to \$11.3 billion in 1975. Outstanding State and local government debt is estimated at \$198.8 billion at the end of 1975, compared to \$100 billion estimated for the end of 1965.

TABLE B1.—*Estimated annual capital outlays of State and local governments, calendar year basis, 1956-65*

[Dollar amounts in millions]

Year	Fiscal year data ¹			Calendar year data			
	Capital outlays	Construction expenditures	Ratio (percent)	Ratio ² (percent)	Construction put in place ³	Estimated capital outlays ⁴	Housing and urban renewal ⁵
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1956	\$11,407	\$9,355	82.0	82.2	\$10,006	\$12,173	\$260
1957	12,616	10,386	82.3	83.0	11,086	13,357	330
1958	13,986	11,704	83.7	83.3	12,069	14,489	380
1959	15,351	12,723	82.9	82.4	12,346	14,953	470
1960	15,104	12,352	81.8	82.0	12,241	14,928	580
1961	16,091	13,214	82.1	81.6	13,269	16,261	700
1962	16,791	13,625	81.1	80.9	13,956	17,251	810
1963	17,946	14,481	80.7	80.7	15,356	19,029	780
1964	19,087	15,389	80.6	79.8	16,485	20,658	760
1965	20,771	16,417	79.0	⁶ 79.0	18,046	22,843	⁶ 780

¹ Fiscal year basis, approximately for year ending June 30, as reported in Governmental Finances. (See ch. 1.)

² Average of ratios in col. 3 for fiscal years overlapping in calendar year.

³ As reported in Construction Review (compiled by Construction Statistics Division, Bureau of the Census). Beginning in 1963 data based on new definitions and data source.

⁴ Col. 5 divided by col. 4.

⁵ Average of capital outlays for "Housing and Urban Renewal" (per ch. 1) for overlapping fiscal years.

⁶ Estimated.

TABLE B2.—*Long-term State and local government capital outlays related to municipal bond sales, calendar year data, 1956-65*

[In millions of dollars]

Year	Long-term bond sales ¹			Adjustments ²	Net long-term bond issues ³	Other long-term debt ⁴	Long-term debt issued			Estimated capital outlays ⁵
	Gross bond sales	Estimated refundings	Sales net of refundings				Total ⁶	For capital outlays ⁶	For other purposes ⁷	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1956.....	5,446	76	5,370	300	5,670	1,141	6,811	⁹ 6,307	504	12,173
1957.....	6,958	60	6,898	-390	6,508	813	7,321	⁹ 6,779	542	13,357
1958.....	7,449	143	7,306	259	7,565	441	8,006	7,054	322	14,489
1959.....	7,681	59	7,622	-258	7,364	637	8,051	7,414	637	14,983
1960.....	7,230	53	7,177	-128	7,049	969	8,018	7,383	635	14,928
1961.....	8,498	103	8,395	-197	8,198	540	8,738	7,915	823	16,261
1962.....	8,737	280	8,457	-5	8,452	1,228	9,680	8,871	809	17,251
1963.....	10,331	1,409	8,922	165	9,087	1,517	10,604	10,187	417	19,020
1964.....	10,646	646	10,000	-577	9,423	1,823	11,246	10,120	1,126	20,658
1965.....	11,265	585	10,680	273	10,953	⁹ 1,423	⁹ 12,376	⁹ 11,460	916	22,843

¹ 1956-60, Bond Buyer data; 1961-65, Investment Bankers Association (IBA) data.² Adjustments for issues offered in calendar year before issuance; differences between col. 1 and bond deliveries (IBA data).³ Algebraic sums of cols. 3 and 4.⁴ Difference between cols. 7 and 5.⁵ As reported in Governmental Finances (table entitled "Indebtedness and debt transactions of State and local governments"), figures are averages for fiscal year data overlapping in respective calendar year.⁶ For 1958-64, ch. 1, table 6, converted into calendar year figures by averaging fiscal year data overlapping in respective calendar year.⁷ Difference between cols. 7 and 8.⁸ Col. 5 of table B1.⁹ Estimated.TABLE B3.—*Relationship of outstanding State and local debt to net long-term debt issues, 1956-65*

[Dollar amounts in millions]

Year	Fiscal year data ¹			Calendar year data					Long-term debt issued ⁷	Col. 8 minus col. 9 ⁸
	Debt outstanding ²	Retirements	Ratio (per-cent)	Ratio ³ (per-cent)	Debt outstanding ⁴	Net change	Estimated retirements ⁵	Estimated new debt issued ⁶		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1956....	\$44,267	\$2,351	5.3	5.0	\$44,800	\$5,100	\$2,240	\$7,340	\$6,811	\$529
1957....	48,568	2,315	4.7	4.9	49,400	4,600	2,421	7,021	7,321	(-300)
1958....	53,039	2,716	5.1	5.0	53,900	4,500	2,695	7,195	8,006	(-811)
1959....	58,187	2,839	4.9	5.0	58,800	4,900	2,940	7,840	8,051	(-211)
1960....	64,110	3,222	5.0	5.0	63,700	4,900	3,185	8,085	8,018	(-67)
1961....	69,955	3,458	4.9	4.9	68,700	5,000	3,366	8,366	8,738	(-372)
1962....	75,023	3,695	4.9	5.1	75,500	6,800	3,851	10,651	9,680	971
1963....	80,802	4,227	5.2	5.3	82,500	7,000	4,373	11,373	10,604	769
1964....	87,451	4,643	5.3	5.4	88,000	5,500	4,752	10,252	11,246	(-994)
1965....	92,222	5,045	5.5	⁹ 5.6	93,900	5,900	5,258	11,158	12,376	(-1,218)

¹ As reported in Governmental Finances.² Outstanding at beginning of fiscal year.³ Average of ratios in col. 3, for fiscal years overlapping in calendar year.⁴ Outstanding at beginning of calendar year (Federal Reserve "flow of funds" data).⁵ Col. 4 times col. 5.⁶ Sum of cols. 6 and 7 (represents all State and local government debt).⁷ Col. 7 of table B2.⁸ Net changes in short-term debt plus statistical discrepancy.⁹ Estimated.

TABLE B4.—*Translation of estimated capital requirements for public facilities into estimated State and local government debt, 1966-75*

[In billions of dollars]

Year	Public facility capital requirements ¹	Housing and urban renewal ²	Total capital requirements ³	Long-term debt for capital outlays ⁴	Long-term debt issued ⁵	Total new debt issued ⁶	Beginning balance ⁷	Estimated retirements ⁸	Total new debt issued ⁹	Net change ⁷	Year-end balance ⁷
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1966-----	25.5	0.8	26.3	13.2	14.4	14.2	100.0	5.7	14.2	8.5	108.5
1967-----	26.9	.9	27.8	13.9	15.1	14.9	108.5	6.2	14.9	8.7	117.2
1968-----	28.3	.9	29.2	14.6	15.9	15.7	117.2	6.7	15.7	9.0	126.2
1969-----	29.8	1.0	30.8	15.4	16.7	16.6	126.2	7.3	16.6	9.3	135.5
1970-----	31.6	1.0	32.6	16.3	17.7	17.6	135.5	7.9	17.6	9.7	145.2
1971-----	33.5	1.1	34.6	17.3	18.8	18.6	145.2	8.6	18.6	10.0	155.2
1972-----	35.1	1.1	36.2	18.1	19.7	19.5	155.2	9.2	19.5	10.3	165.5
1973-----	37.4	1.2	38.6	19.3	22.0	20.8	165.5	9.9	20.8	10.9	176.4
1974-----	39.0	1.3	40.3	20.2	22.0	21.8	176.4	10.7	21.8	11.1	187.5
1975-----	40.7	1.3	42.0	21.0	22.8	22.7	187.5	11.4	22.7	11.3	198.8

¹ Per vol. 1, interpolated on assumed annual rate of increase of 5.5 percent.² Assumed annual rate of increase of 5.5 percent of 1965 volume.³ Sum of cols. 1 and 2.⁴ Calculated at 50 percent of col. 3 (per table B2).⁵ Calculated by multiplying col. 4 by reciprocal of 92 percent.⁶ Col. 5 less \$170,000,000.⁷ Computed through gross flow tabulation.⁸ 5.6 percent in 1965; thereafter annual rate of retirement increased by 0.05 percent per year.⁹ Col. 6.

SUPPLEMENT C

Holdings of State and Local Government Obligations

The basic source for all statistics on total State and local government debt outstanding is the annual compilation made by the Governments Division, Bureau of the Census of the Department of Commerce. The total debt outstanding figure represents indebtedness of all State and local governments, including cities, towns, special districts, and public authorities; that is, what is commonly called "municipal securities." Included within the total debt figure are both long-term and short-term debt, interest-bearing and non-interest-bearing.

Data on State governments are based on reports from all 50 States and data on local governments are based on reports from a sample of local governments now numbering over 10,000 units, classified by type and size, including complete coverage of cities with populations in 1960 exceeding 25,000 and special districts with debt of \$1 million or more in 1962. Aside from the sampling variability possibility,¹ these Census Bureau data are subject to a major weakness in that there is no common reporting date. Instead, all of the data, including the debt statistics, relate to the reporting government's fiscal year that ends within the period of review. Through 1963 the period of review was prescribed as the calendar year and since then it has been the 12 months ending June 30.

Data received by the Census Bureau cover all indebtedness of State and local governments, whether to private lenders, to the Federal Government, State government, or to public trust funds. In its tabulation, however, the Census Bureau excludes certain items that upon examination are not really indebtedness in the sense of being a firm commitment to repay. Loans where repayment is conditional are thus excluded. Accordingly, the total debt figures do not include Department of Housing and Urban Development advances for public works planning (where repayment is required only if construction is started) or for urban renewal planning (where repayment is required only if the project is undertaken). Similarly, California State loans for school buildings are excluded because repayment is contingent upon an assessment of ability to pay.²

The Bureau of the Census furnishes an annual total State and local government debt figure to the Treasury Department and to the Office of Business Economics, adjusted to June 30. The figure supplied to Treasury excludes non-interest-bearing debt and the figure supplied to OBE includes the non-interest-bearing debt. The Flow of Funds Section of the Board of Governors of the Federal Reserve System converts the Census compiled total debt figure into a calendar year-end figure by adding the net new issues of municipal securities (gross sales less estimated refinancings and retirements) for the third and fourth calendar quarters. The Capital Markets Branch of the Securities and Exchange Commission employs a similar technique to esti-

¹ From time to time Census reports uncover debt referred to for the first time that had been outstanding in previous years. These figures are incorporated into the current year tabulation, but corresponding adjustments are not made in earlier year total debt figures.

² According to "Moody's Municipal and Government Manual" (1966 issue), of the \$448.4 million of debt service paid by the State through June 1965 on bonds issued for school building loans, \$198.2 million, or 41 percent, came from repayments of school building loans.

mate a yearend State and local government debt figure (used internally, especially for the quarterly estimates of savings by individuals). Table C1 contrasts the four published³ estimates of outstanding State and local government debt.

Holdings of municipal securities (State and local government debt) by type of institution are estimated by the Treasury Department, Federal Reserve Board and the Securities and Exchange Commission (the latter unpublished). The Treasury-estimated distribution of holdings, as of June 30, shows holdings of (a) commercial banks, (b) U.S. Government investment accounts, (c) individuals (including personal trust accounts), (d) insurance companies, (e) mutual savings banks, (f) corporations (excluding banks and insurance companies), (g) State and local governments (including retirement funds) and (h) miscellaneous investors (including savings and loan associations, noninsured pension funds, dealers and brokers, foreign investors). At the request of the Joint Economic Committee, several of these ownership groups were broken down into components; for example, (1) State and local government retirement funds as distinguished from other State and local governments, (2) life insurance companies as distinguished from fire and property insurance companies, (3) a notation that municipal bond investment funds are included under "other corporations" and (4) estimated 1964 holdings by personal trust accounts and savings and loan associations. The Treasury estimates for 1946-65 are presented in table C2. Under the Treasury system of estimation there are three residual categories: other corporations, individuals, and miscellaneous.

As part of its flow of funds accounts, the FRB-estimated distribution, as of December 31, shows holdings of (a) households and nonprofit organizations, (b) business corporations, (c) commercial banks, (d) mutual savings banks, (e) life insurance companies, (f) other insurance companies (including fire and property insurance and fraternal orders), (g) brokers and dealers (termed "finance n.e.c."), and (h) State and local governments (including public retirement funds). The FRB estimates for 1946-65 are presented in table C3. Under the FRB system of estimation, there is one residual category—households and nonprofit organizations. Inasmuch as there is no separate category showing municipal security holdings by Federal credit agencies, it follows that they are included in the residual category "households and nonprofit organizations." The SEC method of distribution of municipal security holdings has not been published, but it is understood that it follows the methodology used by FRB; that is, to allocate the estimated total outstanding debt among identifiable groups and to assign the residual, including any statistical discrepancy, to "individuals."

The 1946-65 trends and projections of municipal security acquisitions during 1966-75 called for by the Joint Economic Committee study relate to 12 categories of investor groups: (a) commercial banks, (b) mutual savings banks, (c) savings and loan associations, (d) life insurance companies, (e) fire and casualty insurance companies, (f) State and local public retirement funds, (g) State and local governments, (h) noninsured pension funds, (i) personal trust funds, (j)

³ Published respectively in "Governmental Finances," "Annual Report of the Secretary of the Treasury," "Federal Reserve Bulletin," "Survey of Current Business" (May issue).

municipal bond investment funds, (*k*) nonfinancial corporations, and (*l*) individuals. Since the distributions estimated by the Treasury or FRB are not sufficiently broken down to fit the foregoing 12 categories, it became difficult to appraise the data presented in the chapters of the study dealing with sources of loan funds. Accordingly, a tabulation was made of municipal security holdings of identifiable institutional groups that fit the categories used in the study, Federal credit agencies, and other identifiable groups.⁴ This tabulation is presented in table C4.

One objective of table 4 is to relate, as much as possible, to published reported data. Inasmuch as the balance sheet data for most private financial institution groups relate to the end of the calendar year, table 4 has been prepared on a calendar-year basis. For the public agencies that hold municipal securities (State and local public retirement funds, State and local governments and Federal credit agencies), their fiscal year data has been converted into December 31 figures on the basis of reported statistics or by straight-line interpolation. Where the year-end figures represent reported information, they are stated to the nearest \$1 million. Where the year-end figures represent interpolations or estimates based on samples, they are stated to the nearest \$10 million (except "other corporations" where the figures are estimated to the nearest \$100 million).

Table C4 comprises three elements: (*a*) total year-end holdings of State and local government obligations, as estimated in the FRB "Flow of Funds Accounts,"⁵ (*b*) year-end holdings for significant identifiable financial institution or public agency groups, the sum of which when subtracted from the year-end total results in (*c*) a residual grouping termed "individuals and others." Although it is believed that "individuals" account for most of the residual category, it should be recognized that the category also includes investor groups for which there is presently inadequate definite information such as college endowment funds, noninsured pension funds, savings bank life insurance companies, and others.⁶

Because of their different fund resources, treatment under the Federal income tax law, and consequent portfolio policies, life insurance companies and fire and casualty insurance companies are shown separately. Similarly, municipal bond investment funds (where investment decisions are made by the fund managers) and personal trust funds (where the investment decisions are largely made by the trust departments of commercial banks) are shown separately, as compared to "individuals" (many of whom invest on their own account).

As explained in the source note, the holdings of Federal credit agencies are based on reports of the respective credit agencies, including the Departments of Housing and Urban Development, Interior,

⁴ Nine of these institutional groups appear in the Bankers Trust Co. Investment Outlook annual tabulation of municipal security net flows. Many of them also are used in the sources and uses of funds tabulations prepared by Salomon Bros. & Hutzler and by the Life Insurance Association of America.

⁵ The only publicly available estimate of total calendar year-end holdings of State and local government obligations, including non-interest-bearing obligations, as collected by the Census Bureau.

⁶ According to a June 30, 1963, survey conducted by the Office of Education, Department of Health, Education, and Welfare, college endowment funds held \$257.8 million of securities issued by State and local governments, Federal agencies and foreign borrowers. According to Goldsmith, Lipsey, and Mendelson "Studies in the National Balance Sheet of the United States" (vol. II), noninsured pension funds, savings bank life insurance companies and group health insurance companies held minor amounts of municipal securities during the middle 1950's.

Agriculture, and Treasury. The aggregate figures shown in column 12 materially differ from the "Government investment accounts" figures in the Treasury estimated distribution (table C2), mainly because the Treasury does not count as part of State and local government debt (a) non-interest-bearing obligations (owed to the Bureau of Reclamation) and (b) borrowing for college housing by State universities and colleges (owed to the Department of Housing and Urban Development).⁷

Delineation of State and local public retirement funds from "State and local governments" facilitates appraisal of two essentially dissimilar sources of loan funds. Public retirement funds, like noninsured pension funds (or insured pension funds) are concerned principally with longer term investments. In contrast, "State and local governments" comprise (a) treasury funds, undisbursed bond proceeds, and bond sinking funds (which are primarily concerned with short-term investments), (b) other insurance, endowment and trust funds (which are concerned, to a considerable extent, with longer term investments) and (c) State government direct loan programs to municipalities. State government direct loans have risen from about \$30 million in 1950 to about \$150 million in 1960, and to about \$240 million in 1965.⁸

There are a number of financial institution groups, which hold relatively small amounts of municipal securities, on which there are fairly good statistics. Rather than show each separately, they are combined under a heading "Other identifiable financial institutions" and include: fraternal orders, brokers and dealers, face amount investment companies, and savings and loan associations. As future research uncovers good statistics on municipal security holdings of other identifiable financial institutions (i.e., college endowment funds), they can be transferred from the residual category to this separate category where the holdings have been reasonably approximated.⁹

⁷ Cf. Treasury Bulletin (June 1966), p. 141.

⁸ Detailed in ch. 4. Where the funds for these "State and local government" resources result from capital market borrowing, there is a double counting problem, e.g., (a) the private holders of the bonds financing the construction funds or the direct loans and (b) the public funds or agencies that hold municipal securities or loans.

⁹ The distribution of bond holdings of fraternal orders is based on a sample, as reported to the New York State Department of Banking. Holdings of "brokers and dealers" are based on the total offerings shown in the Blue List. Municipal security offerings in the Blue List ordinarily are by investment banking dealers, but sometimes include offerings by commercial banks. According to an official of the Blue List, offerings by dealers are generally of their own holdings (in which they have a "position" or unsold inventory), but may include holdings of other investors. Moreover, a dealer may not offer in the Blue List all that he holds, especially during periods of credit tightness when heavy capital losses could occur in selling bonds with coupon interest rates appreciably lower than prevailing market yields. Data for savings and loan associations are available only for 1964 and 1965 (June). Data for earlier years are based on straight line interpolation.

TABLE C1.—*Comparative estimates of outstanding State and local government debt*

[In millions of dollars]

	Census ¹	Treasury ²	Federal Reserve ³	OBE ⁴
1946.....	15,917	15,626	15,600	15,900
1947.....	16,825	16,529	17,000	16,800
1948.....	18,650	18,354	19,000	18,700
1949.....	20,875	20,481	21,700	20,900
1950.....	24,115	23,722	24,700	24,200
1951.....	27,040	26,592	27,200	27,000
1952.....	30,100	29,111	29,900	29,600
1953.....	33,782	32,200	34,200	32,700
1954.....	38,931	37,300	39,700	37,900
1955.....	44,267	42,600	44,800	43,200
1956.....	48,868	47,400	49,400	48,000
1957.....	53,039	51,840	53,900	52,500
1958.....	58,187	56,500	58,800	57,200
1959.....	64,110	61,675	63,700	62,400
1960.....	69,955	66,425	68,700	67,100
1961.....	75,023	71,730	75,500	72,500
1962.....	80,802	80,131	82,500	80,900
1963.....	87,451	85,900	88,000	86,700
1964.....	92,222	91,300	93,900	92,200
1965.....	99,512	97,800	100,000	98,700

¹ For fiscal years ending in calendar year (1946-63); thereafter for fiscal years ending in year ending June 30² Interest-bearing debt, as of June 30.³ As of Dec. 31.⁴ Interest plus non-interest-bearing debt, as of June 30.TABLE C3.—*Holdings of State and local government obligations—Flow of funds accounts data*

[In billions of dollars]

	Households ¹	Corporate non-financial business ²	State and local governments ³	Commercial banks	Mutual savings banks	Life insurance companies	Other insurance companies ⁴	Security brokers and dealers	Total holdings
1946.....	7.2	0.3	2.4	4.4	0.1	0.6	0.2	0.3	15.6
1947.....	7.6	.4	2.5	5.3	.1	.6	.3	.2	17.0
1948.....	8.5	.4	2.6	5.7	.1	.9	.5	.3	19.0
1949.....	9.3	.5	3.1	6.5	.1	1.1	.8	.3	21.7
1950.....	9.6	.5	3.6	8.1	.1	1.2	1.1	.4	24.7
1951.....	10.4	.6	3.8	9.2	.1	1.2	1.4	.4	27.2
1952.....	11.5	.7	4.0	10.2	.3	1.1	1.9	.2	29.9
1953.....	13.5	.8	4.3	10.8	.4	1.3	2.6	.4	34.2
1954.....	15.2	1.0	4.7	12.6	.6	1.8	3.4	.3	39.7
1955.....	18.6	1.2	5.1	12.7	.6	2.0	4.2	.3	44.8
1956.....	21.6	1.3	5.6	12.9	.7	2.2	4.9	.1	49.4
1957.....	23.6	1.5	6.1	13.9	.7	2.4	5.6	.2	53.9
1958.....	23.8	2.0	6.6	16.5	.7	2.7	6.2	.2	58.8
1959.....	25.7	2.6	7.0	17.0	.7	3.2	7.2	.3	63.7
1960.....	28.7	2.4	7.2	17.6	.7	3.6	8.1	.4	68.7
1961.....	31.6	2.2	7.3	20.3	.7	3.9	9.1	.3	75.5
1962.....	34.2	1.8	6.8	24.8	.5	4.0	9.8	.5	82.5
1963.....	33.8	2.7	6.0	30.0	.4	3.9	10.6	.5	88.0
1964.....	36.4	2.9	5.3	33.5	.4	3.8	10.8	.7	93.9
1965.....	37.2	3.6	5.0	38.5	.3	3.5	11.4	.5	100.0

¹ Includes nonprofit organizations serving individuals.² Includes holding companies and closed end investment companies.³ Includes State and local retirement funds, trusts, and sinking funds.⁴ Includes fire and casualty insurance companies and insurance activities of fraternal orders.

Source: 1946-51, "Flow of funds; assets and liabilities, 1945-65" (May 3, 1966, version), table 24; 1952-65, Federal Reserve Bulletin (October 1966) pp. 1539-1546.

TABLE C2.—*Estimated ownership of State and local interest-bearing securities outstanding, June 30, 1946-65*

[In billions of dollars]

Fiscal year	State and local governments			Other investors							Miscellaneous ⁵	
	Total	Public retirement funds ¹	Other ²	Total	Commercial banks	Mutual savings banks	Life insurance companies	Fire and property insurance companies	Other corporations ³	Individuals ⁴		Government investment accounts
1946	15.7	2.4	1.0	13.4	4.1	0.1	0.6	0.3	0.4	7.0	0.5	0.4
1947	16.6	2.4	1.0	14.1	5.0	.1	.6	.3	.4	6.9	.5	.4
1948	18.4	2.5	1.1	15.9	5.6	.1	.7	.4	.4	7.7	.5	.5
1949	20.5	2.7	1.3	17.8	6.0	.1	.9	.7	.5	8.8	.4	.5
1950	23.8	3.5	1.6	20.3	7.4	.1	1.1	1.1	.5	9.2	.4	.5
1951	26.7	3.7	1.6	23.0	8.6	.1	1.2	1.3	.6	10.1	.6	.6
1952	29.3	3.9	1.7	25.4	9.9	.2	1.1	1.7	.6	10.5	.7	.6
1953	32.3	4.2	1.9	28.1	10.6	.4	1.2	2.3	.7	11.6	.7	.6
1954	37.4	4.5	2.1	32.9	12.0	.5	1.6	3.0	.9	13.8	.8	.7
1955	42.8	4.9	2.5	37.9	12.8	.7	2.0	3.8	1.1	16.4	.8	.9
1956	47.6	5.3	2.9	42.3	13.4	.7	2.1	4.5	1.4	19.5	.9	1.0
1957	52.1	5.8	3.3	46.3	14.0	.7	2.3	5.1	1.5	22.0	.9	1.1
1958	56.8	6.4	3.7	50.4	15.8	.7	2.5	5.7	1.5	22.8	.9	1.1
1959	62.0	6.8	4.1	55.2	17.0	.7	3.0	6.5	1.7	24.6	.9	1.3
1960	66.4	7.1	4.4	59.3	16.8	.7	3.3	7.8	1.7	27.2	.8	1.3
1961	71.7	7.4	4.5	64.4	18.8	.7	3.8	8.8	1.9	28.3	.8	1.6
1962	80.1	7.2	4.3	72.9	23.2	.6	4.0	9.7	2.4	30.7	.5	1.8
1963	85.9	6.4	3.9	79.5	27.9	.5	4.0	10.5	2.6	31.7	.6	1.8
1964	91.3	5.6	3.2	85.7	31.5	.4	3.9	11.1	2.7	33.7	.6	1.8
1965	97.8	5.0	2.8	92.8	36.6	.4	3.7	11.5	3.0	35.0	.8	1.8

¹ Estimated on the basis of "fiscal yearend" data.² Includes State and local government treasury funds, bond sinking funds, insurance, endowment, and trust funds.³ Includes municipal bond investment funds from June 30, 1962, to date in the following amounts: June 30, 1962, less than \$50,000,000; June 30, 1963, \$100,000,000; June 30, 1964, \$100,000,000; and June 30, 1965, \$200,000,000. Cumulative sales of participation in these funds totaled about \$125,000,000 through December 1964 and rose by an additional \$100,000,000 during 1965.⁴ Includes personal trust accounts which have generally accounted for around 1/4 of individuals' holdings of these securities. The most recent estimates available indicate that in 1964 trust institutions held approximately \$12,000,000,000 in these accounts.⁵ Includes savings and loan associations. Insured State chartered associations held about \$100,000,000 on Dec. 31, 1964. Prior to October 1964, Federal savings and loan associations were not permitted to invest in municipal bonds.

Source: Office of the Secretary of the Treasury, Office of Debt Analysis.

TABLE C4.—*Holdings of State and local government obligations as of Dec. 31*
(In millions of dollars)

Year	Total holdings (1)	Commercial banks (2)	Mutual savings banks (3)	Life insurance companies (4)	Fire and casualty insurance companies (5)	State and local public retirement funds (6)	State and local government bonds (7)	Municipal bond investment funds (8)	Personal trust funds (9)	Other identifiable financial institutions (10)	Other corporations (11)	Federal credit agencies ¹ (12)	Individuals and others (13)
1946	15,600	4,395	58	614	237	800	1,600	---	3,030	750	300	400	3,400
1947	17,000	5,276	57	609	315	900	1,600	---	3,190	680	400	400	3,700
1948	19,000	5,619	73	872	544	900	1,700	---	3,270	740	400	400	4,600
1949	21,700	6,500	93	1,052	828	1,100	2,000	---	3,950	730	500	500	5,100
1950	24,700	8,118	96	1,152	1,144	1,500	2,100	---	4,610	860	500	500	4,800
1951	27,200	9,198	140	1,170	1,381	1,600	2,200	---	5,270	900	600	500	4,800
1952	29,900	10,188	325	1,133	1,871	1,900	2,220	---	5,410	750	600	570	5,100
1953	34,200	10,821	428	1,298	2,019	2,070	2,330	---	6,130	1,000	700	620	5,900
1954	39,700	12,586	608	1,846	3,402	2,300	2,450	---	6,650	900	900	690	6,900
1955	44,800	12,698	646	2,038	4,195	2,730	2,480	---	7,250	810	1,200	690	7,900
1956	49,400	12,901	676	2,273	4,919	3,120	2,500	---	7,830	830	1,300	780	12,900
1957	53,900	13,915	685	2,376	5,353	3,540	2,720	---	8,100	910	1,500	860	14,200
1958	58,800	16,595	729	2,651	6,279	3,800	2,740	---	8,100	1,170	1,800	1,300	15,200
1959	63,700	16,938	721	3,200	7,222	4,200	2,740	---	8,100	1,220	2,300	1,700	17,200
1960	68,700	17,570	672	3,588	8,175	4,300	2,740	---	8,100	1,220	2,400	2,000	18,100
1961	75,500	20,345	677	3,888	9,175	4,300	2,740	---	8,100	1,220	2,400	2,000	19,300
1962	82,500	24,755	527	4,026	10,052	3,800	2,740	---	8,100	1,220	2,400	2,000	20,300
1963	88,000	25,788	440	3,852	10,840	3,800	2,740	---	8,100	1,220	2,400	2,000	20,300
1964	93,900	33,533	391	3,774	11,148	3,910	2,740	---	8,100	1,220	2,400	2,000	20,300
1965	100,000	38,655	320	3,530	11,352	4,200	2,740	---	8,100	1,220	2,400	2,000	20,300

¹ Preliminary estimates.

SOURCES (IDENTIFIED BY COLUMNS)

- (1) Federal Reserve Board "Flow of funds accounts," year-end figures (October 1966 revision).
 (2) Federal Reserve Bulletin, "Loans and Investments of Commercial Banks" (call report data).
 (3) National Association of Mutual Savings Banks, "National Fact Book" (table 34, May 1966).
 (4) Life Insurance Association of America, "Life Insurance Fact Book" (year-end holdings).
 (5) (a) 1946-53, Roland I. Robinson, "Postwar Market for State and Local Government Securities" (p. 215).
 (6) 1956-65, Best's "Aggregates and Averages," adjusted per chapter explanation.
 (7) (a) 1946-51, proportion of State and local governments figures in Federal Reserve Board "Flow of funds accounts" (ranging from 36 to 41 percent).
 (b) 1952-65, Bureau of the Census, "Employee retirement systems of State and local governments," table on cash and security holdings, fiscal year data converted to December figures by straight line interpolation.
 (8) (a) 1946-51, proportion of State and local governments figures in Federal Reserve Board "Flow of funds accounts" (balance after deducting col. 6).
 (b) 1952-65, Bureau of the Census "Governmental finances," table on cash and security holdings, fiscal year data (balance after deducting retirement fund figures shown in col. 6) converted to Dec. 31 figures.
 (9) Derived from data in ch. 27, data as of Dec. 31.
 (10) Includes holdings of (a) fraternal orders (United States and Canadian); (b) brokers and dealers (Blue List); (c) currency dealer (American Express Co.); (d) face amount investment companies; and (e) savings and loan associations; based on Federal agency tabulations.
 (11) Largely nonfinancial business corporations, but also includes consumer, sales, and business finance companies; figures estimated by Securities and Exchange Commission.
 (12) Includes holdings by Departments of Housing and Urban Development (loans for college housing (public institutions), public facilities, mass transit and urban renewal); Commerce (loans for public facilities); and Interior (Bureau of Reclamation loans and repayment contracts) and indebtedness of the Washington, D.C., government (owed to various Federal agencies). Holdings by Department of Agriculture (soil and water loans to public bodies) not available.
 (13) Residual includes individuals, college endowment funds, noninsured pension funds, group health insurance companies, savings bank life insurance companies, and other investor groups.

SUPPLEMENT D

Projected Holdings of State and Local Government Obligations, 1966-75

Materials presented in chapters 21 to 30 provide an array of projections and related commentary concerning the future holdings of State and local government obligations by various investor groups. Some are stated in terms of estimated holdings in 1975 (commercial banks and personal trust funds), some are stated in terms of annual net flows (mutual savings banks, fire and casualty insurance companies, and "individuals"), and some are suggestive as to the likely course of holdings (downward), but they do not present quantitative data (State and local public retirement funds, State and local governments). Where the materials in the respective chapters do not deal with future holdings, subsequent discussion with the chapter authors or trade association officials provided a basis for this writer to make appropriate projections (life insurance companies, municipal bond investment funds, and other corporations).

Altogether, these various sources furnish a framework of investor group data, which could be woven into a projected structure of holdings of State and local government obligations for the years 1966-75 by these 10 investor groups.¹ Essentially, the projections involve, where there are projected holdings in 1975, an annual proration of the computed net change in holdings between 1965 and 1975, assuming an annual rate of increase of 5.5 percent, or estimates of annual net expansion of holdings during the years 1966-75, based on extrapolations of recent expansion (or contraction) experience. The actual methodology for each investor group is described in the text below. The projected holdings of the investor groups for the years 1966-75 are presented in table D1.

It should be noted that the projections for each investor group were made independently of the other projections. While each may be internally consistent with respect to growth trends and distributions of assets invested in municipal securities, it is conceivable that in the aggregate they result in total holdings of municipal securities that are more optimistic than might otherwise be projected, had there been a comprehensive projection of sources and uses of capital funds for all investor groups.

1. COMMERCIAL BANKS

At the end of 1965 commercial bank loans and investments totaled \$306.1 billion, of which \$38.7 billion, or 12.6 percent, were accounted for by municipal securities. According to the materials presented in chapter 21, by 1975 total loans and investments are expected to increase to \$475 billion, including \$115 billion of municipal securities, or 24.2 percent of total loans and investments, on the basis of performance during the years 1944-64. If, however, projections are based on the experience of 1954-64, by 1975 total loans and investments would be \$525 billion, and municipal securities would be \$100 billion. Averaging these two projections, it is estimated that by 1975 total loans and

¹ To round out the picture, it is assumed that "other identifiable financial institutions" and Federal credit agencies will expand their holdings by the same annual amounts experienced in 1961-65.

investments would amount to \$500 billion, of which \$107.5 billion, or 21.5 percent, would reflect holdings of municipal securities.

During the years 1961-65, when commercial banks experienced a considerable expansion of savings inflows and lending activity, the average annual rate of increase of loans and investments was 8.9 percent and holdings of municipal securities grew at an average annual rate of 17.1 percent. If the commercial bank situation at the end of 1975 were to be projected at these annual rates of increase, total loans and investments would amount to \$659 billion, of which municipal security holdings would be \$160 billion, or 24.3 percent. On the other hand, during the years 1956-60 the average annual rates of increase for commercial banks were more moderate, with a 4.4-percent annual rate for total loans and investments and 6.9 percent for municipal securities. At these annual rates of increase, by 1975 total loans and investments would amount to \$471 billion and municipal securities would be \$75 billion.

Assuming that these two spans of recent experience provide a rough approximation of the upper and lower limits for projections to 1975, the projections provided in chapter 21 appear to be reasonable, and the averages of the two projections have been used accordingly. It should be recognized that implicit in these projections are certain assumptions regarding the flow of savings (assumptions that were made prior to the recent legislative and administrative actions concerning interest rates paid on savings), the extent to which our economy becomes a "checkless society" (which would affect the volume of demand deposits) as well as rates of growth and alternative lending opportunities.

2. MUTUAL SAVINGS BANKS

Since 1958 mutual savings banks have progressively reduced their holdings of municipal securities so that at the end of 1965 they amounted to \$320 million (compared to \$729 million in December 1958). In the first 9 months of 1966 the banks reduced their municipal security holdings further by another \$50 million. According to the material presented in chapter 22, for mutual savings banks municipal bond flows will continue to average below \$100 million annually. In light of these factors, it is estimated that mutual savings bank holdings of municipal securities will grow very slowly over the next decade to reach \$400 million at the end of 1975 (\$300 million in 1970). In part, this increase is attributable to the effects of the 1962 change in the Internal Revenue Code as it affects these banks. Should these tax considerations become more important, mutual savings banks might acquire more municipal securities.

3. LIFE INSURANCE COMPANIES

At the end of 1965 assets of all U.S. life insurance companies aggregated \$158.9 billion, of which \$3.5 billion, or 2.2 percent, were invested in municipal securities. Analysis of the growth trends of life insurance company assets indicates that by 1975 total assets may reach \$300 billion. Some informed analysts believe that, owing to the attractiveness of alternative investments, the proportion of life insurance company assets accounted for by municipal securities will decline to about 1.3 percent.

During the years 1963-65 life insurance companies have decreased their holdings of municipal securities by an annual average of \$165 million, and during the first 6 months of 1966 their holdings of municipal securities declined by another \$315 million. Given the tight money situation for many insurance companies in the balance of 1966 and during much of 1967, there is reason to expect that by the end of 1967 their holdings of municipals will have dropped to \$2.9 billion. Because of alternative investment opportunities, further decline in holdings of municipals may be expected through 1969, but thereafter life insurance companies are expected to step up their acquisitions of municipal securities (because of comparatively more attractive yields) so that their holdings are expected to total \$3.8 billion at the end of 1975.

4. FIRE AND CASUALTY INSURANCE COMPANIES

According to the materials presented in chapter 24, stock fire and casualty insurance companies may be expected to increase their holdings of State and municipal securities at an annual rate of about 6 percent, or by amounts ranging from almost \$470 million in 1966 to \$790 million in 1975. In the case of the mutual companies, estimated purchases of municipal securities were stated in terms of "\$10 million per year, or 5 percent of admitted assets will go each year into tax-exempt municipals, or that about 30 to 50 percent of their portfolios would be invested in municipals." Of the independent companies, 14 companies responded that "they would be likely to invest in excess of \$100 million each year for the next 10 years, and our members could purchase between \$500 and \$750 million of municipal securities in each of the next 10 years."

During the decade 1954-63 fire and casualty insurance companies added to their holdings of municipal securities at an average annual rate of \$822 million. In 1964 and 1965, owing to heavy underwriting losses, the average annual rate of increase in holdings of municipal securities fell to \$271 million. Taking into account the complex of projections set forth above, and assuming a resumption of a more normal underwriting loss experience, it is estimated that the net expansion in holdings of municipal securities by fire and casualty insurance companies will rise progressively from about \$0.7 billion in 1966 to \$1.3 billion in 1975.

5. STATE AND LOCAL PUBLIC RETIREMENT FUNDS

Holdings of municipal securities by State and local government public retirement funds rose progressively to reach a high of \$4.4 billion in 1961, and thereafter they have steadily decreased to a level of \$2.7 billion in 1965. Significantly, municipal security holdings as a percentage of total assets have declined moderately during the 1950's, from 26.3 percent in 1952 to 23.4 percent in 1960, but since then the ratio has fallen sharply to 8.6 percent in 1965. As explained in chapter 25, "this ratio has steadily declined as the funds broadened their investment authority, particularly those of larger size, extending its scope to include corporate bonds, federally insured and conventional mortgages and equities."

As chapter 25 further notes, "present indications are that further decreases will occur in State and municipal securities held by these

funds. These decreases will be due to the cessation of additional investments in these bonds and by a conversion of municipal securities into other types and higher yielding securities, a continuation of the trend in effect during the last 10 years. * * * We may look for a continuance of the downward trend in the holdings of the bonds by these funds resulting from sales or maturities." Thus, while assets of the public retirement funds are expected to rise from \$32 billion in 1965 to \$85 billion in 1975,² their holdings of municipal securities may be expected to decrease by about \$0.2-0.3 billion per year during most of the coming decade.

6. STATE AND LOCAL GOVERNMENTS

Between 1955 and 1965 total assets of State and local governments (excluding public retirement funds) expanded from \$32.9 to \$53.4 billion, a rise of 62 percent. Over the same period total security holdings (total assets less unemployment compensation funds, cash and deposits) of these State and local governments grew from \$14.2 billion, or 43 percent of total assets, to \$26.5 billion, or 50 percent of total assets. During this decade total security holdings increased by 87 percent. In contrast, holdings of municipal securities rose from \$2.5 billion in 1955 to \$2.7 billion in 1960, but declined thereafter to reach \$2.2 billion in 1965. The ratio of municipal securities to total assets decreased over the decade from 7.5 percent in 1955 to 4.1 percent in 1965, while the ratio of municipal securities to total security holdings dropped from 17.3 to 8.3 percent over the same period.

Over the 6-year period, 1960-65, total assets of State and local governments (excluding public retirement funds) grew at an average annual rate of 7.4 percent, and total security holdings expanded at an average annual rate of 8 percent. Assuming the same rate of growth over the decade, 1966-75, it is estimated that State and local government assets may reach over \$100 billion at the end of 1975, of which over 50 percent will be accounted for by holdings of securities. Despite these large expansions of asset and security holdings, it is believed that relatively little, if any, will be invested in municipal securities, because the tax exemption accorded to these securities is of no value to State and local governments. (See discussion in ch. 26.)

Over the past 5 years, State and local government holdings of State and local government obligations declined at an average annual rate of \$124 million. When allowance is made for the fact that during these 5 years State direct loans to local governments expanded by about \$100 million, the average annual rate of decrease in holdings of marketable municipal securities was thus about \$150 million. After allowance is made for a moderate expansion of the State direct loan programs, it is estimated that State and local governments will decrease their holdings of State and local government obligations by about \$100 million per year during the decade 1966-75.

² Daniel M. Holland, "Private Pension Funds, Projected Growth" (Occasional Paper 97 of the National Bureau of Economic Research, 1966) estimates that in 1975 total assets will amount to \$74 billion.

7. MUNICIPAL BOND INVESTMENT FUNDS

Since their inception in 1961, municipal bond investment funds have grown rapidly to reach \$229 million at the end of 1965, including sales of \$80 million in 1965. In 1966, sales of these funds are expected to total \$60 million, the decline attributable to the prevailing tight money situation. But, according to the author of chapter 26, under more normal conditions sales in 1966 might have increased to \$100 million. For the years 1967-71 he estimates that bond investment fund sales would increase at an annual rate of 25 percent, and during 1972-75 sales would grow at an annual rate of 20 percent to reach a level exceeding \$600 million in 1975. Redemptions of the investment funds, which amounted to 0.5 percent in 1964 and 1 percent in 1965, are expected to grow at an incremental rate of 0.5 percent per year until 1973 when they would level off at 5 percent. Taking into account these rates of growth for sales and redemptions, municipal bond investment funds outstanding at the end of 1975 are estimated at \$2.4 billion, an increase of \$2.2 billion during the decade of 1966-75.

8. PERSONAL TRUST FUNDS

Holdings of municipal securities by personal trust funds rose from \$3 billion in 1946 to \$6.7 billion in 1955 and \$13.2 billion in 1965. According to the projections presented in chapter 28, "by 1975 the holdings of personal trusts should be somewhere between \$28 and \$38 billion, meaning an increase of from \$1.4 to \$2.3 billion per year. The average of these two projections (each reflecting extrapolation of a trend) suggests that by 1975 personal trust funds may be expected to hold \$33 billion of municipal securities."

As explained in the chapter, "between 1955 and 1963 there was a 91-percent increase in the number of taxpayers in the \$25,000 to \$49,999 income class and a 71-percent increase in the number of taxpayers in the \$50,000 to \$99,999 class. This increase in the number of individuals in the higher income tax brackets will very likely continue and perhaps accelerate. This, of course, will mean that the tax-exempt feature of State and local government bonds will be important to more and more taxpayers. It is reasonable to assume also that as personal incomes rise and the number of persons in the higher brackets increases, there will be an increase in the number of personal trusts created and, therefore, more funds will come under the investment direction of trust departments."

9. OTHER IDENTIFIABLE FINANCIAL INSTITUTIONS

Over the 5-year period 1961-65 other identifiable financial institutions (fraternal orders, brokers and dealers, American Express Co., face amount investment companies, and savings and loan associations) together increased their holdings of municipal securities at an annual rate of \$60 million. For the purpose of this 10-year projection, it is assumed that a similar rate of increase will be experienced during 1966-75 to bring the total holdings of these collective groups to about \$2.2 billion at the end of 1975.

10. OTHER CORPORATIONS

At the end of 1965 "other corporations" held an estimated \$3.6 billion of municipal securities. According to informed analysts, after taking into account alternative investment possibilities for corporate funds, these "other corporations" can be expected to increase their holdings of municipal securities to \$4.8 billion in 1970 and to \$6 billion in 1975. The resultant net increase in holdings of municipal securities projected for the decade 1966-75 equals the net increase in holdings of municipal securities by "other corporations" during the decade 1956-65. The expected increase in holdings have been prorated for the intervening years on a straight-line basis; i.e., \$240 million per year.

11. FEDERAL CREDIT AGENCIES

Over the 5-year period 1961-65 Federal credit agency holdings of obligations of State and local governments increased at an average annual rate of \$260 million. For the purposes of this 10-year projection, it is, therefore, assumed that Federal credit agency holdings of State and local government obligations will expand by \$260 million per year to reach about \$5.4 billion at the end of 1975.

12. INDIVIDUALS AND OTHERS

During the years 1952-65 the net change in holdings of State and local government obligations by the households and nonprofit sector (in the flow of funds accounts) ran at the rate of 0.4 of 1 percent of annual personal income. According to chapter 30 (and subsequent discussion with its author), this pattern may be expected to continue. Annual personal income can be estimated by the equation $Y = 3.752 + 0.7827 \text{ GNP}$.³ Gross national product, in turn, under one of the basic assumptions governing this study is assumed to increase at an annual rate of 5.5 percent (in current dollars). These relationships and assumptions are reflected in the following table:

[In billions]

Year	Gross national product	Personal income	Net change of holdings by households of municipal securities
1966.....	\$718.7	\$566.3	\$2.3
1967.....	758.2	597.2	2.4
1968.....	799.9	629.9	2.5
1969.....	843.9	664.3	2.7
1970.....	890.3	700.6	2.8
1971.....	939.3	739.0	3.0
1972.....	991.0	779.5	3.1
1973.....	1,045.5	822.1	3.3
1974.....	1,103.0	867.1	3.5
1975.....	1,163.7	914.6	3.7

³ Ch. 1 of vol. 1.

By definition, the households and nonprofit sector comprises three groups of holders of municipal securities, as developed in supplement C, municipal bond investment funds, personal trust funds, and "individuals and others." As detailed above, independent estimates have been made for the first two groups regarding their future holdings of municipal securities. Subtraction of their respective net change figures from the figures in the last column of the above table result in estimated net change in holdings of municipal securities by "individuals and others."

TABLE D1.—Projected holdings of State and local government obligations by significant investor groups, 1966-75

[In billions]

Year	Total holdings (1)	Com- mercial banks (2)	Mutual savings banks (3)	Life insurance companies (4)	Fire and casualty insurance companies (5)	State and local public re- tirement funds (6)	State and local govern- ments (7)	Municipal bond in- vestment funds (8)	Personal trust funds (9)	Other identi- fiable financial institu- tions (10)	Other corpora- tions (11)	Federal credit agencies (12)	Indi- viduals and others (13)
1966	\$108.0	\$44.1	\$0.3	\$3.1	\$12.1	\$2.3	\$2.0	\$0.3	\$14.7	\$1.6	\$3.8	\$3.0	\$20.7
1967	110.8	49.7	.2	2.9	12.0	2.0	1.9	.4	16.3	1.7	4.1	3.3	21.4
1968	126.1	55.6	.2	2.8	13.8	1.7	1.8	.5	18.0	1.8	4.3	3.5	22.1
1969	136.3	61.9	.3	2.7	14.7	1.5	1.7	.7	19.8	1.8	4.6	3.8	22.8
1970	147.1	68.5	.3	2.8	15.7	1.3	1.6	.9	21.7	1.9	4.8	4.1	23.5
1971	158.3	75.5	.3	2.9	16.7	1.1	1.5	1.2	23.7	1.9	5.0	4.3	24.2
1972	170.4	82.9	.3	3.0	17.8	.9	1.4	1.5	25.8	2.0	5.3	4.6	24.9
1973	183.0	90.7	.3	3.2	18.9	.7	1.3	1.8	28.0	2.1	5.5	4.8	25.7
1974	196.7	98.9	.4	3.5	20.1	.6	1.2	2.2	30.4	2.1	5.8	5.1	26.4
1975	211.0	107.5	.4	3.8	21.4	.5	1.1	2.6	33.0	2.2	6.0	5.4	27.1

NOTES (IDENTIFIED BY COLUMN)

- (1) Sum of cols. 2 to 13.
 (2) \$68,800,000 net increase in holdings (\$107,500,000,000 in 1975 less \$38,700,000,000 in 1965) prorated over 10 years, assuming 5.5 percent annual rate of increase.
 (3) Estimated net decreases of holdings of \$70,000,000 in 1966 and \$30,000,000 in 1967 and thereafter net increases of holdings of \$20,000,000 per year.
 (4) Estimated net decreases of holdings of \$30,000,000 in 1966, \$200,000,000 in 1967, and \$100,000,000 each in 1968 and 1969; thereafter net increases of holdings at annual increments of \$50,000,000.
 (5) Estimated net increase in holdings rising from \$700,000,000 in 1966 to \$1,000,000,000 in 1970 and \$1,300,000,000 in 1975.
 (6) Estimated net decrease in holdings of \$300,000,000 during 1966-68, \$200,000,000 during 1969-73, and \$100,000,000 in 1974-75.
 (7) Estimated net decrease in holdings of \$100,000,000 per year, 1966-75.
 (8) Estimated net increase of \$50,000,000 in 1966, and rising trend of increases from \$120,000,000 in 1967 to \$270,000,000 in 1975.
 (9) \$19,800,000 net increase in holdings (\$330,000,000,000 in 1975 less \$13,200,000,000 in 1965) prorated over 10 years, assuming 5.5 percent annual rate of increase.
 (10) Estimated net increase of \$80,000,000 per year.
 (11) Holdings estimated at \$450,000,000 in 1970 and \$6,000,000,000 in 1975, or an annual increase of \$240,000,000 per year.
 (12) Estimated net increase by \$240,000,000 per year.
 (13) Calculated as a residual by subtracting cols. 8 and 9 from annual increase in holdings of "Households and nonprofit organizations" (see text).

PART I. TRENDS IN PUBLIC FACILITY FINANCING

CHAPTER 1

State and Local Government Financing of Capital Outlays, 1946-65*

INTRODUCTION

State and local governments have expended approximately \$220 billion for capital outlay during the past 20 years, or about \$1,135 per person of the present population of the United States. The following pages summarize trends in such expenditure, and provide some background and estimates with respect to its financing.

The data given here are mainly from annual surveys of governmental finances conducted by the Bureau of the Census, or from the 1957 or 1962 Censuses of Governments. There was no regular survey to provide comprehensive annual data on local government expenditures before 1952, although earlier Census Bureau surveys did deal with finances of State governments and of some municipalities. Accordingly, most of the historical comparisons given here are limited to the period since 1952. It should be noted that, except for the census years 1957 and 1962, the local government amounts included are estimates subject to sampling variation. (See also the concluding section, "Sources and Limitations of Data".)

The financial scale of State and local governments has increased dramatically during the past two decades. As illustrated by table 1, below, the rise in expenditure and indebtedness of these governments has markedly outpaced related trends in Federal Government finances.

TABLE 1.—Selected items of governmental finances for specified years, 1946 to 1964-65

	1946	1952	1957	1962	1964-65
PER CAPITA AMOUNTS					
Total expenditure:					
Federal Government.....	472.93	457.62	477.74	610.19	671.04
State and local governments.....	99.99	197.34	277.78	379.51	448.68
Capital outlay:					
Federal Government.....	(¹)	111.49	94.93	99.14	68.15
State and local governments.....	9.28	47.55	73.70	90.33	107.17
Debt outstanding:					
Federal Government.....	1,915.06	1,656.76	1,580.30	1,604.18	1,636.97
State and local governments.....	113.14	192.46	309.83	437.24	513.43
INDEX OF PER CAPITA AMOUNTS (1952=100)					
Total expenditure:					
Federal Government.....	103	100	104	133	147
State and local governments.....	51	100	141	192	227
Capital outlay:					
Federal Government.....	(¹)	100	85	89	61
State and local governments.....	20	100	155	190	230
Debt outstanding:					
Federal Government.....	116	100	95	97	99
State and local governments.....	59	100	161	227	267

¹ Not available.

*Prepared by Allen D. Manvel, Chief, Governments Division, Bureau of the Census, Department of Commerce, with minor editing by committee staff.

CAPITAL OUTLAY IN RELATION TO TOTAL STATE-LOCAL EXPENDITURE

Capital outlay has made up about one-fourth of all expenditures of State and local governments during recent years. For example, total expenditure of these governments in their fiscal years that ended between July 1964 and June 1965 amounted to \$87.0 billion. Of this sum, \$20.8 billion, or 23.9 percent, was for capital outlay, including \$16.4 billion for new construction, \$2.5 billion for the purchase of land and existing structures, and \$1.8 billion for the purchase of equipment.

Also included in the 1964-65 expenditure total was \$5.0 billion of benefit and withdrawal payments by "insurance trust systems" of State and local governments, principally employee retirement systems and State unemployment compensation systems. Because of the special nature of such expenditures, and especially the strong responsiveness of unemployment compensation payments to business cycle changes, insurance trust amounts are best omitted when one reviews trends in the relation of capital outlays to aggregates of State-local expenditure, as summarized in table 2, which is based on appendix table A.

TABLE 2.—Capital outlay of State and local governments in relation to total State and local government expenditures, 1946 to 1964-65

Fiscal year ¹	Capital outlay (millions of dollars)			Percent of total expenditures (excluding insurance trust amounts)		
	State and local governments	States	Local governments	State and local governments	States ²	Local governments ²
1964-65	20,771	9,175	11,596	25.3	22.2	21.0
1963-64	19,087	8,820	10,267	25.3	23.1	20.3
1963	17,946	8,110	9,836	25.4	23.0	20.7
1962	16,791	7,214	9,577	25.6	22.4	21.5
1961	16,091	6,865	9,226	26.1	22.9	21.9
1960	15,104	6,607	8,497	26.5	23.5	22.1
1959	15,351	7,059	8,292	28.5	26.3	23.2
1958	13,986	5,946	8,040	28.2	24.4	24.0
1957	12,616	5,163	7,454	28.2	23.6	24.3
1956	11,407	4,564	6,843	28.0	23.2	24.5
1955	10,706	3,992	6,713	28.5	22.2	25.9
1954	9,125	3,347	5,778	26.7	20.2	24.6
1953	7,905	2,847	5,058	25.3	18.4	23.7
1952	7,436	2,658	4,778	25.5	18.4	24.0
1950	6,047	2,237	3,810	23.7	17.3	22.6
1948	3,725	1,456	2,269	18.6	14.3	17.2
1946	1,305	368	937	10.2	6.2	10.5

¹ For the periods shown up to "1963," these data relate to fiscal years of State and local governments that ended during the calendar year indicated. Beginning with "1963-64," the local government amounts are for local fiscal years ended between July and June of the respective designated years.

² Computed for each level of government by reference to expenditure totals which include payments to other levels of government (State-to-local and local-to-State).

Wartime restrictions caused a drastic cut in State-local capital outlay during World War II, from a prewar annual level of about \$2.5 billion to a low of \$0.7 billion in 1944. By 1948, such expenditure had revived to a new annual high (in current dollar terms) of \$3.7 billion. The subsequent rate of growth has been less striking, but with only one exception (1959 to 1960), Census Bureau surveys have each year indicated a material rise in State-local capital outlay. The annual rate of increase averaged 8.5 percent between 1953 and 1963.

This strong upward trend in capital outlay has roughly paralleled the rate of growth in State and local government expenditure as a

whole. Accordingly, as indicated by table 2, the proportion of all State and local government spending (other than insurance trust amounts) that is represented by capital outlay has been practically the same in recent years as it was in the early 1950's. During the interim, however, somewhat higher proportions prevailed. This reflects the fact that capital outlays rose more rapidly than other State and other local government expenditures up to 1959, while the reverse has been true in recent years. Thus, the year-to-year rise in all State-local expenditure (other than insurance trust amounts) averaged 7.4 percent from 1958 to 1963, as against an average annual rise of 5.1 percent in the capital outlay of these governments.

TRENDS IN THE COMPOSITION OF CAPITAL OUTLAY

About four-fifths of all capital outlay of State and local governments is for new construction, and about 12 percent of the total is for the purchase of land and existing structures. The other 8 to 9 percent involves equipment purchases (counted on a gross basis, including replacement items). There has been an increase in the proportion for the purchase of land and existing structures, as indicated by the following summary distribution for selected fiscal years:

Percent of capital outlay of State and local governments

	1952	1957	1962	1964-65
Construction.....	85.9	82.3	81.1	79.0
Land and existing structures.....	6.3	9.5	11.1	12.1
Equipment.....	7.9	8.2	7.8	8.8

This trend can be more sharply indicated by pointing out that amounts applied by State and local governments to the purchase of land and structures went up 272 percent, or 14 percent annually, between 1953 and 1963-64, while their construction expenditure was rising 114 percent, or about 8 percent a year.

Changes have also occurred in the relative amounts of capital outlay undertaken by States and local governments, respectively. The State government portion has rather consistently risen, from less than 30 percent of the State-local total in 1946 to 36 percent in 1952, 41 percent in 1957, 43 percent in 1962, and over 44 percent in the latest years. This development is related to the strong rise in State highway outlays during the 1950's and the even more rapid increase (although involving lesser sums) in capital outlay for institutions of higher education, which mainly involves direct State government spending.

A little more than four-tenths of all capital outlay of State and local governments during recent years has been for highways—including urban streets, local roads, and toll facilities as well as regular State-provided highways. Nearly one-fourth of all State-local capital expenditure is for education. The remaining one-third of the total pertains to a great variety of governmental functions, of which only two (sewerage and water supply) respectively account for as much as 5 percent of all capital outlay of State and local governments.

A functional distribution of State-local capital outlay for selected recent years is provided by table 3, which is based on appendix table B.

TABLE 3.—*Percent distribution of capital outlay of State and local governments, by function; selected years, 1952 to 1964-65*

Function	1952	1957	1962	1964-65
Total.....	100.0	100.0	100.0	100.0
Highways.....	36.3	41.3	41.7	40.1
Regular State highways.....	21.5	25.1	31.3	31.2
State toll facilities.....	3.6	6.6	.9	1.1
Local government streets and highways.....	11.2	9.6	9.5	7.8
Education.....	23.0	25.8	23.9	24.4
Local schools.....	19.1	21.5	18.0	17.0
Institutions of higher education.....	3.6	4.1	5.7	7.0
Other.....	.3	.2	.2	.4
Sewerage.....	5.9	5.1	5.3	5.3
Water supply.....	5.5	5.9	5.4	5.5
Housing and urban renewal.....	8.5	2.2	4.7	3.8
Electric utilities.....	2.6	3.4	2.7	3.7
Natural resources.....	2.5	1.7	2.0	2.4
Health and hospitals.....	5.2	2.8	2.4	2.4
Airports.....	.7	1.3	1.5	1.3
Local parks and recreation.....	.8	1.2	1.6	1.7
Local transit utilities.....	.9	1.0	.5	1.2
Water transportation and terminals.....	1.0	.8	1.1	.8
Other and unallocable (including multipurpose general public buildings).....	7.1	7.4	7.3	7.5

Although all functions have shared in the upward trend in capital outlay, they have differed considerably in rates of change. For example, highway outlay grew considerably faster than other capital expenditure from 1952 to 1958, and has since then generally paralleled the overall trend. Capital outlay for local schools has increased less rapidly than other State-local outlays, so that the fraction of the total applied to schools dropped from about one-fifth in the early 1950's to about one-sixth in 1964-65. However, with the stronger-than-average rise in capital outlay for institutions of higher education, the fraction of all capital expenditure of State and local governments going into education as a whole has been relatively unchanged. Rates of growth in capital outlay for sewerage and water supply facilities have generally paralleled the trend in total State-local outlays.

The most striking departure from the usual pattern involves capital outlay for health and hospitals. Such spending went up only 19 percent between 1953 and 1958, while aggregate annual capital outlay of State and local governments was increasing 77 percent; and since 1958 health and hospital outlays of these governments have been relatively stable, even though their total capital spending was continuing to rise about 5 percent a year. If this functional class had kept pace with the prevailing trend, there would have been nearly \$10 billion of State-local capital outlay for health and hospitals during the period 1952 to 1965, instead of the \$5.6 billion that was actually so applied.

The functional class "housing and urban renewal" also reflects an unusual historical pattern. Capital outlay of State and local governments for this purpose dropped steadily between 1952 and 1956, and did not regain its 1952 level until after 1961. Since then it has continued upward, but only to a 1964-65 level about one-fourth above the 1952 level, while total capital outlay of State and local governments nearly tripled during this 13-year interval.

FUNCTIONAL COMPOSITION OF CONSTRUCTION EXPENDITURE

Construction expenditure, as already noted, makes up about four-fifths of all capital outlay of State and local governments. It is not surprising, therefore, that the functional distribution of construction spending, as summarized in table 4 (based on appendix table C) generally resembles the percentage allocation of capital outlay among various functions, as shown for the same years in table 3. However, some differences between the two sets of figures may be noted. Two components—sewerage and water supply—generally account for larger percentages of construction expenditure than of capital outlay, indicating that purchases of land and of equipment make up a less-than-average proportion of all capital outlays for these particular functions.

The reverse is true for three other functions—housing and urban renewal, and natural resources (each involving a relatively large part of all capital outlay for acquisition of land) and transit utilities (with relatively large sums for the purchases of equipment, as distinct from construction).

TABLE 4.—*Percent distribution of construction expenditure of State and local governments, by function: Selected years, 1952 to 1964-65*

Function	1952	1957	1962	1964-65
Total.....	100.0	100.0	100.0	100.0
Highways.....	36.7	41.8	42.7	42.4
Regular State highways.....	23.0	25.5	32.2	33.2
State toll facilities.....	3.6	7.1	1.0	1.2
Local government streets and highways.....	10.1	9.2	9.5	8.0
Education.....	22.7	26.5	23.6	23.5
Local schools.....	18.9	22.8	18.1	16.5
Institutions of higher education.....	3.6	3.6	5.4	6.6
Other.....	0.3	0.2	0.2	0.5
Sewerage.....	5.9	5.8	6.3	6.5
Water supply.....	5.5	6.2	6.0	6.4
Housing and urban renewal.....	8.8	1.5	2.8	2.3
Electric utilities.....	2.6	3.9	3.0	2.9
Natural resources.....	2.3	1.5	2.0	2.3
Health and hospitals.....	6.0	3.0	2.5	2.5
Airports.....	0.6	1.4	1.7	1.4
Local parks and recreation.....	0.8	1.1	1.5	1.6
Local transit utilities.....	0.8	0.7	0.2	0.5
Water transportation and terminals.....	1.0	1.1	1.2	0.9
Other and unallocable (including multipurpose general public buildings).....	6.0	5.5	6.5	6.7

RELATION TO OTHER DATA ON PUBLIC CONSTRUCTION

The statistics summarized in table 4, and the related figures detailed in appendix table C, pertain to amounts expended by State and local governments for construction, as assembled for annual Bureau of the Census reports which provide governmental finance data on a fiscal-year basis. Another statistical series, which has been regularly published for many years in the Construction Review (issued by the Business and Defense Services Administration of the Department of Commerce) supplies monthly and cumulative annual estimates of the dollar value of "construction put in place," including separate figures on construction of facilities owned by State and local governments.

Until very recently, the construction put-in-place series was based upon figures concerning public contract awards, and applied a classification pattern (by type of facility) which differed materially from the functional classification used in Census Bureau reporting of State and local government finances. Nevertheless, annual aggregates of State and local government construction, as indicated by these two independent series, showed a relatively high degree of historical consistency during the past decade, as illustrated in table 5.

TABLE 5.—*Comparison of construction expenditure of State and local governments in the fiscal years 1954 through 1963 with State-local construction put in place during corresponding periods*

[Amounts in millions of dollars]

Fiscal year ¹	Construction expenditure (A)	Construction put in place ¹ (B)	Difference (with construction expenditure as the base)	
			Amount	Percent
1963.....	14,481	14,441	-40	-0.3
1962.....	13,625	13,613	-12	-.1
1961.....	13,214	12,755	-459	-3.5
1960.....	12,352	12,294	-58	-.5
1959.....	12,723	12,208	-515	-4.0
1958.....	11,704	11,578	-126	-1.1
1957.....	10,386	10,546	160	1.2
1956.....	9,355	9,584	229	2.4
1955.....	9,048	8,819	-229	-2.5
1954.....	7,738	7,860	122	1.6
10 years, 1954-63.....	114,626	113,698	-928	-.8

¹ Since the diverse fiscal years which are covered comprise approximately, on a weighted average basis, the 12 months ending with June of the respective specified years, the amounts shown for "construction put in place" are also for such 12-month intervals.

Early in 1963, the Bureau of the Census initiated a quarterly sample survey of State and local government expenditure for new construction, which provides national estimates by level of government and by function. Findings from this survey are now being used as the primary basis for the published current data on State-local construction put in place. The subclassification of the latter series has also been modified, beginning with the year 1963, and now incorporates (with some limited differences of terminology) the functional categories which are reflected in regular Census Bureau statistics on finances of State and local governments. A detailed explanation of the present relationship between these two sets of data appear in a Census Bureau publication (construction reports, series C30-655) *Value of New Construction Put in Place, 1962-65*, issued in January 1966.

BORROWING IN RELATION TO CAPITAL OUTLAY

Total indebtedness of State and local governments at the beginning of July 1965 was approximately \$99 billion, or about 6 times as much as 20 years before. Most of this development has resulted from the issuance of debt to finance capital outlays.

Annual Census Bureau reports show \$110.1 billion of long-term borrowing by State and local governments during the 14 fiscal years from 1952 through 1964-65. Of this sum, \$2.2 billion involved long-term debt for purposes other than capital outlay—mainly for veterans bonuses, but including also debt issued to finance a sizable vet-

erans home loan program of the State of California. Not all of the other \$107.9 billion was fully applied to capital outlay during this period; a portion of it was reflected in the growth of bond fund holdings—i.e., proceeds from borrowing not yet disbursed. Census Bureau reports indicate a \$4.4 billion increase in such holdings (from \$5.4 billion to \$9.8 billion) between 1957 and 1965, and bond funds had also probably grown by at least \$2 billion during the preceding 5 years, when no such specific measure was being developed for census reports. Deducting these amounts from the \$107.9 billion of long-term debt issued for capital outlay would indicate approximately \$101.4 billion as being actually so applied from 1952 through 1964-65. This is a little more than half of the \$194 billion total of State-local capital outlays during the 14-year period. When corresponding calculations are carried out on an annual basis for the eight most recent fiscal years (those for which the necessary detailed figures are available), the results summarized in table 6 are obtained.

TABLE 6.—Long-term debt issued for capital outlay in relation to capital outlay expenditure of State and local governments, fiscal years 1958 to 1964-65

Fiscal year	Issues of long-term debt applicable to capital outlay ¹ (million dollars)			Applicable long-term debt issued as percent of capital outlay		
	Total ¹	State governments ¹	Local governments	Total	State governments	Local governments
1964-65.....	9,258	2,658	6,600	44.6	29.0	56.9
1963-64.....	10,982	2,796	8,186	57.5	31.7	79.7
1963.....	9,391	2,152	7,239	52.3	26.5	73.6
1962.....	8,351	2,225	6,127	49.7	30.8	64.0
1961.....	7,479	1,773	5,706	46.5	25.8	61.8
1960.....	7,286	1,918	5,368	48.2	29.0	63.2
1959.....	7,542	2,119	5,423	49.1	30.0	65.4
1958.....	7,825	2,136	5,690	55.9	35.9	70.8
8 years, 1958 to 1964-65..	68,114	17,777	50,339	50.4	29.7	66.8

¹ Excluding State bonds issued for purposes other than capital outlay, and minus increases in bond-fund holdings.

In considering table 6, it should be noted that State debt issuance is being compared with direct State government expenditure for capital outlay, without any specific allowance for some State payments to local governments for capital purposes. Most State intergovernmental expenditure is not of that nature, and no basis is available for estimating closely the debt-financed amounts that may be involved. However, from statistics developed in the 1962 Census of Governments, it can be determined that State payments to local governments for educational purposes included about \$271 million specifically for construction or capital outlay. Presumably, also, the bulk of State intergovernmental expenditure for local highways (\$1,327 million in 1962; \$1,630 million in 1965) is used or available for capital outlays; in addition, relatively minor sums are distributed by various States to help finance local capital outlay for various other functions. Not all such distributive amounts, however, are financed by State borrowing. Even if it were possible to develop data in which all State-financed capital outlay by local governments were counted as State rather than local expenditure, the States would still show a considerably lower percentage relationship of debt issued to capital outlay than would the local governments. This is mainly because highway

amounts, with considerable financing from Federal grants, make up such a large part of all State capital outlay.

FEDERAL AID FOR STATE-LOCAL CAPITAL OUTLAYS

About one-seventh of all general revenue of State and local governments during recent years has been received through Federal grants or other distributive payments. However, of the numerous programs of Federal intergovernmental expenditure, there are only a few which are designed primarily to help finance construction or capital outlays. By far the largest of these is the Federal highway program, which accounts for about one-third of all Federal payments to State and local governments. Another sizable component involves distributions for urban renewal and public housing. (The housing payments do not specifically finance construction but subsidize low-rent housing operations undertaken by local governments, and thus indirectly foster capital outlay for such public housing.) During recent years, Federal grants specifically for construction or capital outlay purposes have amounted to a significant fraction of all capital outlay of State and local governments for four functions—highways, housing and urban renewal, hospitals, and airports. For other functions, however, grants of this sort have represented only a relatively minor percentage of State-local capital spending. These relationships are shown in table 7.

TABLE 7.—Federal intergovernmental expenditure specifically for capital outlay purposes, in relation to capital outlay of State and local governments, by function, 1952 to 1964-65

Period (fiscal years)	Amounts (millions of dollars)							
	Total	Highways	Housing and urban renewal	Health and hospitals	Sewerage	Airports	Education	All other
1964-65	5,035	3,983	675	161	75	71	29	41
1963-64	4,453	3,615	543	115	66	65	39	10
1963	3,533	2,951	359	64	51	52	53	3
1962	3,257	2,748	309	60	42	57	41	-----
1961	3,093	2,686	275	66	44	63	59	-----
1960	3,353	2,906	223	58	40	56	70	-----
1959	2,969	2,680	182	51	36	56	64	-----
1958	1,777	1,477	125	45	17	42	71	-----
1957	1,172	944	112	30	1	19	66	-----
1956	943	733	84	24	-----	16	86	-----
1955	839	589	93	30	-----	8	119	-----
1954	746	517	58	49	-----	17	105	-----
1953	739	517	31	59	-----	27	105	-----
1952	578	420	9	61	-----	33	55	-----
1952 to 1964-65 (14 years)	32,487	26,566	3,078	873	372	582	962	54
1952 to 1963-64 (13 years)	27,452	22,583	2,403	712	297	511	933	13
1952 to 1963-64 (7 years)	22,435	18,863	2,016	459	296	391	397	13
1952 to 1957 (6 years)	5,017	3,720	387	253	1	120	536	-----

Period (fiscal years)	Percent relation to State and local capital outlay for corresponding functions							
	Total	Highways	Housing and urban renewal	Health and hospitals	Sewerage	Airports	Education	All other
1964-65	24.2	47.8	85.0	32.6	6.8	27.2	0.6	0.9
1963-64	23.3	45.4	74.5	27.5	6.0	29.8	0.9	0.2
1963	19.7	39.1	43.2	15.3	4.8	23.1	1.3	0.1
1962	19.4	39.4	39.6	14.7	4.7	22.5	1.0	-----
1961	19.2	39.9	45.5	17.4	6.1	20.1	1.5	-----
1960	22.2	45.8	40.0	14.3	5.2	23.0	1.9	-----
1959	19.3	38.8	48.1	11.2	5.1	24.3	1.7	-----
1958	12.7	25.6	34.2	9.9	2.6	15.3	2.0	-----
1957	9.3	18.1	39.6	8.5	0.2	11.3	2.0	-----
1956	8.3	15.7	35.4	7.9	-----	13.4	2.7	-----
1955	7.8	13.9	30.5	9.0	-----	11.8	3.9	-----
1954	8.2	15.0	13.2	12.5	-----	24.6	4.1	-----
1953	9.3	17.3	6.4	15.4	-----	46.6	5.1	-----
1952	7.8	15.6	1.4	15.8	-----	67.3	3.2	-----
1952 to 1964-65 (14 years)	16.7	33.5	41.5	15.6	3.7	27.8	2.0	0.1
1952 to 1963-64 (13 years)	15.8	31.8	36.3	14.0	3.3	22.3	2.2	(1)
1952 to 1963-64 (7 years)	19.6	39.5	47.5	15.6	5.0	22.2	1.4	(1)
1952 to 1957 (6 years)	8.5	16.0	16.3	11.7	-----	22.6	3.4	-----

¹ Less than 0.05 percent.

TABLE 8.—*Estimated distribution of major sources of financing of State and local government capital outlay, selected periods, 1952 to 1965*

Period (fiscal years)	Amounts (millions of dollars)							Other financing sources ²
	Total capital outlay	Long-term debt issues applicable to capital outlay ¹			Federal intergovernmental expenditure specifically for capital outlay purposes			
		Total	State debt	Local debt	Total	For high-ways	Other	
1964-65.....	20,771	9,258	2,658	6,600	5,035	3,983	1,052	6,478
1963-64.....	19,087	10,982	2,796	8,186	4,453	3,615	838	3,652
1963.....	17,946	9,391	2,152	7,239	3,533	2,951	582	5,022
1962.....	16,791	8,351	2,225	6,127	3,257	2,748	509	5,183
1961.....	16,091	7,479	1,773	5,706	3,093	2,586	507	5,519
1960.....	15,104	7,286	1,918	5,368	3,353	2,906	447	4,465
1959.....	15,351	7,542	2,119	5,423	2,969	2,580	389	4,840
1958.....	13,986	7,825	2,136	5,690	1,777	1,477	300	4,384
1952 to 1964-65 (14 years).....	194,303	102,541	(3)	(3)	32,487	26,566	5,921	59,275
1952 to 1963-64 (13 years).....	173,551	92,141	(3)	(3)	27,452	22,583	4,869	53,958
1958 to 1963-64 (7 years).....	114,356	58,865	15,119	43,739	22,435	18,863	3,572	33,065
1952 to 1957 (6 years).....	59,195	33,285	(3)	(3)	5,017	3,720	1,297	20,893
1958 to 1964-65 (8 years).....	135,127	68,114	17,777	50,339	27,470	22,846	4,624	39,540

Period (fiscal years)	Percent distribution							Other financing sources ²
	Total capital outlay	Long-term debt issues applicable to capital outlay ¹			Federal intergovernmental expenditure specifically for capital outlay purposes			
		Total	State debt	Local debt	Total	For high-ways	Other	
1964-65.....	100.0	44.6	12.8	31.8	24.2	19.2	5.1	31.2
1963-64.....	100.0	57.5	14.6	42.9	23.3	18.9	4.4	19.1
1963.....	100.0	52.3	12.0	40.3	19.7	16.4	3.2	28.0
1962.....	100.0	49.7	13.3	36.5	19.4	16.4	3.0	30.9
1961.....	100.0	46.5	11.0	35.5	19.2	16.1	3.2	34.3
1960.....	100.0	48.2	12.7	35.5	22.2	19.2	3.0	29.6
1959.....	100.0	49.1	13.8	35.3	19.3	16.8	2.5	31.5
1958.....	100.0	55.9	15.3	40.7	12.7	10.6	2.1	31.3
1952 to 1964-65 (14 years).....	100.0	52.8	(3)	(3)	16.7	13.7	3.0	30.5
1952 to 1963-64 (13 years).....	100.0	53.1	(3)	(3)	15.8	13.0	2.8	31.1
1958 to 1963-64 (7 years).....	100.0	51.5	13.2	38.2	19.6	16.5	3.1	28.9
1952 to 1957 (6 years).....	100.0	56.2	(3)	(3)	8.5	6.3	2.2	35.3
1958 to 1964-65 (8 years).....	100.0	50.4	13.2	37.3	20.3	16.9	3.4	29.3

¹ Excluding long-term debt issued for other than capital outlay, and net of increases in bond fund holdings; see text.

² Calculated as a residual for the various periods reported.

³ Not available.

OTHER SOURCES OF FINANCING

As indicated by the foregoing discussion, long-term borrowing has in recent years financed slightly more than one-half of all capital outlay of State and local governments, and Federal grants for capital purposes have equalled about one-fifth of the outlay total (or somewhat more than this after 1963). Accordingly, other means of financing have typically accounted for somewhat over one-fourth of all State-local capital spending. A summary of these several financing components appears in table 8, which provides data for various groups of years since 1952 and on an annual basis from 1958 to 1965.

There is no basis for estimating in detail the origin of the "other financing sources" shown in table 8. It is reasonable to presume that a considerable portion came from tax collections, in view of the important place of taxes in the revenue structure of State and local governments. However, nontax revenue sources are relatively more significant than seems often to be recognized, and these have also, directly or indirectly, financed an indeterminate portion of State-local capital spending.

Some background on this score is provided by table 9, which summarizes State and local government revenue in 1963-64 by source.

TABLE 9.—Revenue of State and local governments, by source, 1963-64

	Amount (in millions of dollars)	Percent distribution
Total.....	81,455	-----
Insurance trust revenue.....	7,038	-----
Federal grants for capital outlay ¹	4,453	-----
All other.....	69,964	100.0
Federal intergovernmental revenue (other than grants for capital outlay, shown above).....	5,549	7.9
Taxes.....	47,785	68.3
State-imposed.....	24,243	34.7
Locally imposed.....	23,542	33.6
Current charges.....	7,491	10.7
Miscellaneous general revenue.....	3,164	4.5
Utility revenue.....	4,616	6.6
Liquor stores revenue.....	1,359	1.9

¹ As so classified in table 7.

The several revenue components appearing in table 9 which pertain to receipts from current charges or the sale of services and commodities can be associated with particular governmental functions. For these, accordingly, table 10 provides a comparison of revenue and expenditure amounts, by function.

The figures in table 10 illustrate the very wide range in the extent to which particular services of State and local governments involve an element of "self-support." Receipts from charges or sales represent only a relatively minor financing source for most functions. However, for local utilities, publicly operated liquor stores, and certain other functions, such revenue actually tends to equal or exceed current expenditure and thus to provide surplus resources, available to meet capital requirements of the particular function involved or to help finance other spending. These variations illustrate why it is not feasible to estimate closely, in detail, the origins of the "Other financing sources" for capital outlay of State and local governments, as shown on a summary basis in table 8.

TABLE 10.—*Revenue of State and local governments from current charges and utility and liquor store sales in relation to expenditure amounts, by function: 1963-64*

[Amounts in millions]

Function	Revenue from current charges or sales	Expenditure		Percent relation of charges or sales revenue to—	
		Total	Current only	Total expenditure	Current expenditure
Total.....	13,466	75,486	56,399	17.8	23.9
General government functions.....	7,491	69,302	51,847	10.8	14.4
Education.....	2,811	26,533	21,959	10.6	12.8
Highways.....	1,499	11,664	3,705	4.3	13.5
Hospitals.....	1,206	4,171	3,768	28.9	32.0
Sewerage.....	468	1,515	420	30.9	111.4
Sanitation other than sewerage.....	174	752	699	23.1	24.9
Local parks and recreation.....	143	1,022	690	14.0	20.7
Natural resources.....	212	1,835	1,143	11.6	18.5
Housing and urban renewal.....	414	1,142	413	36.3	100.2
Airports.....	234	359	141	65.2	166.0
Water transport and terminals.....	171	291	118	58.8	144.9
Parking facilities.....	152	114	49	133.3	310.2
All other or unallocable ²	1,007	19,904	18,742	5.1	5.4
Local utilities ³	4,616	5,067	3,436	91.1	134.3
Water supply.....	1,917	2,255	1,307	85.0	146.7
Electric power.....	1,718	1,614	1,123	106.4	153.0
Transit.....	715	948	793	75.4	90.2
Gas supply.....	266	251	213	106.0	124.9
Liquor stores.....	1,369	1,117	1,116	121.7	121.8

¹ State governments only; mainly from toll highway charges.

² Includes public welfare, police, fire protection, correction, and various other functions for which "charges revenue" data are not separately available.

³ Expenditure amounts shown include interest on debt for utility purposes.

SOURCES AND LIMITATIONS OF DATA

The statistics shown in this study with respect to capital outlay and other expenditure, revenue, and indebtedness of State and local governments are nearly entirely from publications of the Bureau of the Census: primarily the annual reports *Government Finances* in [year], and *Compendium of State Government Finances* in [year], and a report of the 1962 Census of Governments (vol. VI, No. 4) entitled "*Historical Statistics on Governmental Finances and Employment*."

All the fiscal-year amounts which are shown or included for local governments are estimates subject to sampling variation, except amounts for 1957 and 1962, which are based upon the comprehensive Censuses of Governments conducted for those years.

The data shown in table 5 concerning State-local construction put in place are from the Construction Review, and are based upon Census Bureau data derived from figures on public construction awards.

The fiscal-year amounts shown for 1963 and earlier periods pertain to governmental fiscal years which ended during the respective calendar years specified. A shift was initiated in Census Bureau financial reports after 1963, whereby local governments are grouped in terms of fiscal years ended in June or the 11 previous months. As thus grouped, the local amounts included here for 1963-64 and 1964-65 are for a period averaging about 3 months earlier than on the previous reporting basis.

The coverage layout of various tables has necessarily been influenced by differences in the extent of data available for various prior periods. Some presentations are limited to the period from 1958 on, and some to the years beginning with 1952, with only a few series shown for the alternate (even-numbered) years from 1946 to 1950. Similarly, limitations in the amount of information available in earlier intervals have been taken into account in the summarization of data for various groups of years in certain tables.

APPENDIX TABLE A.—Selected items of State and local government finances, 1946 to 1964-65

[In millions of dollars]

Fiscal year	Total expenditure			Insurance trust expenditure			Expenditure, other than insurance trust				Capital outlay			
	State and local governments ¹	States	Local governments	State and local governments	States	Local governments	State and local governments ¹	States	Local governments	State and local governments	States	State and local governments	States	Local governments
1964-65.....	86,962	45,507	55,890	4,950	4,170	780	82,012	41,337	55,110	20,771	9,175	11,596	9,175	11,596
1963-64.....	80,579	42,583	51,199	5,064	4,364	730	75,485	38,219	50,469	19,087	8,320	10,267	8,320	10,267
1963.....	75,760	39,583	48,309	5,012	4,306	706	70,748	35,277	47,603	17,946	8,110	9,836	8,110	9,836
1962.....	70,547	36,402	45,279	4,888	4,238	651	65,659	32,164	44,628	16,791	7,214	9,577	7,214	9,577
1961.....	67,023	34,693	42,641	5,209	4,701	599	61,724	29,992	42,042	16,091	6,865	9,226	6,865	9,226
1960.....	60,999	31,596	39,056	4,031	3,461	570	56,968	28,135	38,486	15,104	6,607	8,497	6,607	8,497
1959.....	58,972	31,125	36,341	4,784	4,259	525	53,788	26,866	35,816	15,351	7,059	8,292	7,059	8,292
1958.....	53,712	28,050	34,023	4,168	3,675	492	49,544	24,405	33,531	13,986	5,946	8,040	5,946	8,040
1957.....	47,553	24,235	31,057	2,749	2,313	436	44,804	21,922	30,621	12,616	5,163	7,454	5,163	7,454
1956.....	43,152	21,686	28,273	2,376	1,984	392	40,776	19,022	25,877	11,407	4,564	6,843	4,564	6,843
1955.....	40,375	20,357	26,230	2,764	2,411	353	37,611	17,946	25,877	10,706	3,992	6,713	3,992	6,713
1954.....	36,607	18,686	23,814	2,423	2,096	327	34,184	16,590	23,487	9,125	3,347	5,778	3,347	5,778
1953.....	32,937	16,850	21,692	1,711	1,416	266	31,226	15,434	21,366	7,905	2,847	5,058	2,847	5,058
1952.....	30,863	15,834	20,229	1,698	1,413	285	29,165	14,421	19,944	7,436	2,658	4,778	2,658	4,778
1951.....	27,905	15,082	17,041	2,379	2,177	202	25,526	12,905	16,839	6,047	2,237	3,810	2,237	3,810
1950.....	21,260	11,151	13,363	1,197	1,020	177	20,063	10,161	13,186	3,725	1,456	2,269	1,456	2,269
1946.....	14,067	7,066	9,093	1,306	1,158	148	12,761	5,908	8,945	1,305	1,368	2,387	1,368	2,387

¹ Less than the sum of amounts shown separately for States and local governments, because of the exclusion of duplicative (State-local and local-State) transactions.

APPENDIX TABLE B.—*Capital outlay of State and local governments, by level of government, by object, and by function, 1946 to 1964-65*

(Millions of dollars)

Item	1964-65	1963-64	1963	1962	1961	1960	1959	1958	1957	1956	1955	1954	1953	1952	1950	1948	1946
Total.....	20,771	19,087	17,946	16,791	16,091	15,104	15,351	13,986	12,616	11,407	10,706	9,125	7,905	7,436	6,047	3,725	1,305
By level of government:																	
States.....	9,175	8,820	8,110	7,214	6,865	6,607	7,050	5,946	5,163	4,564	3,992	3,347	2,847	2,658	2,237	1,456	368
Local governments.....	11,596	10,267	9,836	9,577	9,226	8,497	8,292	8,040	7,454	6,843	6,713	5,778	5,058	4,778	3,810	2,269	937
By object:																	
By Construction.....	16,417	15,389	14,481	13,625	13,214	12,352	12,723	11,704	10,386	9,355	9,048	7,738	6,763	6,386	5,169	3,085	970
Land and existing structures.....	2,516	2,200	1,974	1,859	1,635	1,560	1,552	1,257	1,198	1,200	925	7,687	5,330	4,667	879	.640	334
Equipment.....	1,838	1,498	1,491	1,307	1,242	1,192	1,075	1,025	1,032	852	733	700	612	584			
By function:																	
By Education.....	5,060	4,574	4,064	4,009	3,853	3,685	3,790	3,543	3,252	3,195	3,074	2,537	2,051	1,710	(1)	(1)	(1)
Instructions of higher education.....	1,445	1,465	1,155	949	790	759	784	653	514	387	312	262	249	266	(1)	(1)	(1)
Local schools.....	3,523	3,042	2,867	3,026	3,031	2,903	2,981	2,868	2,715	2,786	2,739	2,256	1,784	1,421	(1)	(1)	(1)
Other.....	93	67	44	35	32	24	24	21	22	22	23	19	18	23	(1)	(1)	(1)
Highways.....	8,324	7,959	7,545	6,978	6,476	6,340	6,641	5,701	5,211	4,654	4,237	3,452	2,984	2,700	(1)	(1)	(1)
State toll facilities.....	223	285	320	154	101	165	368	717	837	1,003	826	826	167	266	(1)	(1)	(1)
Other.....	8,101	7,674	7,225	6,824	6,375	6,175	6,273	5,044	4,374	3,651	3,411	3,007	2,817	2,434	(1)	(1)	(1)
Health and hospitals.....	494	418	418	407	380	405	457	456	355	303	303	3,392	382	387	(1)	(1)	(1)
Natural resources.....	498	692	488	344	352	246	231	204	212	212	152	141	137	184	(1)	(1)	(1)
Housing and urban renewal.....	794	739	831	781	606	557	378	366	283	237	305	438	481	629	(1)	(1)	(1)
Airports.....	261	218	225	253	314	243	230	275	168	119	68	69	58	49	(1)	(1)	(1)
Water transport and terminals.....	159	173	200	185	193	136	153	138	107	106	71	121	94	71	(1)	(1)	(1)
Sewerage.....	1,107	1,095	1,087	886	726	767	708	649	644	580	491	439	395	442	(1)	(1)	(1)
Local parks and recreation.....	360	332	317	269	254	235	220	205	156	144	142	112	79	63	(1)	(1)	(1)
Local utilities.....	2,190	1,631	1,590	1,481	1,481	1,407	1,431	1,436	1,340	1,191	1,162	821	787	677	(1)	(1)	(1)
Water supply.....	1,138	948	936	913	990	843	878	781	738	712	652	486	453	406	(1)	(1)	(1)
Electric power.....	1,768	491	461	446	498	443	474	525	428	337	281	249	270	195	(1)	(1)	(1)
Transit.....	242	155	168	90	120	94	102	134	120	109	81	62	62	67	(1)	(1)	(1)
Gas supply.....	44	38	26	32	51	27	27	16	34	33	48	23	12	9	(1)	(1)	(1)
Other and unallocable.....	1,524	1,265	1,210	1,198	1,279	1,083	1,063	954	900	667	668	603	453	524	(1)	(1)	(1)

1 Detail not available.

APPENDIX TABLE C.—Construction expenditure of State and local governments, by level of government and by function, 1948 to 1964-65
 [Millions of dollars]

Item	1964-65	1963-64	1963	1962	1961	1960	1959	1958	1957	1956	1955	1954	1953	1952	1950	1948	1946
Total.....	16,417	15,389	14,481	13,625	13,214	12,352	12,723	11,704	10,386	9,355	9,048	7,738	6,763	6,386	5,169	3,085	970
By level of government:																	
States.....	7,500	7,263	6,717	5,960	5,699	5,509	5,937	5,022	4,318	3,872	3,404	2,831	2,472	2,323	1,866	1,268	282
Local governments.....	8,909	8,127	7,764	7,665	7,515	6,843	6,786	6,682	6,069	5,482	5,644	4,907	4,291	4,063	3,303	1,817	678
By function:																	
Education.....	3,858	3,687	3,257	3,220	3,155	3,038	3,205	3,035	2,767	2,511	2,706	2,172	1,766	1,452	(1)	(1)	(1)
Institutions of higher.....	1,079	1,142	886	733	613	593	639	468	374	302	235	194	203	228	(1)	(1)	(1)
Local schools.....	2,703	2,490	2,340	2,482	2,518	2,427	2,553	2,547	2,396	2,195	2,455	1,963	1,537	1,206	(1)	(1)	(1)
Other.....	76	50	32	75	26	13	13	19	17	14	16	16	16	19	(1)	(1)	(1)
Highways.....	6,969	6,094	6,302	5,844	5,419	5,344	5,551	4,871	4,345	3,937	3,648	2,862	2,607	2,346	(1)	(1)	(1)
State toll facilities.....	293	257	283	155	85	141	333	649	738	834	715	2,862	2,406	2,331	(1)	(1)	(1)
Other.....	6,766	6,437	6,319	5,689	5,334	5,203	5,218	4,222	3,607	3,103	2,933	2,598	2,461	2,116	(1)	(1)	(1)
Health and hospitals.....	415	361	314	243	220	343	391	386	311	282	354	362	381	362	(1)	(1)	(1)
Natural resources.....	374	486	389	376	277	176	175	188	163	163	111	109	108	149	(1)	(1)	(1)
Housing and urban renewal.....	374	370	438	376	307	266	247	233	164	166	179	325	387	566	(1)	(1)	(1)
Airports.....	281	182	185	229	293	219	206	195	144	97	60	67	37	39	(1)	(1)	(1)
Water transport and terminals.....	145	161	182	167	177	117	131	103	115	92	63	115	86	67	(1)	(1)	(1)
Sewerage.....	1,072	980	1,024	866	708	749	690	629	605	572	476	412	335	378	(1)	(1)	(1)
Local parks and recreation.....	266	265	234	208	189	183	176	152	110	111	108	91	67	62	(1)	(1)	(1)
Local utilities.....	1,655	1,437	1,317	1,292	1,400	1,198	1,282	1,234	1,160	991	949	734	691	581	(1)	(1)	(1)
Water supply.....	1,061	890	840	824	900	713	755	655	645	622	617	446	404	351	(1)	(1)	(1)
Electric power.....	1,477	454	404	404	459	393	441	483	405	275	231	211	240	169	(1)	(1)	(1)
Transit.....	88	56	60	52	52	67	75	83	68	62	55	55	38	53	(1)	(1)	(1)
Gas supply.....	40	37	24	29	49	26	23	14	32	22	46	22	22	7	(1)	(1)	(1)
Other and unallocable.....	1,066	763	799	864	909	721	629	708	542	437	451	387	338	376	(1)	(1)	(1)

1 Detail not available.

CHAPTER 2

Financing by Private Nonprofit Organizations*

A. NATURE OF MARKET

Private, nonprofit organizations during the past several decades have benefited substantially through the expanded interest among lenders in providing practical, economic loans for needed expansion of facilities. Today the market for such loans includes underwriting for public distribution and direct loans by insurance companies, banks, pension funds, labor unions, and so forth. Sound underwriting practices by underwriters specializing in the field has contributed to outstanding performance on issues sold publicly for an extended period of years. This exemplary performance record obviously influenced large unit buyers to accelerate an increase in their holdings in this classification by larger participations in publicly distributed issues and by becoming direct lenders. Thus for a period of years there has been very active competition among underwriters and lenders to acquire the obligations of nonprofit organizations whenever the quality of the credit could be established.

The quality of each specific loan has had a direct bearing on the breadth of its marketability. Obligors with a good past record of earnings and a showing of ability to comfortably service the proposed indebtedness have usually been pursued by several lenders. At the other extreme there have been some loan proposals where the absence of performance or the uncertainty of future potential resulted in a general lack of lenders' enthusiasm for the project. Since the great majority of private nonprofit organizations are well managed, the overall general experience nevertheless has been favorable for borrowers.

1. SIGNIFICANT INVESTOR GROUPS

From the beginning of institutional financing right up to the present time, the participation of the private, individual investor has been of great importance. Sales of \$500 bonds and an annual average unit sale of less than \$2,500 was the general experience of pioneer dealers in church bonds. Today, individuals buy in much larger units; \$25,000, \$50,000, or \$100,000 purchases by one person are fairly frequent. Currently, with the addition of large block sales to insurance companies and other institutional accounts, the average unit sale has increased substantially. Thus the total dollar volume of securities purchased by individuals has increased constantly and very substantially. For most of the past 20 years individual investors have accounted for more than 50 percent of the total volume of nonprofit-organization securities sold.

*Prepared by Arnold H. Moeller, secretary-treasurer, B. C. Ziegler & Co., West Bend, Wis., with minor editing by committee staff.

Banks have a long record of participation in publicly distributed issues of securities in the "church, hospital, private school, and homes for the elderly" classification. Since most issues are set up with required serial retirements, banks investing their own discretionary funds find the vehicle well adapted to their requirements and at rates that are usually somewhat higher than they would be able to procure elsewhere for the same term and with comparable marketability. Owing to certain classifications by some bank examiners in some areas, less-aggressive bank officers have become reluctant buyers, or even non-participants. However, this has not been a major deterrent in distribution.

The volume of securities in this classification sold to insurance companies shows substantial growth during the past two decades. Also, some direct lending has been done by insurance companies particularly in the last decade. The success of publicly distributed issues attributable to some degree to sound underwriting practices has contributed to the broadening market in the insurance company investment portfolio. Since the investment of insurance company funds is to a large degree controlled by State or Federal regulation, underwriters have also found it expedient to set up many of their larger offerings so that they adequately meet the prescribed insurance portfolio investment requirements. Participation by pension funds, labor unions, and other similar investor accounts has to a large degree followed the pattern of insurance company participation, except that the aggregate total dollar volume has not yet been developed to any large extent.

2. UNDERWRITERS AND DISTRIBUTORS

Church and hospital financing through underwriting securities issues is centered in the Midwest. Other houses in various sections of the country participate in the distribution of church, hospital, and private school bonds. Dealer participation can be summarized in these three classifications:

1. Underwriters specializing in underwriting and distributing publicly offered issues of bonds and notes for private, nonprofit organizations,
2. Underwriters who occasionally enter the field either as part of a syndicate or as sole underwriter, and
3. Securities dealers who participate in distribution, without making any substantial advance commitment.

In the Middle West there are about 10 underwriting firms which definitely specialize in originating, underwriting, and selling securities for religious, educational, and other not-for-profit organizations. Their service is extended to borrowing institutions from coast to coast. The volume of dollars provided annually by these underwriters for local public facilities probably exceeds the total dollars loaned to such institutions through any other specific source. These underwriters by careful selection of loans, by employment of sound underwriting practices, and by persistent publicity, popularized these securities as investments for the wide variety of accounts now holding this type of bond or note.

Distribution of larger issues sometimes is accomplished by the joint efforts of several securities houses. Included in the selling group there occasionally are houses whose principal distribution lies in other fields

such as municipals, stock or mutual funds. There are within the 50 States of the United States no less than 500 offices of licensed securities dealers who serve an investor clientele by providing obligations of non-profit organizations for the investment of available funds. A dealer's investor clientele will include individuals, banks, insurance companies, and all other investor classifications included in the specializing underwriter's various participants.

B. VOLUME AND CHARACTERISTICS

1. VOLUME OF ANNUAL SALES

The volume of obligations issued by private, nonprofit organizations during the years 1946-65 can only be approximated. There is no known authoritative source of comprehensive information on the subject. The figures presented here are estimates made by the author of this chapter from separate and incomplete information studied carefully in compiling these facts:

Estimated volume of obligations issued by private nonprofit organizations during the years 1946-65

Year	Number	Amount	Year	Number	Amount
1946	30	\$15,200,000	1956	100	\$47,000,000
1947	30	19,250,000	1957	105	69,000,000
1948	40	18,200,000	1958	120	90,000,000
1949	48	20,500,000	1959	110	105,000,000
1950	60	25,000,000	1960	120	138,000,000
1951	60	28,000,000	1961	150	134,000,000
1952	60	28,000,000	1962	160	181,000,000
1953	62	36,000,000	1963	160	200,000,000
1954	76	34,000,000	1964	180	235,000,000
1955	95	52,000,000	1965	206	237,000,000

2. FINANCIAL CHARACTERISTICS OF LOANS

Borrowing by private nonprofit corporations has been frequently, but not exclusively, secured by a first mortgage lien on the primary properties of the borrower. In recent years financing through issuance of unsecured notes has been employed in situations where borrowers have exhibited a strong financial situation. Catholic dioceses, large religious orders, and national organizations of Protestant denominations have been served frequently by negotiation and sale of unsecured loans. The trend has been in the direction of wider use of the unsecured note type of lending. This trend is illustrated in the following tabulation compiled from the records of one large underwriting firm:

Issues underwritten and distributed

Year	1st mortgage loans		Unsecured notes		Year	1st mortgage loans		Unsecured notes	
	Percent of dollars loaned	Number of issues	Percent of dollars loaned	Number of issues		Percent of dollars loaned	Number of issues	Percent of dollars loaned	Number of issues
1946.....	79	13	21	1	1957.....	63	40	37	13
1947.....	92	11	8	3	1958.....	83	48	17	14
1948.....	97	21	8	1	1959.....	58	37	42	17
1949.....	72	21	28	3	1960.....	39	37	61	24
1950.....	79	28	21	2	1961.....	71	64	29	26
1951.....	93	28	7	2	1962.....	50	44	50	34
1952.....	74	27	26	3	1963.....	43	48	57	24
1953.....	79	27	21	4	1964.....	55	56	45	35
1954.....	68	29	32	9	1965.....	67	59	33	37
1955.....	67	33	33	16	Total.....	60	720	40	280
1956.....	79	39	21	12					

Concurrently there has been a tendency to lengthen out the term of loans made to this broad classification of borrowers. Several decades ago loans were made principally for a maximum period of 10 years. By 1946 the most commonly used amortization period was 15 years. Recently conventional loans have been frequently set up for serial retirement over a 20-year period. Within the past 3 years a small number have been arranged with terms up to 40 years. The increasing participation of insurance companies and pension fund portfolios in publicly offered issues of this classification and the preference of these investors to put their funds out for long periods of time are factors which have made it practical to offer longer term loans to nonprofit organizations. The following schedule indicates the very modest changes in this direction through 1962, and the perceptible change within the past 3 years:

Sample of issues underwritten

Year	Term				Year	Term			
	1 to 10 years	11 to 20 years	21 to 30 years	Over 30 years		1 to 10 years	11 to 20 years	21 to 30 years	Over 30 years
1946.....	54.5	45.5	-----	-----	1956.....	57.0	43.0	-----	-----
1947.....	56.0	44.0	-----	-----	1957.....	51.0	49.0	-----	-----
1948.....	44.0	56.0	-----	-----	1958.....	50.0	50.0	-----	-----
1949.....	67.0	33.0	-----	-----	1959.....	50.0	50.0	-----	-----
1950.....	55.0	45.0	-----	-----	1960.....	52.0	48.0	-----	-----
1951.....	64.0	36.0	-----	-----	1961.....	47.0	53.0	-----	-----
1952.....	70.0	30.0	-----	-----	1962.....	50.0	50.0	-----	-----
1953.....	65.0	35.0	-----	-----	1963.....	42.0	54.5	1.5	2
1954.....	56.0	44.0	-----	-----	1964.....	37.0	55.0	3.0	5
1955.....	56.0	44.0	-----	-----	1965.....	36.0	59.0	2.0	3

3. PRINCIPAL BORROWERS AND PURPOSES OF ISSUES

Churches and synagogues issued the greatest number of loans in the private nonprofit corporation classification during the past 20 years. However, hospitals and educational institutions borrowed a larger amount of money than churches and synagogues during this period.

By classifying 1,000 units of financing underwritten during the years 1946-65, the following comparative figures were developed:

	Number of issues	Proportion of total dollars borrowed
Hospitals.....	286	42.2
Churches and synagogues.....	452	20.5
Educational institutions.....	204	30.5
Nursing and retirement homes.....	49	5.7
Other.....	9	1.1
Total.....	1,000	100.0

The concept that church and state should exist as independent institutions has historically been an important factor in the growth and development of many private nonprofit organizations. Church members have supported their denominations with a fervor and zeal that made church building projects feasible. A high percentage of the Nation's voluntary nonprofit hospitals are church affiliated. Many other institutions such as homes for the elderly, nursing homes, orphanages and homes for the handicapped and underprivileged trace their origin to the work of some religious denomination. Statistics published by the American Hospital Association show a substantially higher number of patient admissions into voluntary nonprofit hospitals than to any other class of hospital facility. Care of the sick and needy is accepted by many religious denominations as both an opportunity and a duty.

Religious considerations are involved also in financing church-related institutions. Some large denominations avoid financial and other types of assistance which may be available through local, State, or Federal agencies. A strong competitive situation among lenders specializing in lending to this classification has been of continuing benefit to these organizations.

While lender and investor motivations for serving private nonprofit organizations have been and should be largely economic, there is a consistent and growing participation which transcends economics. Private people investing their own funds include altruism with economics in making a selection. Many want their invested funds to not only earn a reasonable rate of interest and to be repaid at maturity, but they want their investment to assist in some project which they regard as beneficial to some segment of society. Earlier in this article reference was made to the experience of pioneer underwriters and the growth of personal investments over the ensuing years. Undoubtedly private investors will provide the most consistent source of additional funds in the years ahead.

C. FUTURE PROSPECTS

The outlook for the future in private financing for private nonprofit, religious, educational, and charitable organizations is very favorable. The three essentials for this traffic are (1) availability of loans, (2) availability of investable funds, and (3) the facilities for serving both the borrower and the investor.

1. AVAILABILITY OF LOANS

There is every indication that borrowing of substantial amounts of money will be done by churches. Population is increasing, church membership in many areas and in many denominations is increasing more rapidly than total population. Thus places of worship will be enlarged, replaced, and supplemented by organization of entirely new congregations. Likewise funds will be sought for building parochial schools at the primary, secondary, and college levels. In some very sizable religious denominations church instruction is concentrated into Sunday school and/or Bible class program. Educational plants for these programs, too, will require expansion.

The pressure to build more hospitals and to enlarge existing hospitals is evident through study of these and other factors:

1. The Nation's increasing population;
2. Broadening of the scope of health services performed in hospitals;
3. Popular acceptance of techniques performed by doctors in hospitals;
4. Hospital insurance;
5. Medicare;
6. Health education—Preventive medicine; and
7. Lengthening lifespan.

The Hill-Burton grants of Federal funds to hospitals, usually for one-third of the cost of a hospital building project has assisted materially in keeping available hospital facilities reasonably current with the need. In connection with most hospital building projects borrowed funds are required, whether or not a Hill-Burton grant was involved. It has been a very satisfactory combination, and an effective method of accelerating expansion of available hospital facilities.

Still other loans will be required for the building of nursing homes, homes for the elderly, public rental housing, etc. In the past some projects in these relatively newer public facility fields have been obliged to search diligently for loan funds unless the obligation was—

1. Insured by an agency of the Federal Government;
2. Guaranteed by an agency of the Federal Government;
3. Guaranteed by a strong religious denomination;
4. A satisfactory past performance record; or
5. Based on a recent demonstration of strength such as participation in a building fund campaign.

2. AVAILABILITY OF INVESTABLE FUNDS

As the Nation's economy expands, the opportunities for savings are simultaneously expanded. Large portions of the savings can and usually are productively invested for extended periods of time. Selection of the specific vehicle for investment varies among types of investors and with further changes related to trends in economic conditions. The past record of performance of a general investment classification, the relative rate of return which it offers, and the contracted term of arrangement are all factors which determine relative popularity of a specific type of investment at a particular time.

Since the overall performance record of church, school, and hospital bonds and notes of private nonprofit organizations has been for an extended period of time far better than the average for all debt

securities, it seems very probable that the future market for this class of securities will tend to broaden. While there have recently been a few scattered instances of promotional lending, it is assumed that unworthy loans are not likely to interest the careful and informed investor. Historically securities in the religious and nonprofit corporation category have yielded the investor a somewhat higher interest return so that individuals, banks, insurance companies, pension funds, etc. have found it profitable to participate in these issues. It is assumed that future financing will have a similar relative degree of variation in yield and return. The practice of providing for serial retirement of loans is almost universal with religious and nonprofit organization loans. It has long been a characteristic of this type, and the practice may thus have contributed substantially to the excellent performance record. The serial mechanics have, moreover, been an important factor in marketing. Some investors require liquidation at certain dates and prefer to hold an obligation that matures at the appropriate time rather than rely on the marketability of some security which is due and payable at a later date. Church, school, and hospital loans are usually written for a shorter term of years than other corporate or utility obligations. Thus the combination of serial maturities and relatively shorter maximum term and a fair rate more ideally meet the requirements of investors than many other types of investment opportunities.

The continuance of sound lender and underwriting practices, the continuing excellent performance of loans and issues in the private nonprofit organization group, adequate competitive rates, and mechanics tailored to meet the investor's preferences and requirements are of importance to all segments of the securities market. As the total volume of individual savings grows, the volume of purchases in the group under study should grow. Likewise in periods of healthy economic climate participations by institutions should grow. However, it is likely that the underwriting industry will not be content to rely merely on normal volume increases. This has been a fairly competitive and aggressive field, and there is every likelihood that effective promotion of the product will further expand its total volume.

3. FACILITIES FOR SERVICE

Church, school, and hospital financing in volume is currently feasible largely because the field was soundly developed by securities underwriters. Persistent education and selling for more than a half century was involved in getting recognition from investors over a wide geographic area and in getting recognition among financial analysts for larger institutional accounts. Many issues are listed in the reports of the valuation committee of the National Association of Insurance Commissioners as being "Eligible for Amortization" when included among insurance company investments. A goodly number of the larger issues have been rated by Fitch Investors Service, New York.

There is keen competition among the top underwriters in the field. During recent years several large insurance companies, metropolitan banks, labor union treasuries and pension funds have been interested in direct loaning. The outlook for the future is that sound institutions with a sound building or expansion project will be well served. Unique

in this specialized field of finance is the combination of several strong motivations; namely, (1) the usual and customary desire to produce a profit, (2) betterment of facilities and environment for mankind, and (3) preservation of a virile religious influence through improvement of churches and church institutions.

CHAPTER 3

State Aids for Local Public Facilities*

INTRODUCTION

In the years since World War II growth in population and the movement of people from cities to suburbs have created a great demand for public services and public facilities. The newly populated suburbs have required new schools, new roads, new libraries, new sewerage facilities, new fire stations, and so on. At the same time, in the central cities especially, but also in the rural areas, the inadequacies of public facilities constructed before the 1930's became apparent. Overcrowded, antiquated schools, and narrow streets unsuited to postwar traffic flows cried for attention as did the lack of facilities for such diverse public services as recreation, public health, and sewerage. This demand for public construction often far outran the ability of the local government to finance it.

To what extent have the States come to the aid of local government in building public facilities? This study investigates the functional areas in which localities receive State aid for capital outlay, the criteria for distributing such aid, and the growth of State aid in the postwar period. It also attempts to arrive at some conclusions as to the possible future course of State aid for capital outlay.

The accurate assessment of State aid for capital outlay has been hampered severely by lack of adequate data. Only in the area of highways is detailed annual data by State available and the nature of highway financing necessitates estimation of that portion of aid going for construction purposes. In the area of education, not only is some construction aid hidden in general aid programs, but also the national total of aid for capital outlay is reported only biennially.¹ Data on other aid is available only in census of governments years. Since there is great variation in capital outlay expenditure and in aid for capital outlay from year to year, the conclusions drawn from just 3 years may be misleading.

The 1962 Census of Governments is at present the most recent source of fairly comprehensive information on State payments to local governments. The detailed discussion of the range of State aid programs is thus based on that year, and primarily upon the data from that publication. Where necessary, data originating in publications

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¹In U.S. Office of Education, Statistics of State School Systems, biennial survey of education in the United States.

of the Bureau of Public Roads, U.S. Public Health Service, U.S. Office of Education and the Council of State Governments also have been used.

This investigation has been concerned only with the State governments. In the past, most of Federal aid to local governments has been channeled through State governments. Thus, under the census definition of State payments to local governments, these Federal funds would have appeared as State aids. Because the census does not for some States report separately Federal and State contributions to local programs, it was necessary to exclude some entire programs in some States from our totals. The major Federal programs which were affected to some extent by this treatment are return of Federal grazing, mineral, and forest revenue to county of origin for roads and schools, and Federal aid programs for hospital construction and airport construction.

The dollar amounts cited in the tables apply only to aid by States to local government for public facilities. In addition, in some functional areas, some States have aided private facilities. When possible such programs are mentioned; however, data on the amounts of such aid are not available nor is information on criteria for distributing it.

THE SCOPE OF STATE AID

In contrast to the Federal Government, whose initial aid program in a functional area is often for construction purposes, State governments have concentrated aid for current operations. Only a little over 6 percent of all State aid in 1962 was specifically for capital outlay.

State aids for construction of local facilities are widespread however, in two functional areas—highways and education. In the fiscal year 1962 State aid financed 16 percent of municipal and county road and street construction, and some 12 percent of local school construction. All other functional areas receive relatively small State contributions for local public facilities and accounted for only about 10 percent of State aid for capital outlays in the fiscal year 1962. Table 1 shows the aid for capital outlay for each function given by each State in 1962. Table 2 shows total capital outlay and State aid for capital outlay for each functional area.

TABLE 1.—*State aid for capital outlay, by function and by State, 1962*

[In thousands]

State	Total	Highways	Education			Other
			Local schools		Junior colleges	
			Grants	Loans		
Alabama.....	\$8,924	\$6,491	\$1,995	\$438		
Alaska.....	884		532			\$352
Arizona.....	2,749	1,749		¹ 1,000	(²)	
Arkansas.....	2,683	2,683				
California.....	118,935	29,612		78,954	\$5,000	5,369
Colorado.....	4,120	4,120				
Connecticut.....	14,221	1,760	8,366			4,095
Delaware.....	12,491	237	12,254			
Florida.....	34,877	2,962	26,897		2,137	
Georgia.....	32,943	2,052	28,285			2,606
Hawaii.....	11,631	1,047		10,247		337
Idaho.....	1,701	1,701				
Illinois.....	22,572	17,401		5,000		171
Indiana.....	13,973	12,848		1,125		
Iowa.....	9,944	9,444	500			
Kansas.....	1,491	1,491				
Kentucky.....	437	437	(²)			
Louisiana.....	2,833	2,833				
Maine.....	1,813	570	876	(²)		367
Maryland.....	38,348	7,378	11,237	13,385	5,725	623
Massachusetts.....	22,933	1,842	16,194			4,897
Michigan.....	34,598	21,893	11,400	24	1,281	
Minnesota.....	7,054	6,192		422		440
Mississippi.....	12,377	5,717	6,660			
Missouri.....	2,960	1,861	1,099			
Montana.....	807	807				
Nebraska.....	4,419	4,419				
Nevada.....	524	524				
New Hampshire.....	1,375	39	1,336			
New Jersey.....	19,147	3,200	15,947			
New Mexico.....	799	799				
New York.....	75,101	14,083	37,878	(²)	(²)	23,140
North Carolina.....	1,505	1,505		(²)		
North Dakota.....	1,617	1,561		(³)		56
Ohio.....	27,326	27,326				
Oklahoma.....	7,406	7,313				93
Oregon.....	5,521	5,521				
Pennsylvania.....	56,996	10,452	35,000			11,544
Rhode Island.....	1,675	83	1,592			
South Carolina.....	3,814	1,476	2,338			
South Dakota.....	1,459	1,459				
Tennessee.....	7,418	7,050				368
Texas.....	7,035	7,035				
Utah.....	4,149	751	3,398			
Vermont.....	5,709	873	4,160			676
Virginia.....	2,323	2,261		(²)		62
Washington.....	26,534	6,410	20,000			124
West Virginia.....						
Wisconsin.....	10,694	9,505		1,189		
Wyoming.....	675	520		155		
Total.....	691,527	259,300	247,944	111,939	14,143	58,201

¹ Estimated.² States have programs, but 1962 expenditures not available.³ States have programs, but gave no aid in 1962.

Source: U.S. Department of Commerce, Bureau of Public Roads, "Highway Statistics," 1962; Bureau of the Census, "State Payments to Local Governments, Census of Governments," 1962, vol. VI (topical studies), No. 2; U.S. Office of Education, Bureau of Educational Research and Development, Public School Finance Programs, 1962-63.

TABLE 2.—*Capital outlay by function, by level of Government, and State aid, 1962*

[In millions]

	Total	State direct	Local direct	State aid
Education.....	\$4,009	\$988	\$3,021	\$374
Higher education.....	949	854	95	14
Local schools.....	3,026	100	2,926	360
Highways.....	6,978	5,403	1,575	258
Hospitals.....	382	176	207	9
Sewerage.....	886	-----	886	6
Local parks and recreation.....	269	-----	269	1
Natural resources.....	344	161	183	15
Housing and urban renewal.....	781	2	779	32
Air transportation.....	253	26	227	25
Water transport and terminals.....	185	52	133	(3)
Correction.....	128	81	47	-----

¹ Includes flood control.² Includes Federal aid.³ Aid amounted to only \$400,000.

Source: U.S. Bureau of the Census, "State Payments to Local Governments," Census of Governments, 1962, vol. VI (Topical Studies) No. 2; "Compendium of Government Finances," Census of Governments, 1962, vol. IV (Government Finances) No. 4.

HIGHWAYS

More States have programs of aid to localities for highways than for any other purpose. In the fiscal year 1962, some \$1.3 billion of aid was given to local governments for county and city roads and streets by 47 States; all States except Alaska, Montana, and West Virginia. West Virginia has taken direct responsibility for local roads, so that comparable outlays appear as direct expenditures in the West Virginia accounts.

In the fiscal year 1962, States gave \$830 million in aids to counties, \$400 million to municipalities, \$93 million to townships, and a very small amount (\$0.15 million) to special districts. In this year, counties and townships together devoted a total of \$814 million of local receipts for highways, while municipalities devoted \$1,145 million of local receipts for highway purposes. Thus, while State grants to counties and townships constituted about half of total receipts, State grants to municipalities amounted to only one-fifth of total receipts. Table 3 shows major sources of highway finance and State aid for highway construction over the period from 1946 to 1962.

The amount of State funds used for capital outlay can be estimated, although the moneys of all but a few State aids are placed in the general highway funds, not earmarked for specific purposes. We estimate that in 1962, \$258 million or 20 percent of total State aid was used for capital outlay. In addition, some \$327 million was spent directly by the States for capital outlay on local roads.

There are four general categories of State aid for highways:

1. Shared taxes.
2. Grants-in-aid.
3. State bonds for local road construction.
4. Reimbursement of local governments for work done on State highways.

SHARED TAXES

Thirty-six States have earmarked a portion of State revenue, totaling \$886 million in 1962, to be returned to local governments for highways. The taxes so earmarked are diverse, although most of the revenue devoted to highways comes from the taxing or licensing of automobiles or gasoline. The rationale for earmarking these revenues for highways is that the highway users are thus paying for highway maintenance and construction.

In 26 States the motor fuel sales tax is shared with counties and/or cities. In 12 States, motor vehicle license revenue is shared; in some of these States only fees from commercial vehicle licenses are shared. Eight States return a portion of "highway user revenue," (which includes one or more of gasoline tax, registration fees, weight taxes, and other taxes pertaining to highway users). Colorado diverts part of its motor vehicle property tax to local governments and Florida shares its auto transportation mileage tax.

Other States devote portions of taxes not closely connected to highway use to local roads. Arkansas, North Dakota, and Oklahoma share their severance taxes with local governments; Mississippi, part of its general sales tax revenue; and South Dakota, its fish and game license revenue.

TABLE 3.—*The role of State aid in the financing of local roads and streets, 1951-63*

[In millions]

Year	State aid	Federal aid	Borrowing	Total receipts	Ratio of State aid to net receipts ¹	Capital outlay	State aid for capital outlay
1951.....	\$696.0	\$9.0	\$304.2	\$2,122.0	0.385	\$715.0	\$154.7
1952.....	762.0	17.7	550.3	2,540.8	.386	860.0	112.7
1953.....	823.2	18.7	353.5	2,506.0	.386	956.0	225.3
1954.....	888.0	18.7	405.4	2,685.4	.393	1,016.0	232.6
1955.....	921.4	16.8	614.6	3,015.8	.386	1,089.0	176.6
1956.....	991.9	21.3	492.8	3,068.0	.388	1,037.3	203.0
1957.....	1,084.1	28.3	577.5	3,344.0	.396	1,132.5	208.6
1958.....	1,126.7	26.3	513.8	3,397.4	.394	1,204.5	261.8
1959.....	1,176.3	20.9	686.7	3,654.0	.399	1,142.4	173.5
1960.....	1,234.9	30.3	622.4	3,720.1	.403	1,156.4	203.0
1961.....	1,226.0	30.9	635.7	3,928.3	.376	1,224.7	209.8
1962.....	1,317.0	31.1	598.0	3,957.8	.395	1,284.6	259.3
1963.....	1,396.5	34.8	633.6	4,181.9	.397	1,312.6	255.7

¹ Receipts exclusive of Federal aid and borrowing.

Source: U.S. Bureau of Public Roads, Highway Statistics, 1951-63.

GRANTS-IN-AID

Eleven States make direct grants to counties for rural roads, sometimes designated as "farm to market roads." Fourteen States make grants to cities for streets, usually for all streets although a few States limit their aid to "connecting streets" or "arterial roads."

In addition to these broad grants, several States give aid to local governments identifiable for specific purposes. Massachusetts and Wisconsin give aid for bridges; in Wisconsin the aid is limited to swing and lift bridges. Several States give flood aid. In Mississippi aid is given to "seawall counties" for construction of seawalls to protect the highways from flood damage; Wisconsin gives aid for repair of flood damage to roads; and in California aid is given for repair

of storm damaged roads. New Jersey gives aid for lighting of local roads.

A form of State aid which facilitates local road construction is aid for debt service, given by six States, although in two States, Mississippi and Missouri, such aid is given only for specific bridges.

CRITERIA FOR ALLOCATION OF SHARED TAXES AND GRANTS

The States have employed a multitude of formulas for distributing the shared taxes and/or the grants among local governments. Most States divide the amount to be distributed into two, three, or four parts, each to be allocated according to a different criterion. The combinations of criteria used differ from State to State.

Most States employ some concept of need or road use to allocate part of State aid funds. Four States employ some measure of road use: Colorado and Nevada use vehicle mileage, while Arizona and Louisiana use motor fuel sales. This latter measure conforms less closely to road use but approximates the return of a portion of the gasoline tax to county or city of origin. Five States distribute funds according to motor vehicle registrations, and four, according to motor vehicle license revenue, which is a slightly different measure of number and kind of vehicle in use. Eighteen States use road mileage, an uncomplicated measure of need, to allocate funds and States use (county or city) area as a criterion for aid.

A second portion of aid funds may be distributed according to criteria other than road use or need for roads. In 11 States part of State aid is distributed equally among the counties or cities and in 15 States some aid is distributed according to population.

In addition, particularly in allocating aid funds, States have taken into account the local contribution to the project and local ability to finance roads. Four States distribute grant funds in fixed ratio to local expenditure, while Illinois and Massachusetts require a minimum local effort. Kansas, Massachusetts, and Missouri allocate a portion of aid according to assessed valuation. Louisiana and Minnesota give aid for approved projects according to need.

Finally, Massachusetts and New Jersey leave some aid to be distributed at the discretion of the State highway authority, and Georgia and Nebraska leave the distribution of some kinds of aid to special statute.

STATE BONDS FOR LOCAL ROADS

In eight States² the proceeds of highway bonds issued by the State have been distributed to participating local governments to finance the construction of local roads. Typically the State then withholds from the local government's share of highway user taxes an amount sufficient to pay the annual debt service on the bonds. This method of financing is necessary due to restrictions on debt incursion by counties in Hawaii and Maryland; it is also a notably useful aid to local units in other States which have come close to their debt limits for purposes of road construction.

² Georgia, Hawaii, Maryland, Massachusetts, New Jersey, Tennessee, Vermont, and Washington.

On December 31, 1962, approximately \$162.5 million in such bonds was outstanding. Two States, Georgia and Maryland, issued bonds equaling some \$24.4 million in 1962.

In addition, bonds to finance county roads are issued by the Florida Development Commission since neither the State nor the counties can issue bonds for this purpose. The debt service is paid from the county shares of the gasoline tax. In 1962 the Florida Development Commission issued \$26.8 million in such bonds.

REIMBURSEMENT FOR WORK ON STATE HIGHWAYS

Twelve States include among their intergovernmental payments to local governments reimbursement to cities or counties for construction or maintenance work performed on State-owned highways. Such payments should not really be classified as State aid to the local governments even though they are intergovernmental transfers of funds, since they are essentially payments for services performed by the local governments.

STATE RESPONSIBILITY FOR CONSTRUCTION AND MAINTENANCE OF LOCAL ROADS

A final form of State assistance to local governments for roads, which does not show up on lists of State aids, is the direct assumption by the States of the responsibility for construction and maintenance of local roads, bridges, etc. In West Virginia, a State which gives no aid for highways, the State has taken over the complete task of road-building, and in other States, for example, Delaware, Kentucky, and Virginia, the State has taken over a portion of the task. Such expenditures are then shown along with direct expenditures on State highways in the State budget.

EDUCATION

The largest dollar volume of State aid to localities for capital outlay is given for education. In 1962, an estimated \$374 million was given to local governments for local school or junior college construction by 32 States. Specific aids for construction of school facilities account for almost all of these funds. In a few States relatively minor amounts for capital outlay are distributed as part of general grants for local public elementary and secondary schools. In most instances, separate determination of these amounts was possible.

State aid for school construction takes two forms: grants-in-aid and loans.

GRANTS-IN-AID

In 1962, 23 States had programs of grants for local school construction, amounting to almost \$248 million, while 5 States made grants of \$14 million for junior college construction.

In some States the funds for capital outlay grants for education are derived mainly from earmarked taxes. Usually the main taxes earmarked for this purpose are fairly broadly based. In Michigan and South Carolina, for instance, the major earmarked tax from which funds for school construction are obtained, is a portion of the general sales tax. Alabama has earmarked portions of several taxes, including the general sales tax and the income tax, for schools. In 1962,

Alaska earmarked all of its tobacco tax for schools with about 30 percent allocated to school construction. In other States, the funds for aid for local school construction are appropriated each year.

In addition, a number of States give aid for construction purposes to private colleges and universities; however, sufficient data are not available to assess the extent of such aid.

LOANS

In 1962, some \$112 million in loans was made available to local schools by 15 States for capital outlay. Of this \$112 million, California's loan program amounted to \$79 million or 70 percent of all loans. Actually, in 1962, California authorized over \$219 million in loan funds, of which only \$79 million was spent in that year. This form of aid, which is usually bond financed, in effect allows local governments to use State borrowing power for school construction. The loans are usually repaid by the levying of a special local property tax, with various forgiveness provisions for the financially weaker localities.

The size of the loan program is much more variable from year to year than is the grant program since individual States usually float only one bond issue in a multiyear period and make loans over a short number of years while the money lasts. A few States have revolving loan funds. In one such State, Virginia, in 1962, approximately \$15 million of school building projects were "lined up" waiting for more funds to become available through the repayment of previous loans.

CRITERIA FOR ALLOCATION OF GRANTS AND LOANS

The distribution of State aid for education has been based on a number of criteria, although considerably fewer than are used for aid for highways. Aid is most commonly allocated according to the size of the school district as measured by number of pupils in average daily attendance, teachers, or teacher units. The first two measures differ as class size varies. The use of teacher units as a measure attempts to take class size into account.

In allocating funds, about half of the States take account of approved expense for school facilities providing matching funds for approved construction. The criterion for aid is the willingness of the local government to provide funds, with the shares depending on assessed valuations.

A third commonly used criterion is the need for new facilities. Measures of this need have included the number of pupils in overcrowded or in substandard school buildings, with allowances for rapid growth in school enrollment.

Some of the loan programs reserve eligibility to those school districts which have approached the limits of their borrowing power, either in terms of a constitutional debt limitation or in terms of a given millage rate for debt service. In a few States, aid is restricted to those school districts in which at least a certain percent of students are State wards or children of State employees.

OTHER AIDS

The magnitude of State aid payments for the range of public facilities, exclusive of education and highways, is quite small. Federal aid programs, such as the Hill-Burton aid for hospital construction, finance capital outlay, and most States seem to prefer not to supplement these programs, but rather to put what aid they do offer into current operations.

In 1962, States gave about \$58 million of aid for miscellaneous types of capital outlay, of which \$32.3 million went for housing and urban renewal and slightly over \$15 million went for water resources projects—about \$6 million for pollution control, and \$9 million for flood control.

Seven States account for over 90 percent of "other" aid with New York and Pennsylvania accounting for more than 60 percent of "other" aid. New York granted about \$23 million in aid for capital outlay for "other" purposes, and Pennsylvania granted about \$11 million; California and Massachusetts granted about \$5 million each, while Connecticut, Florida, and Georgia each granted over \$2.5 million.

In addition to the \$58.2 million listed here, there is State aid amounting to some \$7.4 million for purposes which include some capital outlay. Some \$5.6 million of this is for California's aid to county fairs and for juvenile homes and camps. Most of the rest is for aid for airports.

There is further another \$2 million or so consisting of combined State and Federal funds for capital outlay. Most of these funds, again, are for airport construction.

HOSPITALS

As of January 1, 1964, 12 States had active programs of State grants-in-aid for hospitals. In addition, 7 other States have had active programs at some time since 1945. The dollar volume of the aid has been relatively small. The Department of Health, Education, and Welfare has identified approximately \$175 million of State funds appropriated for State grants-in-aid for hospitals in the 1946-63 period—of which California accounts for \$75 million. In 1962, about \$10 million of aid was given by States to local governments and private hospitals. The size of State programs varies from that of California which exceeded \$10 million annually by 1963-64, to Missouri which, since 1949, has appropriated a total of \$60,000 for six county hospitals.

Four of the States having programs as of July 1, 1964, offered grants to nonprofit private hospitals and/or nursing homes as well as to public facilities, while the other eight States limited themselves to public hospitals.

All of the States, except Hawaii and Missouri, provide for some form of matching of local and/or Federal funds. Hawaii and Missouri make direct grants to hospitals. Missouri grants are \$10,000 per county memorial hospital and the Hawaii Legislature makes appropriations direct to specific projects. In North Carolina, the State provides the difference between the total cost and the combined Federal aid and a local share based on fiscal capacity.

In addition to giving State grants, Hawaii has allowed counties to use the State's borrowing power in financing medical facilities projects.

AIRPORTS

Fifteen States augment the Federal program for construction, maintenance, and operation of local airports with State programs.

One form of aid for airports is the return of aviation fuel taxes to county or city of origin. However, one cannot assume that all of the county or city share does indeed go to the airport or further that that portion which does go to the airport is used for capital outlay rather than current operation. In 1962, shared aviation tax revenues amounted to \$1.2 million.

There are also direct grants for airport construction. These grants usually supplement Federal funds, and are distributed in fixed ratio to local expenditures. The total amount of these grants for airports in 1962, including the Federal portion, was almost \$15 million.

LIBRARIES

Again State aid to libraries usually, although not necessarily, takes the form of a supplement to the Federal program of aid to libraries. In 1962, 19 States had programs of aid to local libraries. The total amount of aid to libraries in 1962, both State aid and Federal administered through the States, was \$13.7 million. Probably only a very small portion of this amount actually went into library building (although the Michigan and Virginia programs call for "aid to new libraries" up to a fixed amount).

Federal aid for libraries is distributed in fixed ratio to local expenditure. Four States also give aid in ratio to local expenditure, while most of the others distribute funds according to population with some requirement of minimum effort on the part of local governments.

HOUSING AND URBAN RENEWAL

Massachusetts and New York give State aid to local governments for urban renewal programs. In 1962 New York's aid, which includes housing, amounted to some \$20.4 million and Massachusetts aid amounted to about \$200,000. Massachusetts distributes its aid in fixed ratio to local expenditure, while New York has financed projects through State loans and since 1961 has had the option of making capital grants up to one-half the net cost of urban renewal programs over and above Federal aid.

Hawaii, Massachusetts, and Pennsylvania also offer aid for housing construction. In 1962, Pennsylvania aid amounted to \$6.9 million, Massachusetts aid (earmarked specifically for the elderly and for veterans) amounted to \$4.6 million, and Hawaii aid amounted to \$116,000, making a total for all three States of \$11.7 million. The distribution criterion for Massachusetts and Pennsylvania (elderly) was a fixed ratio to local expenditures, and for Hawaii and Massachusetts (veterans) it was essentially reimbursement for local costs.

SEWERS, SEWAGE TREATMENT, AND FLOOD CONTROL

Four States offer aid for sewage treatment works, and California gives aid to the local units who provide sewer service to the State fair site. The total amount of aid in 1962 was about \$6 million. In Pennsylvania, distribution of aid was determined by the secretary of health, while in the other three States aid was distributed in fixed ratio to local expenditures.

Connecticut and Florida have grant programs which distributed some \$4.3 million in 1962 for flood control. Connecticut provided one-half the cost of the project over that covered by Federal aid and Florida provided for reimbursement of local governments.

PORTS AND NATURAL RESOURCES

Three States, Illinois, Maine, and Washington, gave a total of \$409,000 to localities for ports in 1962. Illinois and Maine distributed the funds on an "as required" basis. Washington returned 75 percent of the proceeds from lease of tidelands, harbor areas, and waterways to the county of origin for harbor improvement.

Colorado, Hawaii, and North Dakota gave a total in 1962 of \$322,000 of aid to localities for natural resources. In North Dakota the aid was expressly for water conservation projects and distributed in fixed ratio to local expenditures. In Colorado and Hawaii the aid was distributed by their respective departments of natural resources.

New York and Virginia had programs for aid for parks. New York gave some \$1.4 million in fixed ratio to local expenditure and Virginia gave some \$62,000 as appropriated.

OTHER

Three States, California, Oregon, and Tennessee, aid county agricultural fairs. California, in addition to returning part of its pari-mutuel tax for fair operating expenses, makes grants for construction of "approved projects." California also has district fairs which are financed out of direct State expenditures. Tennessee provides aid in fixed ratio to local expenditure, while Oregon distributes funds according to assessed valuation.

A unique class of local facilities is given State aid in California. California gives aid to juvenile homes and camps, part of which goes for reimbursement of costs and equipment in fixed ratio to local expenditure up to a maximum amount per project.

TABLE 4.—*State aid for capital outlay, by function, 1951 to 1962*

[In millions]

Year	Education	Highways	Education and highways	Other	Total
1951	\$124.2	\$151.7	\$275.9	(1)	
1952	192.0	112.7	304.7	\$27.1	\$331.8
1953	208.0	225.3	433.3	(1)	
1954	180.1	232.6	412.7	(1)	
1955	163.0	176.6	339.6	(1)	
1956	195.7	203.0	398.7	(1)	
1957	246.6	208.6	455.2	27.9	483.1
1958	² 327.4	261.8	599.2	(1)	
1959	(1)	173.5	(1)	(1)	
1960	² 370.0	203.0	573.0	(1)	
1961	(1)	209.8	(1)	(1)	
1962	374.0	259.3	633.3	58.2	691.5
1963	(1)	320.0	(1)	(1)	
1964	² 523.7	357.5	881.2	³ 75.0	956.2
1965	(1)	376.8	(1)	(1)	

¹ Not available.² Minor differences in coverages for 1958, 1960, and 1964.³ Estimated.

Source: U.S. Office of Education, "Financing Public School Facilities," Misc. No. 32, 1959; U.S. Office of Education, "Statistics of State School Systems," biannual reports; Bureau of Public Roads, "Highway Statistics, 1951 to 1962"; U.S. Bureau of the Census, "State Payments to Local Governments," Census of Governments, 1952, 1957, and 1962, vol. VI (Topical Studies) No. 2.

THE GROWTH IN STATE AID

Table 4 shows the amounts of State aid for capital outlay from 1951 to 1962. Total State aid for capital outlay purposes has doubled from 1952 to 1962, financing a slightly increased proportion of local capital outlay (8.5 percent in 1962 as compared to 6.9 percent in 1952), while local capital outlay increased by 70 percent in the 10-year period.

The rate of increase of State aid for capital outlay has been slightly less than the rate of increase of all State aids to localities, and in 1962 aid for capital outlay comprised 6.3 percent of total aid while it amounted to 6.6 percent of total aid in 1952.

Looking at the role of State aid for capital outlay within the broader picture of the total State budget, we find that while State capital outlays aids increased at about the same rate as total State direct expenditure, total State direct capital outlay increased at an even greater rate. Table 5 indicates these relationships.

A closer look at State aid shows that in the 10-year period from 1952 to 1962 the proportion of aid for education going for school construction has decreased, although the absolute amount of aid for school construction has increased. The rate of school age population growth has slowed in recent years and the pressure for school construction programs to accommodate the "baby boom" has relaxed. Increments in State aid are now devoted mainly to improvement of school program and to debt service for school districts rather than to school construction.

A recent projection ³ indicates that total capital outlay for local schools will not increase in 1970 beyond the present rate of 65,000 classrooms per year. If construction costs remain constant until 1970, capital outlay expenditures might actually decline. The projections of State aid in 1970, shown in table 6, are based on that study. Illustrations

³ "Local School Expenditures: 1970 Projections," Selma J. Mushkin and Eugene P. McLoone, RM 382, Council of State Governments, 1966.

tion I assumes no change in construction costs, the experience of the recent past. State aid for school construction is estimated to approach \$600 million if the conditions of illustration II prevail and to decline slightly if the conditions of illustration I prevail. If State aid programs concern themselves only with expansion of school facilities rather than with renovation and replacement, State aid will fall even farther (construction costs remaining constant). Aid would also be lowered if Federal aid for school construction replaces State payments rather than local shares.

From 1951 to 1953 State aid for highways (including shared taxes) has formed a fairly constant proportion of local receipts for highway purposes other than Federal aid and bond finance. Just under two-fifths of such receipts has come from State aid.

TABLE 5.—*State aid for capital outlay by function, in amounts and as a percent of total State aid, total State and local capital outlay, and total State and local direct expenditures, 1952, 1957, and 1962*

[Dollar amounts in millions]

	1952	1957	1962	Percent increase	
				1952-57	1952-62
State aid for capital outlay	\$332	\$483	\$692	45.5	108.4
(a) Education	192	247	374	28.6	94.7
(b) Highways	113	209	259	84.9	129.2
(c) Other	27	28	58	3.7	114.8
Total State aid	5,044	7,196	10,906	42.7	116.2
(a) Education	2,523	4,087	6,474	61.9	156.6
(b) Highways	728	1,082	1,316	48.6	80.7
Total State capital outlay	2,658	5,163	7,213	94.2	171.4
Total State direct expenditure	10,790	16,921	20,375	56.8	88.8
Total local capital outlay	4,778	7,453	8,096	55.9	69.4
Total local direct expenditure	20,073	30,621	39,831	52.5	98.4
EXHIBIT					
State aid for capital outlay as a percent of—					
Total State aid	6.6	6.7	6.3	-----	-----
Total State capital outlay	12.4	9.4	9.6	-----	-----
Total local capital outlay	6.9	6.5	8.5	-----	-----
Total State direct expenditure	3.1	2.9	3.4	-----	-----
Total local direct expenditure	1.6	1.6	1.7	-----	-----
State aid for capital outlay for education as a percent of total State aid for education	7.6	6.0	5.8	-----	-----
State aid for capital outlay for highways as a percent of total State aid for highways	15.5	19.3	19.7	-----	-----

Source: U.S. Bureau of the Census, "State Payments to Local Governments," Census of Governments, 1952, 1957, and 1962, vol. VI (Topical Studies) No. 2; "Compendium of Government Finances," Census of Governments, 1952, 1957, and 1962, vol. IV (Government Finances) No. 4.

TABLE 6.—*State aid for capital outlay, by function, 1957, 1962, and 1970 (projected)*

[In millions of dollars]

	1957	1962	1970 (projected)	
			Illustration I	Illustration II
Local schools	\$246.6	\$374.0	\$515	\$598
Highways	208.6	259.3	330	400
Other	27.9	58.2	110	160
Total	483.1	691.5	955	1,158

Source: U.S. Bureau of the Census, "State Payments to Local Governments," Census of Governments, 1957 and 1962, vol. VI (Topical Studies) No. 2; Selma J. Mushkin and Eugene P. McLoone, "Local School Expenditures: 1970 Projections," Council of State Governments, November 1965; Selma J. Mushkin and Robert Harris, "Transportation Outlays of States and Cities: 1970 Projections," Council of State Governments, May 1965.

On the whole the amounts of capital outlay financed by State aid have increased, but in a rather erratic fashion. There were variations in total capital outlay and in borrowing over the interval. In a year when local governments borrow heavily, State aid for capital outlay would be relatively low (for example, see 1955 and 1959).

In projecting State aid for highway construction, we have derived our lower estimate of \$330 million from a recent study⁴ that made projections of transportation outlays and of highway user receipts from which most State highway aid comes. This estimate is shown in table 6 as illustration I.

Illustration II shows an estimate developed from Bureau of Public Roads projections of capital outlay by local governments and of revenue sources. The Bureau of Public Roads projections assume a lower proportion of bond financing than do the other projections. The estimate derived from these projections calls for approximately \$400 million in State aid, with a possible variation of perhaps \$10 million in either direction, depending upon the proportion of projected borrowing done by local governments.

Finally, State aid for "other" capital outlay has more than doubled since 1952. This increase has resulted mainly from an expansion in programs which were in operation in 1952 rather than from the institution of new aid programs. Almost all of this expansion has occurred since 1957.

Projection of State aid for "other" public facilities is extremely difficult, if not impossible, due to the polyglot character of the category and the uncertainty as to future State action in these areas. We set as the lower limit (illustration I) represents an absolute annual increase approximately the same as that from 1957 to 1962. In this projection the implicit assumption was of moderate growth only of present programs similar to recent past experience. As the upper limit (illustration II) we have projected a rate of growth similar to the 1957 and 1962 experience. However, if more States should develop sizable programs of aid for local government—for example, in the areas of broad unmet needs, such as water pollution abatement, housing and urban renewal or parks and recreation, "other" State aid could be larger. For instance, in November 1965 New York State voters approved a \$1 billion bond issue for State aid to communities over a 6-year period for the construction of sewerage facilities. The State will provide 30 percent of the total cost, and local government 40 percent, with the remaining 30 percent provided by grants under Federal Water Pollution Control Act.

If more States embark on such programs, State aid for capital outlay could increase markedly the slower growth in aids, resulting from the lessening of demands for school facilities as the rate of growth of school-age population declines, would be more than offset. These developments are difficult to predict as they depend on a new program to meet a statewide need. Even the high estimates of State aid for capital outlay may be an understatement as no allowance is made for States moving into new areas of concern.

⁴ "Transportation Outlays of States and Localities to 1970," Selma J. Mushkin and Robert Harris, RM 375, Council of State Governments, 1965.

*In summary, from the limited data available it is possible to discern that State aid for capital outlay has been small and is not likely to increase considerably without a significant change in the role taken by the States with respect to local governments. The two major areas in which aid has been given are not areas which can continue construction at current rates for an extended period. If aid in "other" areas continues only in programs currently in operation, it is not likely to more than double in the next 5 years, an increase which, because of the small proportion of aid now devoted to "other" capital outlay, will not offset the projected slower growth in aid for education. If, however, the States undertake sizable new programs in hitherto neglected areas, such as urban renewal and recreation, State aid for public facilities could expand at a faster rate than in the recent past.

CHAPTER 4

State Credit Aid for Public Facilities*

INTRODUCTION

This is a study of State credit aid programs to assist municipalities and other local public bodies in the provision of public facilities and works. State credit assistance is a means of securing lower interest rates and easier terms on loans for local governments. For this reason, it encourages local public bodies to undertake projects for the construction of public facilities. It is not a substitute for local expenditures and is distinct from direct State grants to local bodies.

To date, 17 States have credit assistance programs to aid local governments in the financing of public facilities. There are several varieties of credit assistance: (1) direct loans, wherein the State government loans money to the local jurisdiction, enabling the local unit to avoid private lenders and obtain favorable interest rates and repayment schedules; (2) guarantees of debt service payment, wherein the State pledges to pay principal and interest on local bond issues should the local unit be unable to do so; and (3) grants to cover debt service, wherein the State contributes in part or in whole to the local payment of debt service. This latter is, in effect, a variation of a grant-in-aid, whereby the payment is made over the life of the bond issue rather than during the period of construction.

Credit assistance programs, numbering 26, are in effect in 17 States. The direct-loan type is used in 17 cases, payments of debt service in 5, and guarantees of debt service in 4.

Assistance is granted most often for the construction and repair of public school buildings and facilities. Eleven States—California, Indiana, Maryland, Minnesota, New Hampshire, North Carolina, North Dakota, Ohio, Pennsylvania, Rhode Island, and Wyoming—provide credit aid for this purpose. In addition, Connecticut, Massachusetts, and New York have credit assistance programs for moderate rental housing projects; Maryland, New Hampshire, New Jersey, Ohio, and Wisconsin for water and sewerage facilities; Indiana for public works; Indiana, Minnesota, and Pennsylvania for industrial development; California for small craft harbors; Indiana for flood control; Maryland for airport and airport facilities; Rhode Island for library construction; Washington for reclamation projects; and Wyoming for irrigation projects.

Since 1947, 11 States have provided the aggregate sum of \$2,008,095,850 to aid local governments in financing school construction. Of this amount, the major portion, \$1,329,700,000, has been authorized by California since 1953. Amounts provided in other States range

*Prepared by Carol Krotzki, under the direction of George A. Bell, Council of State Governments, 1966, with minor editing by committee staff.

from \$325,402,150 in Pennsylvania and \$190,024,000 in Maryland to \$1,469,294 in Wyoming. From 1947 to 1958, Hawaii expended \$34,709,000, which was to be repaid by local districts. This program has been superseded since statehood by direct State school construction.

The number of States undertaking credit assistance programs for school construction has increased steadily from the inauguration of Maryland's program in 1950 to the most recent enactment—Rhode Island in 1961. California and Pennsylvania programs, which have developed into the largest, began in 1953. Programs also were initiated in North Dakota, in 1954; Indiana, in 1956; New Hampshire, Ohio, and Wyoming, in 1957; and Minnesota, in 1959. All of these were preceded by the Hawaiian territory program in 1947. Since 1961, however, no new school construction credit assistance programs have been adopted.

The trend in expenditures for school construction credit assistance has continued upward despite the recent lack of additional States. The average annual spending by the States in 5-year periods has been \$50,315,195 from 1951 to 1955, \$153,280,087 from 1956 to 1960, and \$196,445,887 from 1961 to 1965.

It is difficult to predict future expenditures for school construction credit assistance. However, with few exceptions, most agencies agree that credit assistance programs in their States will increase as demands for public school construction outstrip the amount of money available to local governments for this purpose.

Washington and New York had credit assistance programs for reclamation and public housing in 1946. Since 1950, in each biennium one or two additional States have established such programs in varying functional areas. The latest was the New Jersey sewerage program in 1965.

The second largest expenditure for credit assistance has been in public housing. Three States with such a program are Connecticut, Massachusetts, and New York. Led by New York's \$952,574,548, they have provided \$1,115,222,634 in funds. The next greatest total expenditure, \$62,314,145, was for economic development programs. Of this amount, Pennsylvania is responsible for \$61,266,606. The other States involved are Indiana and Minnesota.

The sum of \$26,605,201 has been expended for the remaining programs. Thus a total of \$1,204,141,980 has been spent for all programs except school construction. Since 1946, the average annual spending in 5-year periods in toto has been \$44,259,968 from 1946 to 1950, \$58,442,670 from 1951 to 1955, \$55,298,173 from 1956 to 1960, and \$82,827,583 from 1961 to 1965. Total expenditures for all programs, including school construction, have been \$3,212,237,830.

State enactments of credit assistance programs have grown slowly but constantly. The most recent enactment is Wisconsin's program for water pollution control in 1966. If the trend continues, more States will adopt such programs in the future; and expenditures will continue to rise. Such programs, therefore, promise to become an increasingly important means of State financial assistance to local governments.

CALIFORNIA

Purpose: Acquisition, construction, and purchase of equipment for public schools; school construction (school building aid law, 1952).

Type of credit assistance: Direct loan.

Eligible borrowers: School districts.

Maximum interest rate: Interest rate has ranged from a low of $2\frac{1}{8}$ percent to a high of 4 percent since 1952; current rate is $3\frac{1}{2}$ percent.

Repayment period: 30 years, repayment of loans made for multipurpose facilities is extended for an additional 10 years.

Maximum loan-to-value ratio: Up to 100 percent.

Other conditions: Any school district which has exhausted its legal bonding capacity and has unhoused pupils by a prescribed formula is eligible for assistance.

Purpose: Construction, maintenance, and operation of small craft harbors (Public Resources Code, sec. 5827).

Type of credit assistance: Direct loan.

Eligible borrowers: Cities, counties, and districts.

Other conditions: The loan must not provide a debt liability exceeding 1 year's revenue, and provisions must be made for interest payments and for a sinking fund to pay principal in not more than 40 years; unless, at an election, two-thirds of the qualified electors voting have authorized the governing body to accept, expend, and repay the loan; such a loan shall not be made if written protest thereto is signed by owners of one-half or more of the assessed valuation of taxable property in the city, county, or district.

Maximum interest rate: 4 percent in 1966.

CONNECTICUT

Purpose: Construction of moderate rental housing projects (sec. 8-70 of the General Statutes of the State of Connecticut).

Type of credit assistance: Direct loans.

Eligible borrowers: Local housing authorities.

Maximum interest rate: Not less than par and accrued interest.

Repayment period: 50 years.

Maximum loan-to-value ratio: 100 percent.

Determinations regarding soundness of loan: Predicated upon the State's supervision and direction of site selection, construction design, and inspections during process of construction, including a yearly review and approval of operational statements.

INDIANA

Purpose: Preparation of surveys, plans, and specifications for the construction of public buildings and facilities undertaken to provide employment during period of industrial dislocation and unemployment (Burns Indiana Statutes Annotated 53-601).

Type of credit assistance: Direct loan.

Eligible borrowers: Governing bodies of the State, counties, cities, towns, townships, and school cities.

Maximum interest rate: None.

Repayment period: Not to exceed 3 years.

Other conditions: No political or municipal corporation may become indebted to an account in the aggregate exceeding 2 percent on the value of the taxable property within such corporation.

Purpose: Industrial development. The program includes the construction or extension of streets, sidewalks, sewerlines, waterlines; the lease or purchase of property (Burns Indiana Statutes Annotated 53-6063).

Type of credit assistance: Direct loan.

Eligible borrowers: Municipalities.

Maximum interest rate: 2 percent.

Repayment period: Any period not to exceed 19 years.

Maximum loan-to-value ratio: 100 percent.

Other conditions: The amount of any such loan to any one municipality shall not exceed \$100,000.

Purpose: Flood control. Program includes the cleaning and straightening of channels, of streams; the building or repairing of dikes, levees, or other flood protective works; the establishment of floodways (Burns Indiana Statutes Annotated 27-1125).

Type of credit assistance: Direct loan.

Eligible borrowers: Municipalities.

Maximum interest rate: $1\frac{1}{2}$ percent per annum.

Repayment period: Not to exceed 10 years.

Maximum loan-to-value ratio: 75 percent.

Other conditions: The amount of any such loan to any one municipality shall not exceed \$100,000; loans in the aggregate cannot exceed \$2 million annually.

Purpose: School construction (Burns Indiana Statutes Annotated 28-163).

Type of credit assistance: Direct loan.

Eligible borrowers: Local school corporations.

Maximum interest rate: 4 percent.

Repayment period: 20 years.

Other conditions: In order to qualify for an advancement under the provisions of this act, the consolidated school corporation is required to raise, either by a bond issue or by a cumulative fund tax levy, or, by both, a sum of money equivalent to not less than 2 percent of the adjusted assessed valuation of its geographical district; advancement must not exceed the sum of \$2,000 per pupil accommodated in the new structure less the sum of any money raised by and made available to the corporation.

Purpose: Emergency school construction (Burns Indiana Statutes Annotated 28-175).

Type of credit assistance: Direct loan.

Eligible borrowers: School corporation or public school.

Maximum interest rate: 1 percent.

Repayment period: 20 years.

Other conditions:

(1) School corporation or school has issued its bonds for the purpose of constructing, remodeling, or repairing school buildings in 90 percent of the maximum amount allowable under the constitution and laws of Indiana.

(2) School corporation or school has established and maintained a tax levy of at least 50 cents on each \$100 of taxable property for school buildings for 3 years prior to the time when application is made for loan.

(3) No advance shall be made to a school corporation whose average resident enrollment in grades 1 through 8 is less than 30 per grade in proposed school buildings to be built and to a school corporation whose average resident enrollment in grades 1 through 12 is less than 270 in proposed school buildings to be built.

MARYLAND

Purpose: Construction of water and sewerage facilities (ch. 719, acts of 1963).

Type of credit assistance: Direct loan.

Eligible borrowers: Municipal corporations or sanitary districts.

Maximum interest rate: 4 percent.

Repayment period: 14 years.

Maximum loan-to-value ratio: 25 percent.

Purpose: Public school construction (ch. 1, acts of 1949; ch. 609, acts of 1953; ch. 80, acts of 1956; ch. 86, acts of 1958; ch. 25, acts of 1962; ch. 542, acts of 1963; ch. 635, acts of 1965).

Type of credit assistance: Direct loan.

Eligible borrowers: Counties and mayor and city council of Baltimore.

Maximum interest rate: 5 percent per annum.

Repayment period: 15 years.

Other conditions: The amount of State funds that can be loaned to any district is limited to the amount which could be amortized by 90 percent of the total funds distributed to districts under provisions of State laws relating to income tax, racing tax, recreation tax, amusement tax, license tax, and incentive fund for school construction.

Purpose: Construction, improvement, and development of airports and airport facilities (ch. 117, acts of 1964).

Type of credit assistance: Direct loan.

Eligible borrowers: Counties, municipalities, and city of Baltimore.

Maximum loan-to-value ratio: 25 percent.

Other conditions: Airport must be included in the Federal airport plan.

Maximum interest rate: $2\frac{3}{4}$ percent.

Repayment period: 20 years.

MASSACHUSETTS

Purpose: Housing project for veterans and their families (ch. 200, acts of 1948).

Type of credit assistance: Guarantee of debt service payment, annual grants to cover debt service.

Eligible borrowers: Housing authority.

Other conditions: The total amount of notes and/or bonds so guaranteed shall not exceed \$225 million in the aggregate; the total amount of annual grants to cover debt service for any 1 year shall not exceed \$5,625 million.

Purpose: Housing for elderly of low incomes (ch. 668, acts of 1953).

Type of credit assistance: Guarantee of debt service payment.

Eligible borrowers: Housing authority.

Other conditions: The amount of bonds and/or notes guaranteed shall not exceed \$125 million.

MINNESOTA

Purpose: Planning and financing economic development by private enterprise (MS-472).

Type of credit assistance: Direct loan.

Eligible borrowers: Local or area redevelopment agencies.

Maximum interest rate: $3\frac{1}{2}$ percent.

Repayment period: 20 years.

Maximum loan-to-value ratio: Not in excess of 20 percent of the cost of such redevelopment project.

Determinations regarding soundness of loan: Local or area redevelopment agency must hold funds in an amount equal to or property of a value equal to not less than 10 percent of the cost of establishing the project; the redevelopment agency must obtain from other sources a firm commitment for all funds over and above the State agency's loans.

Purpose: School construction; sites for schoolhouses and for acquiring, bettering, furnishing, or equipping school districts (MS-124.42, as amended by laws of 1965, ch. 875; MS-124.43, as amended by laws of 1965, ch. 875).

Type of credit assistance: Debt loan service; direct loan.

Eligible borrowers: Any school district.

Maximum interest rate: $3\frac{1}{2}$ percent.

Repayment period: 30 years.

Other conditions: Required levy for debt service in any year must exceed the school district's maximum effort debt service levy by 10 percent or by \$5,000, whichever is less; to qualify for direct loan district must have a net debt in excess of 98 percent of its debt limit or within \$20,000 of such limit.

NEW HAMPSHIRE

Purpose: School construction, enlargement, or alternation (RSA-195-B).

Type of credit assistance: Guarantees of debt service payments.

Eligible borrowers: Receiving districts under area school plan and cooperative school districts.

Other conditions: Guarantee cannot exceed the total aggregate sum for the entire State of \$10 million; the outstanding amount of principal and interest cannot exceed \$10 million.

Purpose: School building aid (RSA-198:15).

Type of credit assistance: Annual grant to cover debt service.

Eligible borrowers: School districts, city maintaining a school department, and cooperative school districts.

Maximum interest rate: Rate determined by local district and lending institution.

Repayment period: 20 years.

Purpose: Construction of sewerage systems, sewage treatment and disposal plants, or other facilities necessary for pollution control (RSA-149.5, as amended).

Type of credit assistance: Guarantee of debt service payments.

Eligible borrowers: Municipalities, towns, cities, counties, or districts.

Other conditions: Guarantee cannot exceed the total aggregate sum for the entire State of \$35 million.

NEW JERSEY

Purpose: Public sanitary sewerage facilities (regional) (ch. 121, laws of 1965).

Type of credit assistance: Direct loans for the preparation of preliminary engineering plans, detail design, engineering drawings and specifications, and contract documents for the construction of a new or the expansion of an existing sewerage facility.

Eligible borrowers: Counties, municipalities, or any public agency established for constructing or operating a regional public sanitary sewerage facility.

Maximum interest rate: Loan is repaid without interest unless construction is not started within 3 years of loan's date in which case the loan is repaid with 2 percent interest per annum; entire loan shall be repaid on or before the date when contracts have been awarded for construction of the proposed sewerage works.

Maximum loan-to-value ratio: 100 percent of engineering.

NEW YORK

Purpose: Public housing (secs. 70 and 73, public housing law).

Type of credit assistance: Direct loan; State subsidy; i.e., annual grants for debt service.

Eligible borrowers: Public housing authority or municipalities.

Maximum interest rate: Loans made at the rate of interest paid by the State for the funds loaned plus a proportionate share of the actual direct cost of the borrowing.

Repayment period: 50 years.

Maximum loan-to-value ratio: Not to exceed 2 percent of the project cost or \$100,000, whichever is less.

Other conditions: Municipality in which project is located must at least match the subsidy made by the State.

NORTH CAROLINA

Purpose: The retirement of school bonds issued by the county (SB-262, ch. 1079).

Type of credit assistance: Annual grants to cover debt service.

Eligible borrowers: Counties or city administrative units.

Other conditions: Leftover funds from grants-in-aid (provided by the State to various counties for the construction, reconstruction, enlargement, and improvement of public facilities) may be used for the retirement of school bonds issued by the county.

NORTH DAKOTA

Purpose: construction and improvement of public school buildings (ch. 15-60, Century Code).

Type of credit assistance: Direct loan.

Eligible borrowers: School districts.

Maximum interest rate: 2½ percent.

Repayment period: 20 years.

Maximum loan-to-value ratio: 10 percent; not to exceed 15 percent in emergencies.

Other conditions: School districts must be levying the maximum mill levy for the maintenance of a building fund and must have an existing bonded indebtedness to the maximum limit permitted by law.

OHIO

Purpose: Purchase of classroom facilities (3318.01-3318.20, Revised Code).

Type of credit assistance: Direct loan.

Eligible borrowers: School districts.

Maximum interest rate: None.

Repayment period: 23 years.

Other conditions: Prior to the approval of State funds, the bonded indebtedness of the school district must be brought to within \$5,000 of the total bonding capacity of such district; the voters in such districts must approve a one-half mill levy against the tax duplicate to run for 23 years or until the capital outlay (without interest) by the State has been repaid.

Purpose: Water and sewer facilities (1525.11, Ohio Revised Code).

Type of credit assistance: Direct loan.

Eligible borrowers: Boards of county commissioners.

PENNSYLVANIA

Purpose: Industrial development projects. Program includes the construction or acquisition of industrial buildings or land for industrial districts (Pennsylvania laws 537, 1956).

Type of credit assistance: Loans to community nonprofit industrial fund agencies.

Eligible borrowers: Industrial development agencies.

Maximum interest rate: None.

Repayment period: Usually not more than 20 years.

Maximum loan-to-value ratio: In areas whose average unemployment is 6 percent or higher for the 60 months prior to the application, 40 percent; in areas whose average unemployment is 4 to 6 percent for the 60 months prior to the application, 30 percent; if the industrial development project is exclusively a research and development facility, the authority may contract to loan the industrial development agency 45 percent of cost of the industrial development project.

Determinations regarding soundness of loan: Borrowing agency must have a "responsible" tenant.

Determinations regarding availability of private financing: Commitment by first mortgage lending institution.

Purpose: School construction and facilities (secs. 2572, 2574, 2575, and 2575.1 of the Public School Code of 1949).

Type of credit assistance: Annual rental payments to reimburse school districts for construction costs.

Eligible borrowers: Approved school districts.

RHODE ISLAND

Purpose: School housing (title 16-7-41, General laws of Rhode Island).

Type of credit assistance: Annual grants to cover debt service; and construction costs.

Eligible borrowers: Communities.

Other conditions: To be eligible to receive impact aid, community must be bearing a tax of \$3 per thousand on equalized weighted assessed valuation.

Purpose: Library construction and capital improvement (H-1716, laws of 1966).

Type of credit assistance: Annual grants to cover debt service.

Eligible borrowers: City, town, or any free public library.

Other conditions: Recipient city or town must match State grant.

WASHINGTON

Purpose: Reclamation and development of arid, swamp, overflow, and logged lands for development as agricultural lands (RCW-89.16.020 to RCW-89.16.050).

Type of credit assistance: Direct loan.

Eligible borrowers: Reclamation districts.

Maximum interest rate: 8 percent; current rate 4 percent.

Repayment period: 15 years.

WISCONSIN

Purpose : Financing of pollution prevention and abatement facilities.

Type of credit assistance : Annual grants to cover interest costs.

Eligible borrowers : Municipalities.

Repayment period : Not less than 15 years ; not more than 30 years.

Maximum loan-to-value ratio : Up to one-third cost of the project.

WYOMING

Purpose : Irrigation projects ; the construction of water development projects (secs. 11-653 and 11-656, Wyoming Statutes).

Type of credit assistance : Direct loan.

Eligible borrowers : Legal subdivisions of Wyoming ; irrigation districts and public power and irrigation districts.

Maximum interest rate : 4 percent.

Repayment period : 40 years.

Maximum loan-to-value ratio : 100 percent.

Determinations regarding soundness of loan : Feasibility report by engineers of natural resources board.

Determinations regarding availability of private financing : Where financing is unavailable and upon refusal of all other lending agencies in area where loan is being requested.

Other conditions : Loan must be adequately secured by mortgage on improvements or by assessment of benefits where allowed by law.

Purpose : School building (secs. 21-100 through 21-108, Wyoming Statutes).

Type of credit assistance : Direct loan.

Eligible borrowers : School districts.

Maximum interest rate : 3 percent.

Repayment period : Indefinite. One-fourth of 1 percent must be paid on original principal each year during first 10 years ; 7 percent of original loan must be paid on principal beginning the 11th year and for duration of loan.

Maximum loan-to-value ratio : 100 percent.

Determinations regarding soundness of loan : Architectural feasibility and assessment of benefits for repayment.

Other conditions : School district must be at maximum bonded indebtedness and not able to float additional bond issues.

State credit aids for construction of public schools

	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956
California.....	-----	-----	-----	-----	-----	-----	-----	\$35,100,000	\$62,000,000	\$76,300,000	\$115,900,000
Indiana.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	3,596,135
Maryland.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	2,362,000
Minnesota.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
New Hampshire.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
North Dakota.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Ohio.....	-----	-----	-----	-----	-----	-----	-----	-----	1,806,550	837,425	1,615,555
Pennsylvania.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Rhode Island.....	-----	-----	-----	-----	-----	-----	-----	3,625,000	3,625,000	15,502,000	15,502,000
Wyoming.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Total by year.....	-----	-----	-----	-----	7,890,000	14,451,000	9,256,000	50,135,000	76,919,550	100,814,425	140,205,690
	1957	1958	1959	1960	1961	1962	1963	1964	1965	Total by State	
California.....	\$117,500,000	\$70,900,000	\$144,100,000	\$107,100,000	\$105,300,000	\$107,800,000	\$130,700,000	\$149,200,000	\$107,800,000	\$1,329,700,000	-----
Indiana.....	3,556,830	3,054,657	3,564,587	2,476,200	1,630,000	1,083,600	1,103,120	1,835,495	2,736,392	25,737,016	-----
Maryland.....	17,969,000	14,026,000	4,440,000	13,863,000	5,443,000	20,366,045	13,385,000	16,090,000	20,910,000	190,024,000	-----
Minnesota.....	-----	-----	1,251,969	5,778,936	378,090	366,045	15,127,060	1,145,457	-----	24,047,557	-----
New Hampshire.....	583,000	659,000	1,719,000	857,000	934,000	1,146,000	1,284,000	1,482,000	1,759,000	9,423,000	-----
North Dakota.....	1,370,570	294,100	382,700	1,330,200	1,338,300	1,371,785	1,829,700	880,800	-----	12,882,685	-----
Ohio.....	10,000,000	-----	10,000,000	-----	32,650,000	34,717,700	10,000,000	-----	51,000,000	81,000,000	-----
Pennsylvania.....	23,516,600	23,516,600	21,207,500	21,207,500	-----	1,522,215	40,250,000	44,082,250	46,000,000	325,402,150	-----
Rhode Island.....	-----	-----	-----	-----	1,311,310	5,000	1,592,236	1,720,746	2,283,641	8,410,148	-----
Wyoming.....	750,000	-----	150,000	-----	-----	-----	499,294	-----	65,000	1,469,294	-----
Total by year.....	175,346,000	112,420,357	185,815,756	152,612,636	148,984,900	168,648,345	214,770,410	216,436,748	233,389,033	-----	-----

PART II. MUNICIPAL SECURITIES MARKET: PATTERNS,
STRUCTURE AND PROBLEMS

CHAPTER 5

Characteristics of the Municipal Bond Market for New Issues*

INTRODUCTION

This chapter has been prepared to present a summary of the volume of municipal bond ¹ financing in the postwar era and to describe this activity in terms of many of its characteristics. No particular attempt is made to explain reasons underlying the form of financing: such an exposition is far beyond the scope, time, and space allotted to this subject. In order to accomplish this objective, the chapter has been divided into three groups: (1) aggregate measures of market activity, (2) characteristics of new issues, and (3) characteristics of the issuing body. Statistics for the first section were obtained from the Daily Bond Buyer and the Treasury Department, and cover the entire postwar period. The need for a multitude of compilations (many previously unavailable) dictated that the second and third sections be limited to the period 1957 through 1965, since basic statistics maintained by the Investment Bankers Association of America are available for only these years.

Statistical data are presented in the chapter primarily through the use of bar charts. A more detailed compilation of data is provided in the statistical appendix.

AGGREGATE MEASURE OF MARKET ACTIVITY

State and local governments and their political subdivisions have steadily grown in importance as borrowers of funds. In the first postwar year, 1946, 3,319 new issues of municipal bonds, with a total value of \$1.2 billion, were brought to the market. Over the next two decades, this activity was increased, until 6,059 issues (valued at \$11.1 billion) were brought to market in 1965.

* Prepared by John E. Walker, Research Director, Investment Bankers Association of America, with minor editing by committee staff.

¹ "Municipal" bonds are bonds issued by State and local governments and their political subdivisions. These bonds are often referred to as "tax exempts," since interest on such bonds is exempt from Federal and often State income tax.

TABLE 1.—*New issues of State and municipal bonds and notes*

[Amounts in millions]

Year	Long-term bonds					Short-term notes (maturities of 1 year or less)		
	Total		General obligation	Revenue	Public Housing Authority	Total		Public Housing Authority
	Number	Amount				Number	Amount	
1965.....	6,059	\$11,084	\$7,445	\$3,639	\$464	1,918	\$6,537	\$1,865
1964.....	6,314	10,544	6,886	3,658	636	1,824	5,423	1,892
1963.....	6,577	10,107	6,070	4,037	254	1,997	5,481	1,961
1962.....	6,515	8,558	5,892	2,666	382	2,174	4,763	1,727
1961.....	6,400	8,360	5,762	2,598	189	2,000	4,514	1,469
1960.....	6,529	7,230	5,035	2,195	383	1,868	4,006	1,283
1959.....	6,711	7,681	5,160	2,521	310	1,857	4,179	1,563
1958.....	6,855	7,449	5,725	1,724	182	1,668	3,910	1,675
1957.....	6,888	6,958	4,933	2,025	65	1,354	3,274	1,599
1956.....	6,495	5,446	3,776	1,670	199	1,194	2,706	1,759
1955.....	6,660	5,977	4,245	1,732	474	1,072	2,593	1,668
1954.....	6,526	6,969	3,755	3,214	374	1,221	3,350	2,433
1953.....	5,795	5,558	3,991	1,567	496	1,468	2,757	2,041
1952.....	5,313	4,401	2,938	1,463	305	1,097	2,049	1,206
1951.....	5,281	3,278	2,548	730	328	604	1,637	974
1950.....	5,861	3,694	3,134	560	59	672	1,611	887
1949.....	5,107	2,995	2,312	683	143	687	1,333	770
1948.....	4,706	2,990	2,440	550	66	472	1,005	496
1947.....	3,803	2,354	1,968	386	4	535	958	413
1946.....	3,319	1,204	998	206	19	567	741	439

Source: The Daily Bond Buyer.

Table 1 presents a yearly record of this financing providing a breakdown between long- and short-term issues and type of security (general obligation, revenue, and Public Housing Authority guaranteed issues).² The figures show that the dollar volume of all security types has grown substantially, with the major increase resulting from general obligation issues. The percentage increase for PHA's has been very great, as is the case for revenue bonds as well.

The increase in short-term financing has met the pace of the longer term bonds, increasing from \$741 million in 1946 (567 issues) to \$6,537 million (1,918 issues) in 1965.

Another measure of the activity of State and local units in the financial markets is the volume of outstanding debt. Table 2 presents annual data on the amount of privately held municipal and Federal Government debt from 1946 through 1965. The Federal debt has remained relatively stable at about \$200 billion, whereas State and local debt has increased from \$16 billion to \$91 billion over the same time interval.

The large increase in outstanding municipal debt has increased the market for outstanding securities, and coupled with the improved and increased tools and functions of brokers has improved the liquidity of municipal bonds. This, of course, is an important consideration in assessing the ability of the market to absorb additional securities.

² General obligation bonds are secured by the full faith, credit, and taxing power of the issuer. Revenue bonds are secured by revenues from the facility or facilities owned by the issuer of the bonds. Public Housing Authority bonds are revenue bonds which are additionally secured by pledges of funds by the Public Housing Authority of the Department of Housing and Urban Development.

CHARACTERISTICS OF NEW ISSUES

Starting in 1957, yearly data are available in sufficient detail to permit an examination of some of the characteristics of new issues. Of particular interest is the method used by the governmental unit to sell the issue (type offering), the maturity distribution of new issues, and the uses for which the bonds are issued. Only long-term debt (maturity greater than 1 year) is considered.

TABLE 2.—*Privately held outstanding public debt*¹

[Amounts in billions]

State and municipal				U.S. interest bearing			
Year	Amount	Year	Amount	Year	Amount	Year	Amount
1965.....	\$92.0	1955.....	\$37.5	1965.....	\$210.8	1955.....	\$197.6
1964.....	85.1	1954.....	32.4	1964.....	211.6	1954.....	194.5
1963.....	78.9	1953.....	27.3	1963.....	211.7	1953.....	191.6
1962.....	72.4	1952.....	24.5	1962.....	208.5	1952.....	189.6
1961.....	64.0	1951.....	22.3	1961.....	202.4	1951.....	188.9
1960.....	59.0	1950.....	19.8	1960.....	201.5	1950.....	199.0
1959.....	54.6	1949.....	17.3	1959.....	201.2	1949.....	193.1
1958.....	49.9	1948.....	15.4	1958.....	193.4	1948.....	192.9
1957.....	45.8	1947.....	13.6	1957.....	189.9	1947.....	200.4
1956.....	41.9	1946.....	12.8	1956.....	192.7	1946.....	215.2

¹ Includes U.S. interest-bearing securities not held by U.S. Government investment accounts and Federal Reserve banks. Also State and local securities not held by Federal agencies and trust funds; Federal Reserve banks; and State and local sinking funds, trust funds and investment funds.

Sources: The Daily Bond Buyer and the Treasury Bulletin: U.S. Treasury Department.

1. *Type offering*.—Almost without exception, new issues of bonds are sold by the issuing body to investment bankers³ and only this form of financing is considered in this chapter. Investment bankers purchase bonds in order to distribute them to a large number of investors, including individuals, commercial banks, and insurance companies.

Basically, bonds are sold either through negotiation or by advertisement and subsequent bidding by prospective purchasers. Competitive bidding is required for issues guaranteed by the Public Housing Authority (commonly referred to as PHA's), most issues of general obligation bonds, and to a lesser extent also for revenue bonds.

Chart I shows separately the dollar volume of those new issues sold by competitive bidding and those sold by negotiation. Within each category a division is made between general obligation and revenue bonds.⁴ Most apparent is the steady growth of both revenue and general obligation bonds sold as the result of competitive bidding and, with the exception of 1963, the rather constant level of bonds issued through negotiation.⁵

³ Investment banker is a term applied to a security dealer or a dealer bank who underwrites securities (limited to municipal general obligation bonds in the case of dealer banks). It is the function of the investment banker to bring together those who wish to borrow funds by issuing securities and those who wish to lend funds, or invest by purchasing securities. Additionally, the investment banker assumes some market risk in this operation. Because of his knowledge of the markets and efforts to locate investors, the investment banker is able to purchase bonds at a price attractive to the issuer, sell bonds at a price attractive to the investor and normally profit from the transaction himself. See ch. 9 for a more complete discussion of the investment banker.

⁴ Public Housing Authority bonds are not included.

⁵ The very large dollar size and the small number of some revenue issues introduces large fluctuations in the dollar volume of such financing when the volume is measured for short periods of time (such as a year).

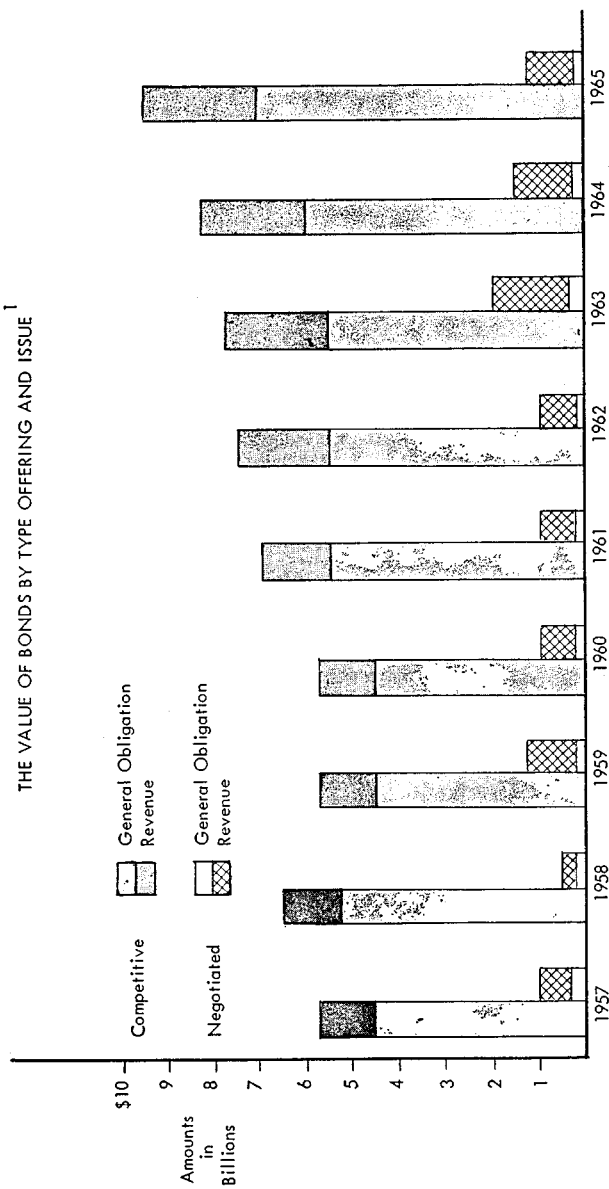
Chart II is similar to chart I but is expressed in terms of the number of new issues rather than the dollar volume. Other than a slight decrease in the number of general obligation bonds offered competitively and the larger (on a percentage basis) decrease of the same bonds offered through negotiation, this chart depicts relative stability in the number and distribution of new issues sold during the past decade.

A comparison of chart I with chart II shows that the dollar value of general obligation issues sold by negotiation is, on the average, much smaller (averaging \$242,000 in 1957 and rising to \$464,000 in 1965) than the value of issues sold by competitive bidding (the latter averaging \$908,000 in 1957 and \$1,575,000 in 1965). No readily apparent relationship of a similar nature exists for revenue bonds.

Chart III presents the data of charts I and II in percentage form. No discernible long run trend is present. The volume of general obligation bonds sold by competitive bidding held steady at about 96 percent as measured by value, and fluctuated between 80 percent and 90 percent as measured by the number of issues. New issues of revenue bonds sold by competitive bidding demonstrate more variability ranging from 52 percent to 71 percent as measured by value and 59 percent to 77 percent as measured by the number of issues. Additional statistical information is presented in table 1 of the appendix. (See page 134.)

New Issues of Municipal Bonds, 1957-1965

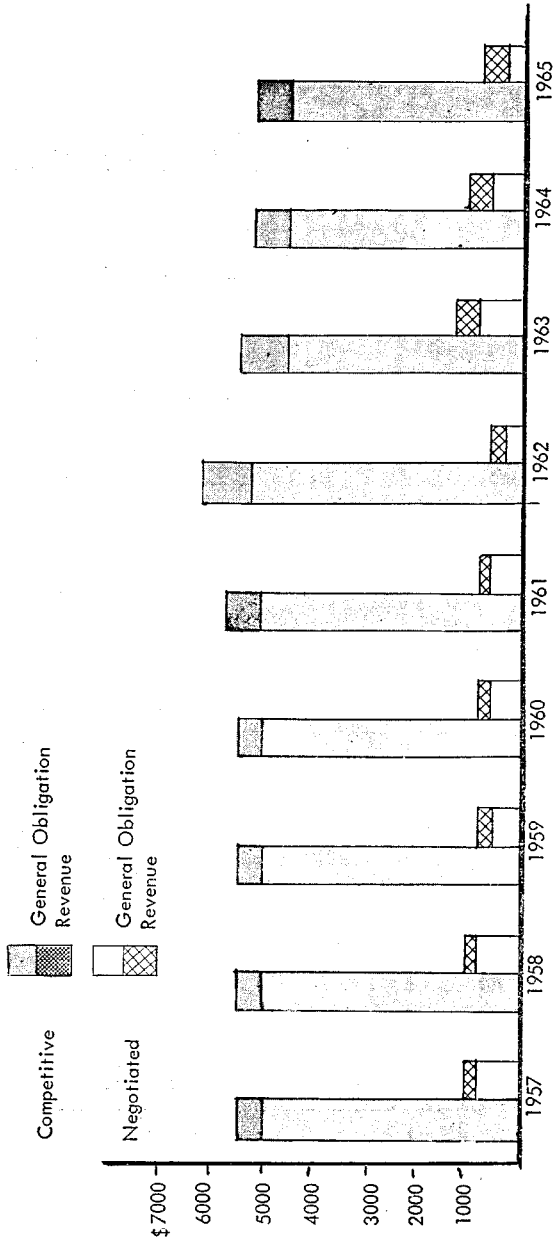
CHART I
THE VALUE OF BONDS BY TYPE OFFERING AND ISSUE¹



Source: Investment Bankers Association of America.

1. Excludes Public Housing Authorities issues.

CHART II
THE NUMBER OF ISSUES BY TYPE OFFERING AND ISSUE

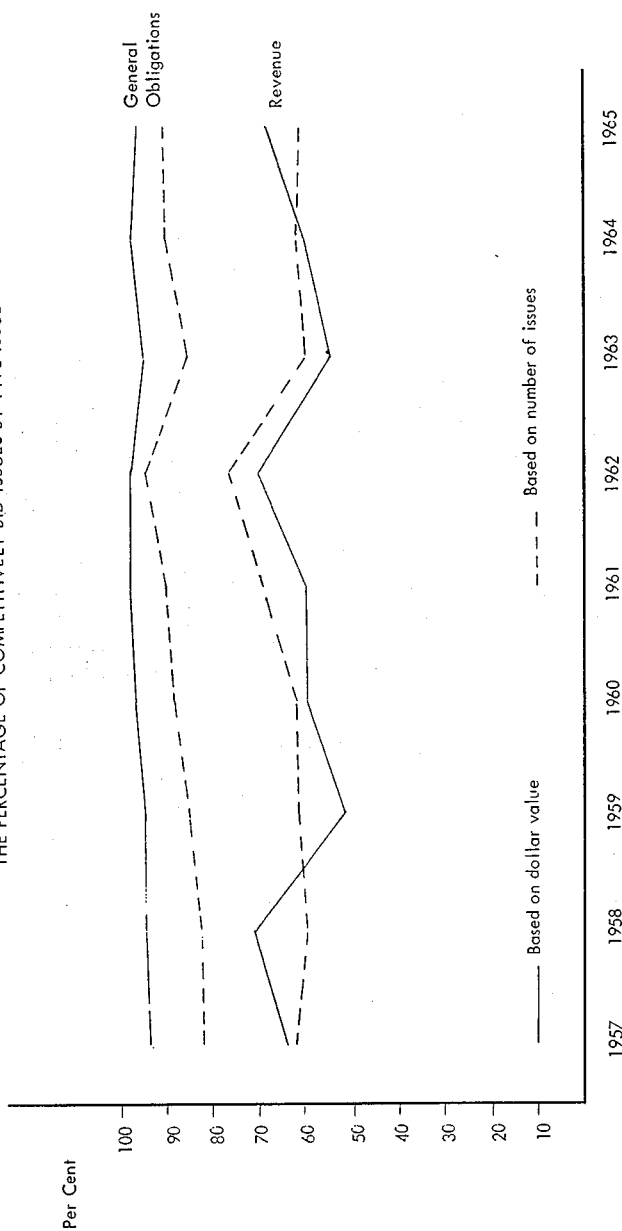


Source: Investment Bankers Association of America.

New Issues of Municipal Bonds, 1957-1965

CHART III

THE PERCENTAGE OF COMPETITIVELY BID ISSUES BY TYPE ISSUE



Source: Investment Bankers Association of America.

2. *Maturity⁶ distribution.*—One of the most important aspects of new debt is the period over which that debt is repayable. Since serial bonds which mature at intervals are normal for general obligation issues, and term bonds which all expire at the end of one period are more prevalent for revenue issues,⁷ the maturity distribution for these two types of securities may be expected to vary considerably. That variation is shown on charts IV through VI. In comparing maturities, the heavy preponderance of general obligation issues for the short maturities and the dominance of revenue issues for the longest maturities is apparent.

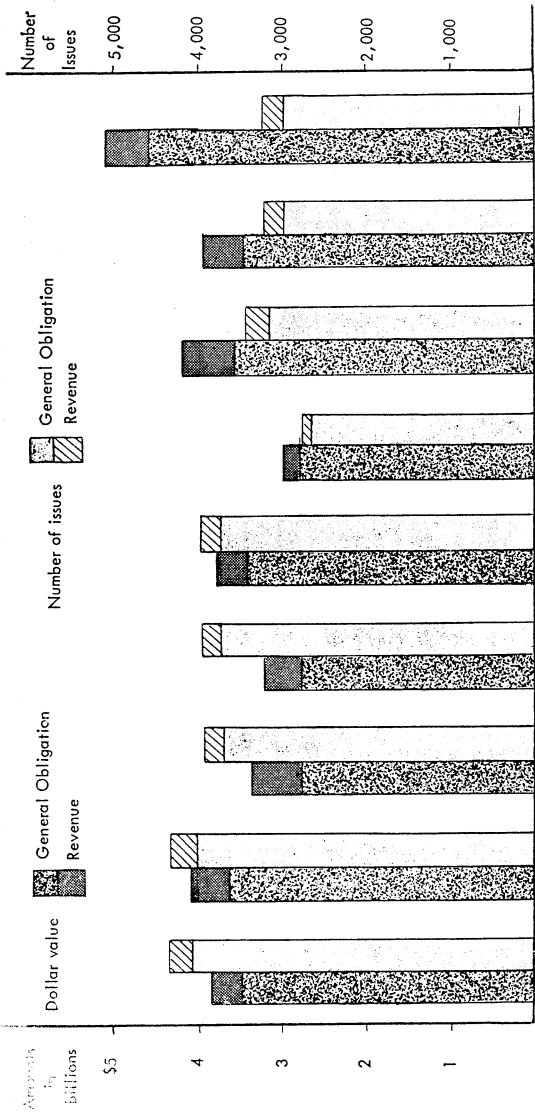
Examining each chart separately, several facts stand out. Chart IV shows the rather constant level—with the exception of 1965—from 1957 to 1965 of the dollar amount of general obligation issues with average maturities from 1 through 14 years, accompanied by a pronounced decline in the number of issues in this category. The volume of revenue financing was too small for time changes to be significant.

Chart V illustrates the large growth during the past 9 years in the dollar volume of revenue financing with an average maturity of from 15 to 30 years. Although general obligation financing still is larger in this category—about equal in 1965—the growth of financing has largely been in the form of revenue issues. The average size of both general obligation and revenue issues has increased during this time span. For maturities of 30 years or more years (chart VI), revenue financing dominates the picture. The dollar volume of both general obligations and revenue bonds of this maturity range has been erratic—due to the large dollar size of the issues and the small number involved—and obscures any trends if such are present. On the average, issues of this maturity are about \$10 million, but with wide variability.

⁶ Maturity has been calculated by weighted average—the method most commonly used to measure bond maturity. Weighted average maturity refers to the average time period the debt is outstanding, weighted by the dollar amount of the debt. For example, a serial bond issue retiring \$1 million in 5 years, \$2 million in 6 years, and \$3 million in 7 years would have an average maturity of 6½ years reflecting the large amount due in 7 years. A term bond maturing in 10 years would have an average maturity of exactly 10 years, no matter how measured or weighted. The availability of funds for use by the issuer would be less because of sinking fund requirements.

⁷ Term bonds are particularly used—and useful—in situations where the uncertainties of net revenues are higher than normal (e.g., new projects). Under such circumstances the use of serial maturities would increase the risk to both the issuer and the investor.

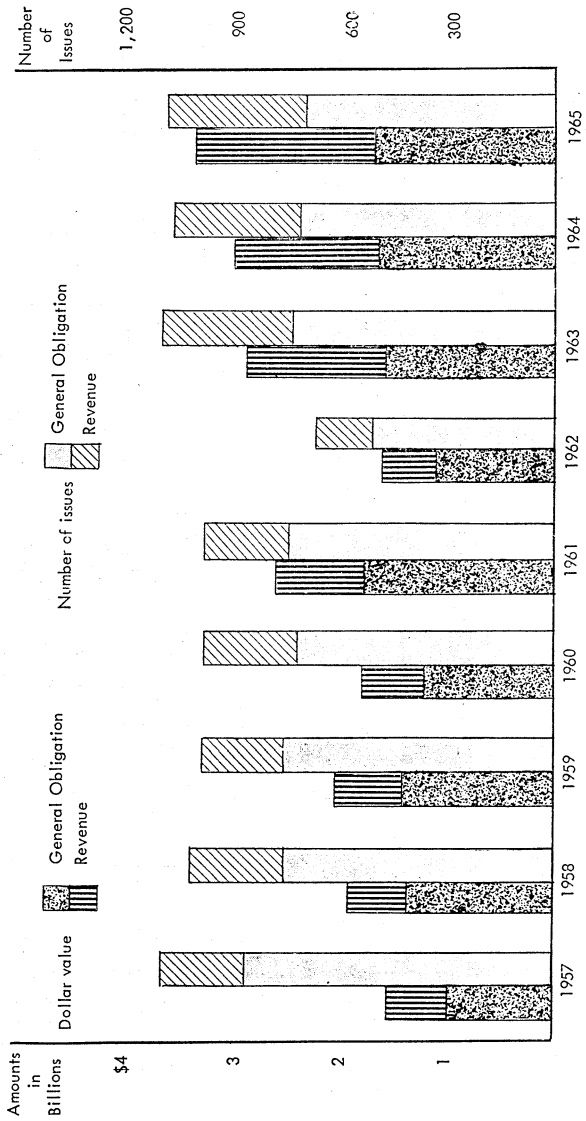
CHART IV
AVERAGE MATURITY 1 THROUGH 14 YEARS BY TYPE ISSUE



Source: Investment Bankers Association of America.

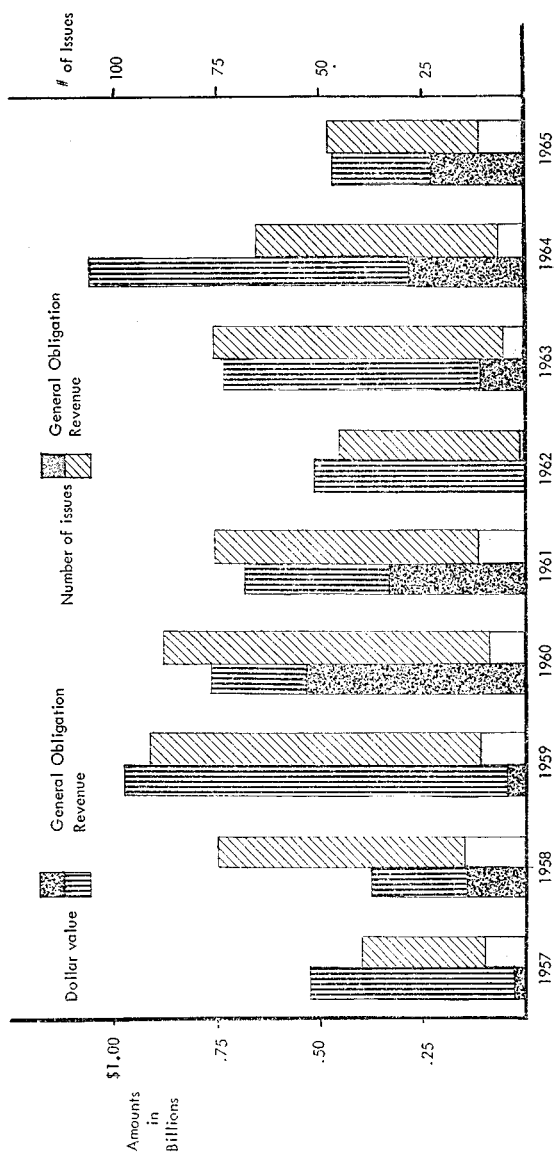
New Issues of Municipal Bonds, 1957-1965

CHART V
AVERAGE MATURITY 15 THROUGH 29 YEARS BY TYPE ISSUE



Source: Investment Bankers Association of America.

CHART VI
AVERAGE MATURITY 30 OR MORE YEARS BY TYPE ISSUE



Source: Investment Bankers Association of America.

Charts VII and VIII concentrate on the proportion of bond financing by maturity grouping. As presented in chart VII, the average maturity distribution of general obligations has, with the exception of year-to-year fluctuation, changed very little during the past 9 years. There has been some decrease in the percentage in the 10 through 14 year range offset by increases in the 20 through 29 year and over 30 year brackets.

The proportion of revenue financing, chart VIII, in the ranges of 5 through 9 years and over 30 years has noticeably declined. This decline has primarily been offset by issues in the 20 to 29 year group. Additional statistical information is presented in table 2 of the appendix.

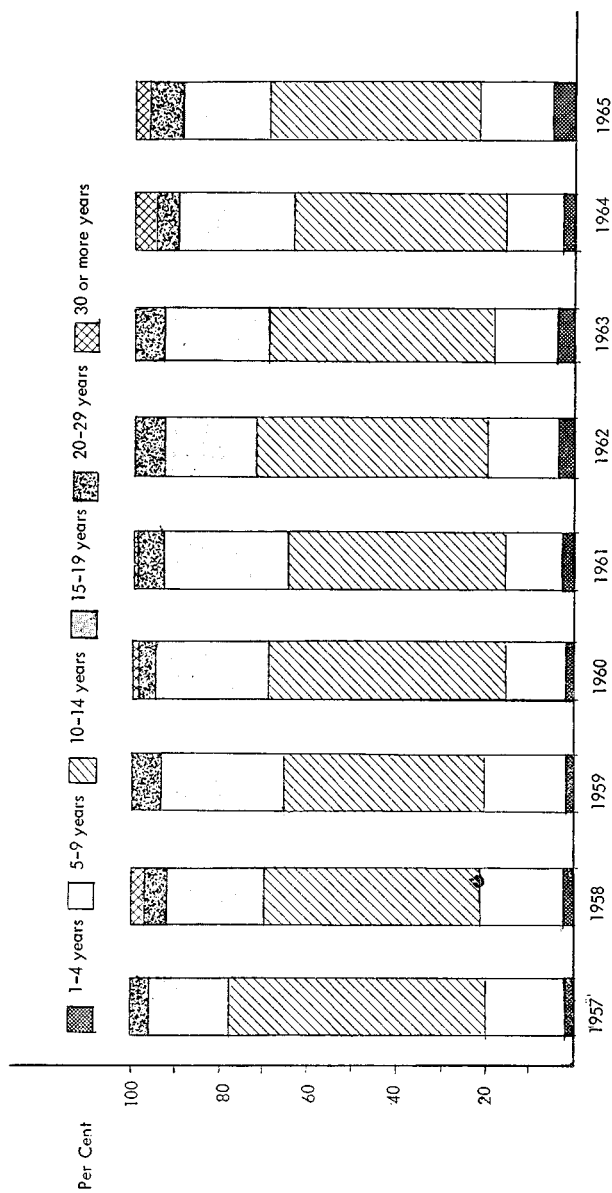
3. *Use of proceeds.*—In the main, the purposes for which bonds are issued have not changed markedly in recent years. Although data are available for more than 50 classifications of use, for the purpose of this study these have been aggregated into six basic categories (education, transportation, utilities and conservation, social welfare,⁸ refunding,⁹ and miscellaneous).

⁸ Includes such items as public housing, hospitals, poor relief, recreational facilities, and civic centers.

⁹ Financing the purpose of which is to retire (at that time or at a later date) an existing issue or issues.

New Issues of Municipal Bonds, 1957-1965

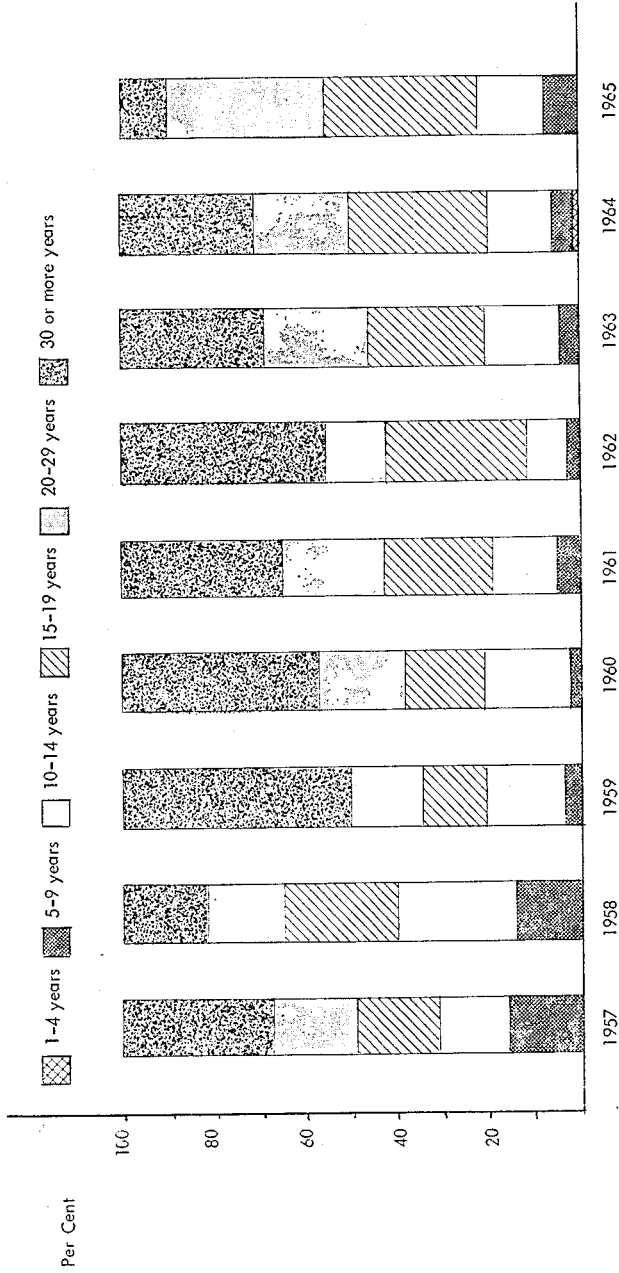
CHART VII
THE MATURITY DISTRIBUTION OF GENERAL OBLIGATION BONDS



Source: Investment Bankers Association of America.

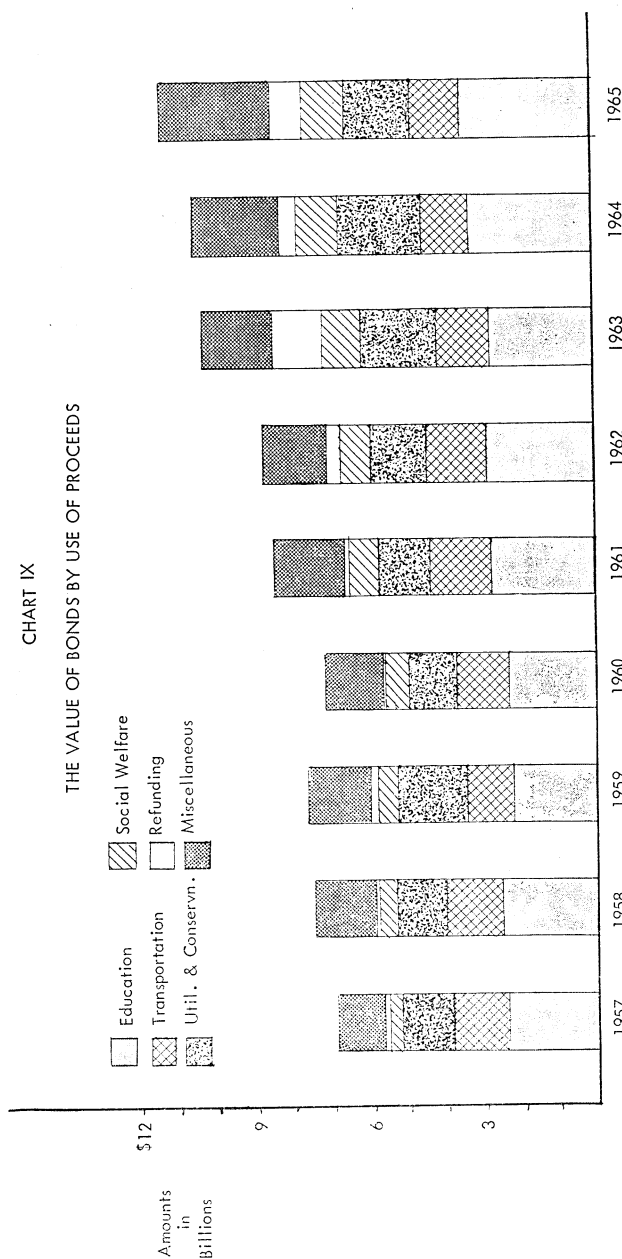
CHART VIII

THE MATURITY DISTRIBUTION OF REVENUE BONDS



Source: Investment Bankers Association of America.

CHART IX
THE VALUE OF BONDS BY USE OF PROCEEDS



Source: Investment Bankers Association of America.

Information concerning these categories for the period 1957 through 1965 is presented in charts IX and X. Chart IX shows the dollar value of new issues classified by use of proceeds. Readily apparent is a pronounced increase in refunding, reflecting the following two factors: First, late 1962 and the first half of 1963 constituted a period of low-interest rates, a favorable time to exchange existing debt for less costly debt. A second factor explaining the continued large volume of refunding is the legal necessity to refund certain issues before new debt may be issued. This requirement is frequently found in revenue bond issues, although it has been relaxed over the past several years as revenue bond financing techniques have evolved and investor acceptance has increased. The chart shows also the increase in issues to obtain funds for social welfare. The increase in miscellaneous issues reflects the trend toward consolidated financing and general purpose bond issues. Education and utilities and conservation also have increased whereas transportation has remained at the same level.

Chart X demonstrates the percentage of borrowing used for each purpose. Particularly noticeable is the large increase in the percentage of funds used for refinancing, and the decrease in percentage of funds used for transportation. The relative share used for education has slightly decreased, while the opposite is true for social welfare.

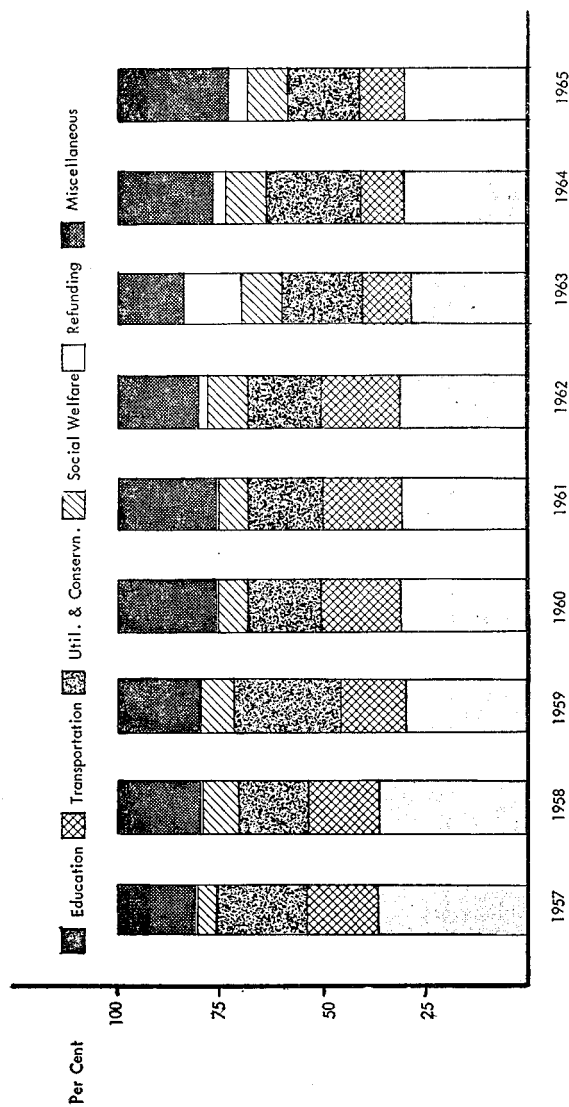
One of the more spectacular developments in this area has been the rise of industrial aid financing. In this form of financing, the borrowed funds are used to construct and sometimes equip a production facility, which the governmental unit then leases to a private firm. Although the volume is not large, relative to the other categories, the growth rate has been rapid. The present annual rate of this type of financing is about \$600 million, which compares with totals of \$7 million in 1957, \$72 million in 1961, and \$214 million in 1965. This topic is discussed in detail in another chapter. Additional statistical information is presented in table 3 of the appendix.

CHARACTERISTICS OF BORROWING AGENCIES

The past decade has been characterized by rising levels of new debt issues and outstanding debt. This section presents information describing the relationship of the issuer of new municipal bonds to the bond market. This is done by compiling market data in terms of the following characteristics of the issuer: (1) the type of public body (State government, city, school district, and special districts), (2) the geographical location, and (3) the population size.

New Issues of Municipal Bonds, 1957-1965

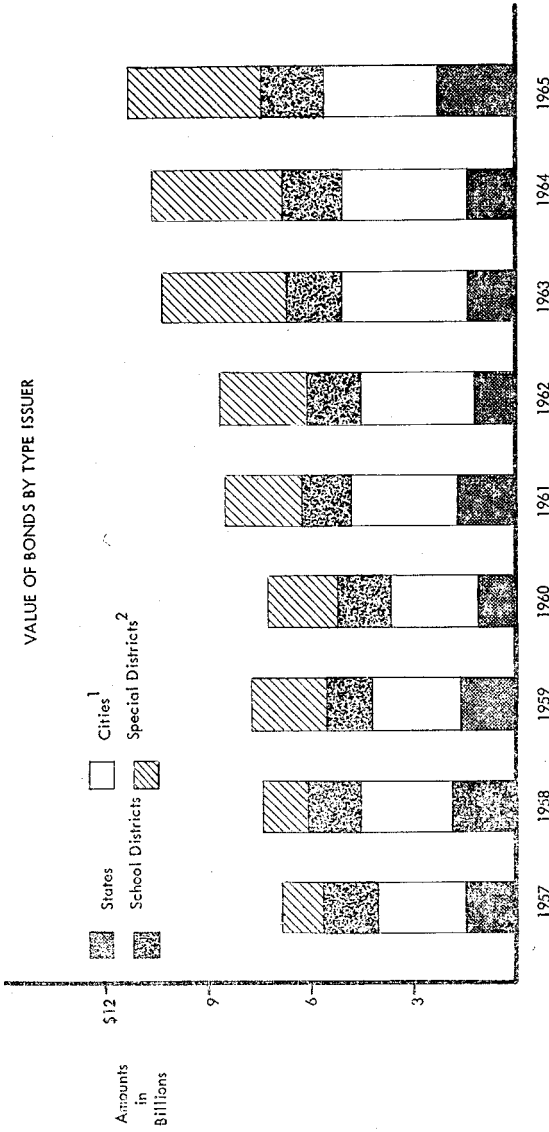
CHART X

THE PERCENTAGE DISTRIBUTION¹ BY USE OF PROCEEDS

Source: Investment Bankers Association of America.

¹, Based on value.

CHART XI
VALUE OF BONDS BY TYPE ISSUER



Source: Investment Bankers Association of America.

1. Includes counties and townships.

2. Includes Statutory Authorities.

1. *Type of public body.*—Chart XI presents a record of the dollar volume of new issues of municipal bonds by type issuer. As would be expected because of the rather constant level of borrowing for education, the dollar value of bonds issued by school districts has remained stable at given level. The amount issued by cities, counties, and townships has increased steadily at a moderate rate, while the amount issued by States has varied appreciably. The most pronounced trend is that for special districts and statutory authorities. The volume of borrowing by these forms of government has risen steadily, from \$1.3 billion in 1957 to nearly \$3.8 billion in 1965, reflecting the increasing use of these governmental bodies.

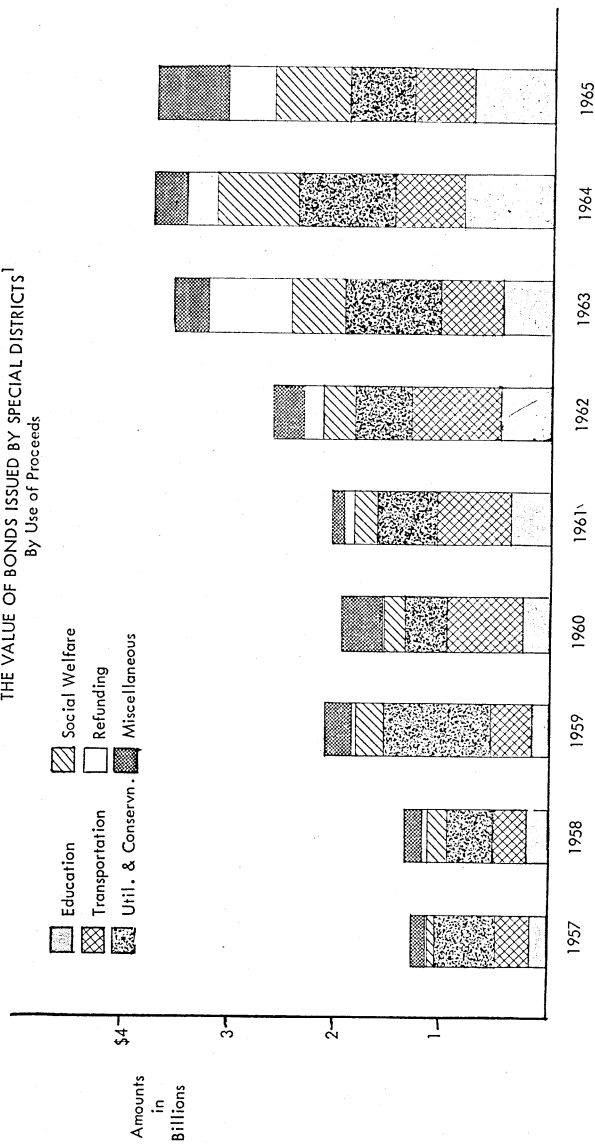
Charts XII and XIII provide additional information about the nature of this increase for special districts and statutory authorities. In Chart XII, the dollar value of bonds issued by these issuers is categorized by the use of proceeds. Social welfare, refunding, and miscellaneous account for most of the increase; each having expanded substantially from 1957 to 1965. Education also expanded substantially, due in part to leasing arrangements necessitated by debt limitations imposed on general obligation issues.

Chart XIII provides a breakdown on the basis of type of security sold by this form of issuer. Increases in revenue issues accounted for most of the dollar amount of additional financing, although on a percentage basis general obligation issues also increased substantially.

Additional statistical information is presented in tables 3 and 4 of the appendix.

2. *Geographic location.*—With an overall increase in the volume of municipal bond issues between 1957 and 1965 of approximately 50 percent, it would be normal to expect an upward trend by individual States as well. Such is indeed the case.

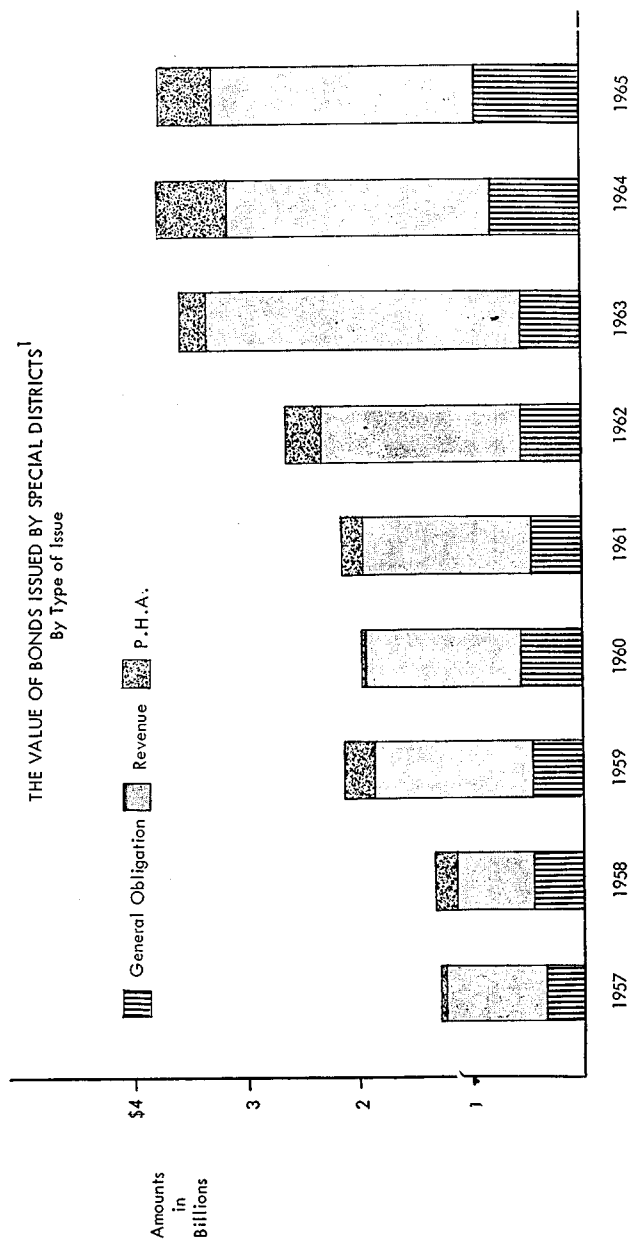
CHART XII
THE VALUE OF BONDS ISSUED BY SPECIAL DISTRICTS¹
By Use of Proceeds



Source: Investment Bankers Association of America.

1. Includes Statutory Authorities.

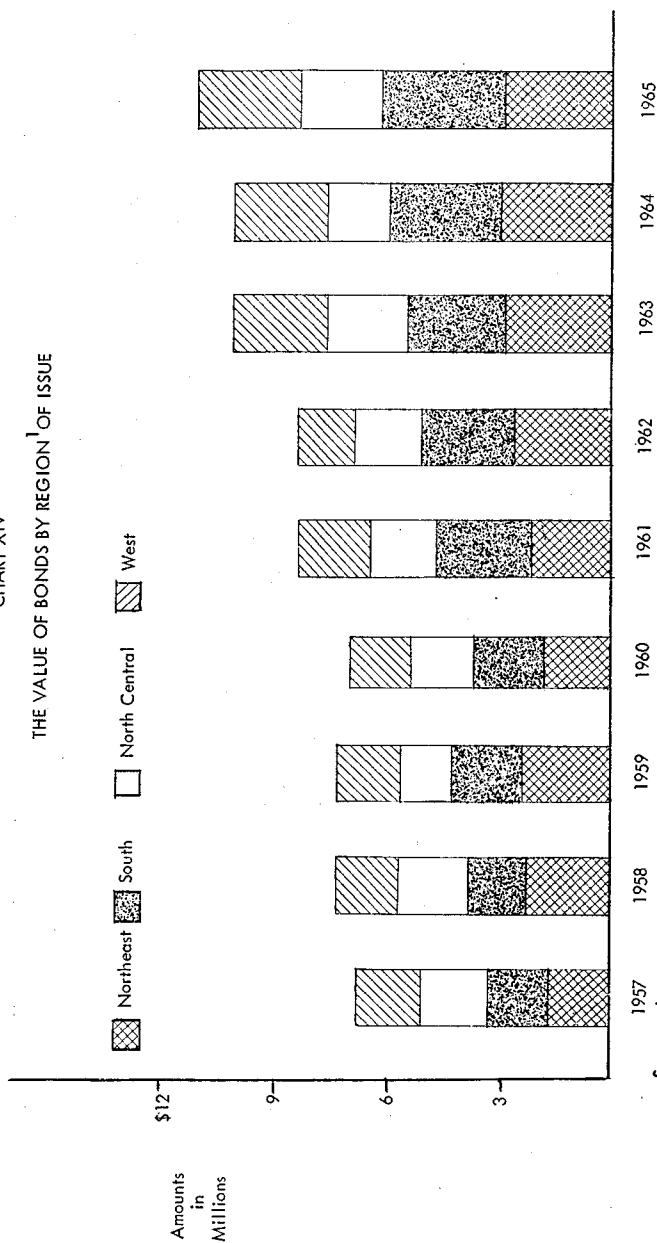
CHART XIII
THE VALUE OF BONDS ISSUED BY SPECIAL DISTRICTS¹
By Type of Issue



Source: Investment Bankers Association of America.

1. Includes Statutory Authorities.

CHART XIV
THE VALUE OF BONDS BY REGION¹ OF ISSUE



Using a general measure of change—the variability is so great in some cases that any measure of change must be general—somewhat less than half of the States did not establish a significant trend—plus or minus about 50 percent—in the level of new debt issues between 1957 and 1965. Four States—Alabama, Arkansas, New Mexico, and Utah—exhibit a definite trend of significantly increasing volume, and Connecticut has definitely reduced its volume of new issues. The remaining States, about half, have established a trend of increasing volume, but less than the four States listed above.

Chart XIV has been constructed to show the regional pattern of new issue growth.¹⁰ All regions showed growth in the dollar volume of bonds issued therein, with the South increasing most rapidly. The Northeast increased nearly as rapidly, followed by the west and north-central regions.

Additional statistical information is presented in table 6 of the appendix.

3. *Size of borrower.*—Even before examining any statistical data about the size of issuer (borrower) one would expect certain relationships to exist. It would be expected that small issuers would borrow in small amounts, that population trends and school consolidation would increase the size of issuing agencies, and that the increasing role of the State in aiding its subdivisions financially would result in a noticeable growth in the percentage of borrowing by the larger units. Not all of these relationships are corroborated by the data presented. Chart XV shows the percentage of the dollar volume of new issues by population category of issuer. Many issuers cannot be assigned a population (e.g., statutory authorities which perform a function not associated with a fixed population, such as a turnpike authority) and such information was not available for others. These have been combined into the classification “population unavailable.” The share of the market attributable to this category has noticeably increased, which is understandable in view of the large growth in importance of “special districts and statutory authorities.” The chart shows the offsetting decline distributed among all other groups, but particularly among the large issuers.

Chart XVI presents the same basic data with percentages calculated on the number of issues rather than value. The pronounced increase in the value of financing in the “unavailable” category is not carried through to the number of issues, denoting a sizable increase in the dollar value of individual issues. If the large increase in percentage of new issues by the smallest population group in 1958 and 1959 is ignored, the percentage distribution has remained very stable over the years.

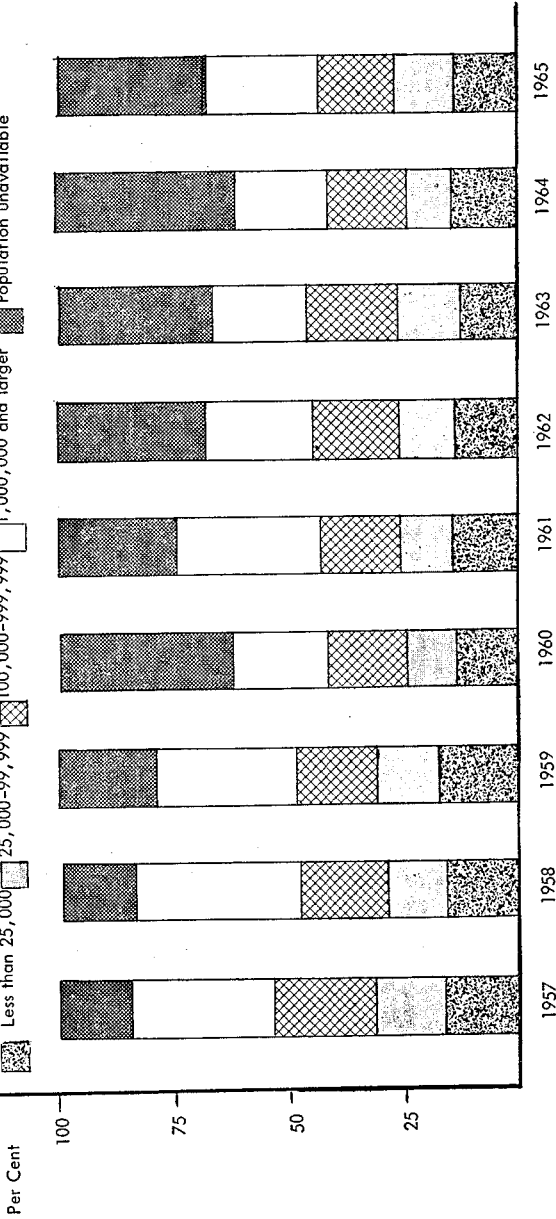
¹⁰ Using the Bureau of the Census definition of census regions.

CHART XV

THE PERCENTAGE DISTRIBUTION OF THE DOLLAR VALUE OF BONDS

By Population Size of Issuer

 Less than 25,000
  25,000-99,999
  100,000-999,999
  1,000,000 and larger
  Population unavailable



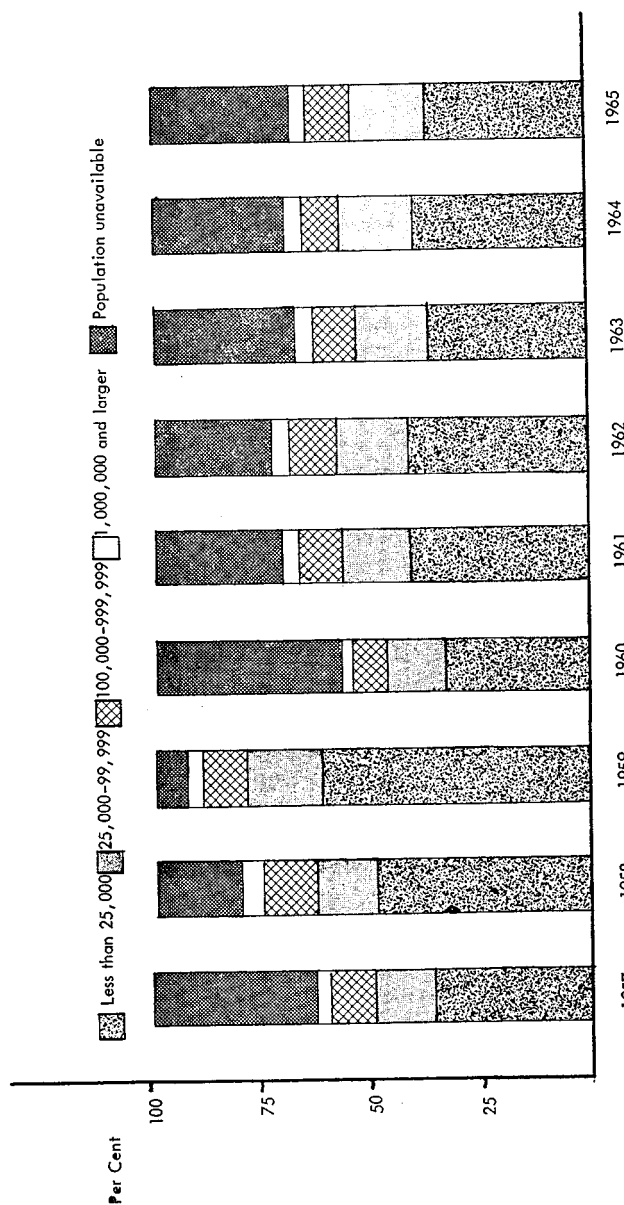
Source: Investment Bankers Association of America.

New Issues of Municipal Bonds, 1957-1965

CHART XVI

THE PERCENTAGE DISTRIBUTION OF THE NUMBER OF ISSUES

By population Size of Issuer



Source: Investment Bankers Association of America.

A comparison of chart XV with chart XVI bears out the suggestion that small issuers borrow by selling bonds in relatively small issues. The other two assumptions about the increasing importance of the large issuer are not borne out unless the increased volume by those issuers for which no population was available represents the larger issuers—which it is in some cases. The evidence is not sufficient to make this judgment, however.

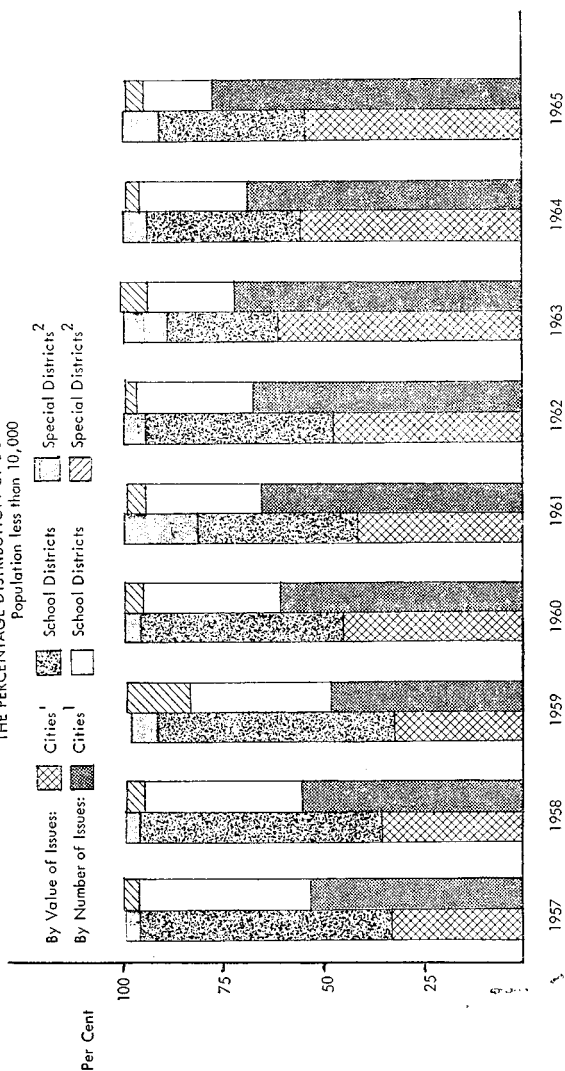
Charts XVII through XIX were constructed to present more detailed information about the issuer. Chart XVII presents data for issuers whose population is 10,000 or less (the smallest available division with the IBA statistics). The shift, within this population bracket, from school districts to cities is most pronounced and undoubtedly the result of school consolidations.

The most significant relationship for the group of issuers 10,000 to 1 million in size (chart XVIII) is the almost complete lack of change over the past 9 years. The only changes are a slight decrease in the share issued by special districts and an increase for cities.

Among the largest issuers, chart XIX, States dominate the picture. Somewhat surprisingly, the most noticeable change has been in the increased percentage of the number of issues by States, offset by a decrease by cities.

CHART XVII

THE PERCENTAGE DISTRIBUTION OF BONDS BY TYPE ISSUER



Source: Investment Bankers Association of America.

1. Includes counties and townships.

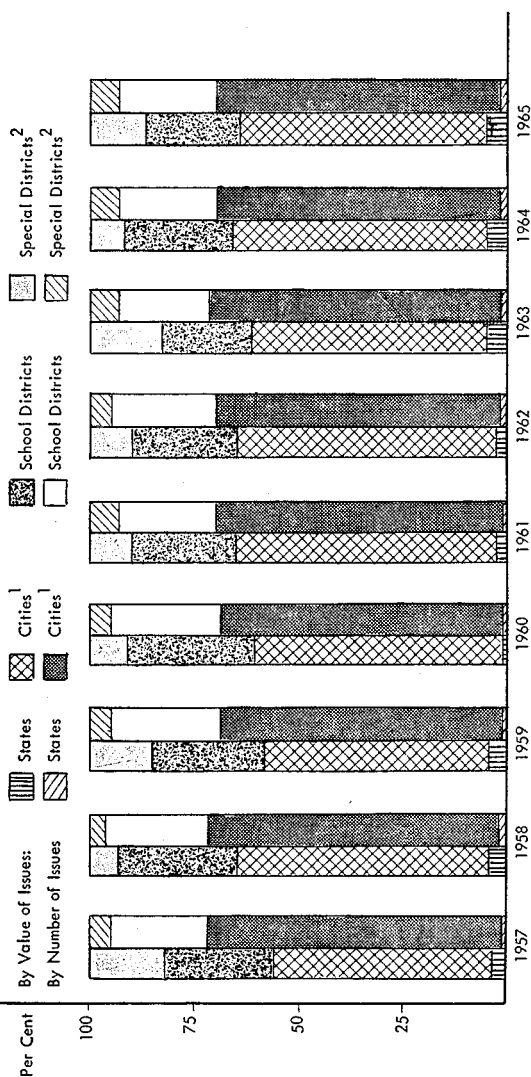
2. Includes Statutory Authorities.

New Issues of Municipal Bonds, 1957-1965

CHART XVIII

THE PERCENTAGE DISTRIBUTION OF BONDS BY TYPE ISSUER

Population 10,000 - 999,999



Source: Investment Bankers Association of America.

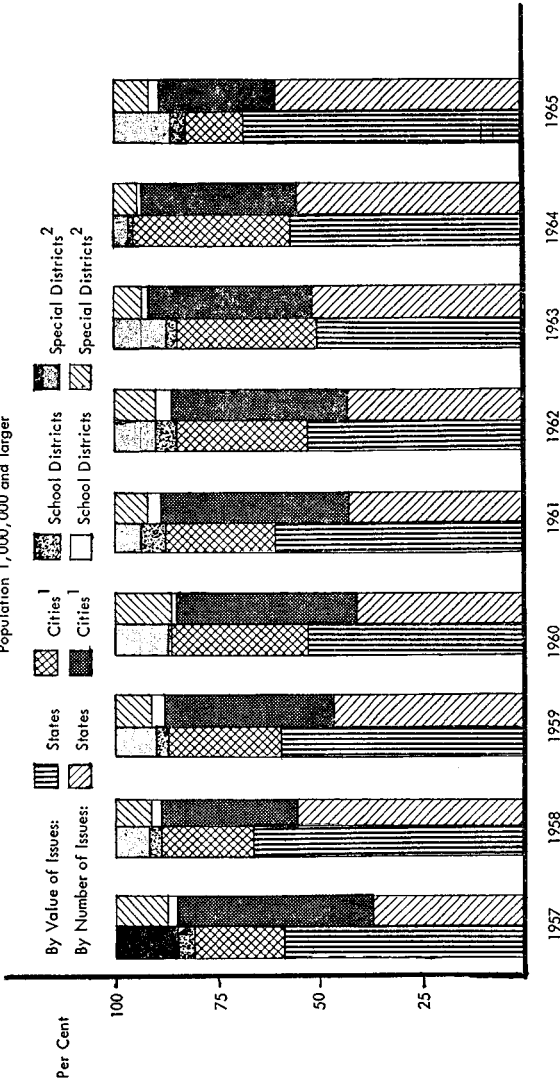
1. Includes counties and townships.

2. Includes Statutory Authorities.

New Issues of Municipal Bonds, 1957-1965

CHART XIX

THE PERCENTAGE DISTRIBUTION OF BONDS BY TYPE ISSUER
Population 1,000,000 and larger



Source: Investment Bankers Association of America.

- 1. Includes counties and townships.
- 2. Includes Statutory Authorities.

APPENDIX

TABLE 1.—*New issues of municipal bonds by type offering and issue, 1957-65*

[Dollar amounts in millions]

Year and type issue	Competitive		Negotiated		Total	
	Amount	Number	Amount	Number	Amount	Number
1957:						
General obligation.....	\$4,525	4,983	\$210	869	\$4,808	6,104
Revenue.....	1,267	444	644	259	1,976	721
Public Housing Authority.....	66	10	-----	-----	66	10
Total.....	5,858	5,437	855	1,128	6,850	6,835
1958:						
General obligation.....	5,247	5,023	198	874	5,515	6,089
Revenue.....	1,207	534	434	328	1,693	893
Public Housing Authority.....	185	44	-----	-----	185	44
Total.....	6,639	5,601	633	1,202	7,394	7,026
1959:						
General obligation.....	4,592	4,866	197	652	4,817	5,682
Revenue.....	1,283	515	1,127	295	2,430	836
Public Housing Authority.....	335	76	-----	-----	335	76
Total.....	6,209	5,457	1,324	947	7,581	6,594
1960:						
General obligation.....	4,629	4,961	136	565	4,775	5,626
Revenue.....	1,242	550	838	315	2,095	881
Public Housing Authority.....	281	68	-----	-----	302	69
Total.....	6,153	5,579	973	880	7,712	6,576
1961:						
General obligation.....	5,601	5,132	126	487	5,739	5,705
Revenue.....	1,468	655	962	292	2,444	954
Public Housing Authority.....	315	116	-----	-----	315	116
Total.....	7,374	5,902	1,088	79	8,498	6,775
1962:						
General obligation.....	5,437	5,238	121	277	5,590	5,526
Revenue.....	1,912	821	774	242	2,711	1,069
Public Housing Authority.....	437	122	-----	-----	437	122
Total.....	7,786	6,181	895	519	8,737	6,717
1963:						
General obligations.....	5,527	4,609	264	663	5,831	5,333
Revenue.....	2,362	904	1,783	572	4,246	1,500
Public Housing Authority.....	254	64	-----	-----	254	64
Total.....	8,143	5,577	2,047	1,235	10,331	6,897
1964:						
General obligations.....	6,194	4,592	195	470	6,402	5,136
Revenue.....	2,181	789	1,377	468	3,608	1,274
Public Housing Authority.....	637	163	-----	-----	637	163
Total.....	9,012	5,544	1,571	938	10,646	6,573
1965:						
General obligation.....	6,989	4,438	167	360	7,266	4,915
Revenue.....	2,410	767	1,025	455	3,521	1,267
Public Housing Authority.....	478	129	-----	-----	478	129
Total.....	9,877	5,334	1,192	815	11,265	6,311

NOTE.—Subtotals may not add to totals due to rounding and inclusion in the total of small amounts not classifiable as competitive or negotiated.

Source: Investment Bankers Association of America.

TABLE 2.—*New issues of municipal bonds by average maturity and type issue, 1957-65*
[Dollars in millions]

Type issue	Average maturity												Total			
	1 through 4		5 through 9		10 through 14		15 through 19		20 through 29		30—				No record	
	Amount	Num-ber	Amount	Num-ber	Amount	Num-ber	Amount	Num-ber	Amount	Num-ber	Amount	Num-ber	Amount	Num-ber	Amount	Num-ber
1957: General obligation..... Revenue..... Public Housing Au- thority..... Total.....	\$104 2	422 9 1	\$795 247 64	1,601 64	\$2,400 235 159	2,056 159	\$812 285 132	694 132	\$190 300 112	137 112	\$4 519	10 29	\$412 389 216	1,184 216	\$4,808 1,976 721	6,104 721
1958: General obligation..... Revenue..... Public Housing Au- thority..... Total.....	106	432	1,043	1,665	2,725	2,215	1,098	826	489	249	522	39	868	1,409	6,850	6,835
1959: General obligation..... Revenue..... Public Housing Au- thority..... Total.....	134 2	446 13	962 181 73	1,639 73	2,506 334 150	1,969 150	1,140 324 140	638 140	265 222 127	127 127	145 243	15 60	363 386	1,255 330	5,515 1,693	6,089 893
1960: General obligation..... Revenue..... Public Housing Au- thority..... Total.....	136	450	1,143	1,712	2,841	2,119	1,464	778	487	254	388	75	935	1,629	7,394	7,026
1961: General obligation..... Revenue..... Public Housing Au- thority..... Total.....	81 8	412 13	801 66	1,536 53	1,951 345	1,763 136	1,182 280	638 127	241 322 107	124 107	4 978	11 81	554 430	1,198 319	4,817 2,430	5,682 836
1962: General obligation..... Revenue..... Public Housing Au- thority..... Total.....	90	425	868	1,589	2,296	1,899	1,462	765	564	231	982	92	1,320	1,593	7,581	6,594
1963: General obligation..... Revenue..... Public Housing Au- thority..... Total.....	91 5	373 8	598 40	1,464 59	2,171 307	1,892 149	1,073 276	602 139	158 309 125	126 125	55 706	8 81	630 453	1,161 320	4,775 2,095	5,626 881
1964: General obligation..... Revenue..... Public Housing Au- thority..... Total.....	95	381	638	1,522	2,477	2,041	1,349	741	467	251	761	89	1,384	1,550	7,172	6,576

TABLE 2.—*New issues of municipal bonds by average maturity and type issue, 1957-65—Continued*
[Dollars in millions]

Type issue	Average maturity												Total			
	1 through 4		5 through 9		10 through 14		15 through 19		20 through 29		30—				No record	
	Amount	Num-ber	Amount	Num-ber	Amount	Num-ber	Amount	Num-ber	Amount	Num-ber	Amount	Num-ber	Amount	Num-ber	Amount	Num-ber
1961:																
General obligation.....	\$149	343	\$690	\$1,448	\$2,612	1,955	\$1,469	608	\$312	137	\$35	12	\$472	1,202	\$5,739	5,705
Revenue.....	8	12	90	55	255	144	432	126	399	131	646	64	613	422	2,444	954
Public Housing Authority.....	22	3			17	3	3	1	104	4			170	105	315	116
Total.....	179	358	780	1,503	2,884	2,102	1,903	735	815	272	681	76	1,255	1,729	8,498	6,775
1962:																
General obligation.....	165	270	649	988	2,037	1,451	852	440	282	76	1	1	1,604	2,300	5,590	5,526
Revenue.....	2	5	26	31	112	66	365	89	157	67	522	44	1,526	767	2,711	1,069
Public Housing Authority.....													437	122	437	122
Total.....	166	275	675	1,019	2,149	1,517	1,217	529	439	143	523	45	3,567	3,189	8,737	6,717
1963:																
General obligation.....	235	274	736	1,191	2,639	1,732	1,239	592	375	150	12	5	595	1,389	5,831	5,333
Revenue.....	11	14	99	68	401	182	657	195	621	174	727	72	1,730	795	4,246	1,500
Public Housing Authority.....													254	64	254	64
Total.....	246	288	835	1,259	3,040	1,914	1,896	787	996	324	739	77	2,579	2,248	10,331	6,897
1964:																
General obligation.....	191	196	755	1,040	2,547	1,715	1,372	600	296	123	298	7	943	1,455	6,402	5,136
Revenue.....	2	5	96	72	377	157	801	192	551	161	770	60	1,010	627	3,608	1,274
Public Housing Authority.....							81	20					556	143	637	163
Total.....	193	201	851	1,112	2,924	1,872	2,254	812	847	284	1,068	67	2,509	2,225	10,646	6,573
1965:																
General obligation.....	337	183	1,127	1,055	3,097	1,748	1,278	567	468	135	235	12	727	1,215	7,266	4,915
Revenue.....	10	9	160	68	366	154	811	202	858	196	219	37	1,096	601	3,521	1,267
Public Housing Authority.....							2	1	31	4			445	124	478	129
Total.....	347	192	1,285	1,123	3,463	1,902	2,091	77	1,357	335	454	49	2,268	1,940	11,265	6,311

NOTE.—Subtotals may not add to totals due to rounding.

Source: Investment Bankers Association of America.

TABLE 3.—*New issues of municipal bonds by use of proceeds and type issuer, 1957-65*
[Dollars in millions]

Type issuer	Use of proceeds												Total				
	Education				Transportation		Utilities and con- serva-tion		Social welfare		Miscellaneous			Refunding			
	Amount		Number		Amount		Number		Amount		Number			Amount		Number	
	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number		Amount	Number		
1957: State..... City, etc..... School district..... Special district..... Total.....	\$249	34	\$558	36	\$14	5	\$84	6	\$499	44	\$2	1	\$1,407	126			
	482	468	355	661	950	1,335	153	258	590	946	34	78	2,565	3,746			
	1,584	2,390	0	0	0	0	0	0	0	0	14	28	1,598	2,418			
	1,116	76	349	95	543	230	96	53	176	88	1	3	1,281	545			
	2,432	2,968	1,263	792	1,508	1,570	333	317	1,265	1,078	51	110	6,850	6,835			
1958: State..... City, etc..... School district..... Special district..... Total.....	406	95	681	45	12	7	108	13	636	60	8	2	1,910	222			
	509	408	396	696	875	1,363	165	287	684	934	43	125	2,673	3,813			
	1,456	2,281	0	0	0	0	0	0	7	1	8	34	2,316	2,316			
	1,152	128	349	79	411	287	224	85	177	85	25	10	1,339	674			
	2,523	2,912	1,428	821	1,299	1,657	557	385	1,503	1,080	84	171	7,394	7,026			
1959: State..... City, etc..... School district..... Special district..... Total.....	334	64	384	36	59	17	93	5	647	53	38	2	1,554	177			
	395	358	440	632	858	1,257	231	279	603	978	33	71	2,560	3,575			
	1,349	2,222	0	0	0	1	0	0	0	0	5	13	2,237	2,237			
	119	99	410	73	1,013	269	265	83	273	75	33	6	2,113	2,605			
	2,196	2,743	1,234	741	1,931	1,544	589	367	1,522	1,107	109	92	7,581	6,594			
1960: State..... City, etc..... School district..... Special district..... Total.....	234	43	246	24	9	5	15	7	508	42	0	0	1,012	121			
	340	336	487	598	819	1,249	407	270	663	912	24	76	2,690	3,441			
	1,477	2,141	0	0	0	0	0	1	0	0	17	24	1,495	2,168			
	253	187	710	103	420	330	170	64	418	160	4	4	1,975	846			
	2,304	2,707	1,394	725	1,247	1,584	593	342	1,589	1,114	45	104	7,172	6,576			

TABLE 3.—*New issues of municipal bonds by use of proceeds and type issuer, 1957-65*—Continued
[Dollars in millions]

Type issuer	Use of proceeds										Total			
	Education		Transportation		Utilities and conservation		Social welfare		Miscellaneous				Refunding	
	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number
1961:														
State.....	\$434	64	\$369	36	\$51	10	\$105	15	\$869	41	\$2	1	\$1,829	167
City, etc.....	485	494	509	669	1,033	1,336	290	291	745	941	24	69	3,085	3,740
School district.....	1,417	1,982	0	0	0	0	0	0	0	2	7	12	1,425	1,996
Special district.....	384	174	687	112	537	328	239	114	231	135	71	9	2,160	872
Total.....	2,729	2,654	1,565	817	1,621	1,674	634	420	1,846	1,119	103	91	8,498	6,775
1962:														
State.....	371	103	315	24	26	4	223	17	356	34	16	2	1,307	184
City, etc.....	460	405	449	595	989	1,193	247	241	987	934	109	113	3,242	3,481
School district.....	1,562	2,041	0	0	0	0	0	0	2	4	15	27	1,578	2,072
Special district.....	477	210	826	118	519	312	347	148	300	139	141	53	2,069	980
Total.....	2,870	2,759	1,591	737	1,534	1,509	817	406	1,644	1,111	280	195	8,737	6,717
1963:														
State.....	442	101	267	30	13	4	186	14	401	49	142	10	1,450	208
City, etc.....	513	420	466	526	1,121	1,371	242	260	1,032	917	353	234	3,727	3,728
School district.....	1,429	1,683	0	0	0	0	0	0	1	1	140	119	1,804	1,804
Special district.....	461	301	625	109	915	408	494	124	316	121	775	94	3,586	1,157
Total.....	2,844	2,505	1,358	665	2,048	1,783	922	399	1,749	1,087	1,409	457	10,331	6,897
1964:														
State.....	462	93	202	22	259	10	67	13	456	52	49	6	1,496	196
City, etc.....	383	307	277	455	1,139	1,231	192	234	1,474	869	208	154	3,674	3,250
School district.....	1,610	1,694	0	0	0	0	0	0	2	2	84	99	1,694	1,795
Special district.....	809	299	684	138	901	457	783	236	301	128	304	74	3,783	1,332
Total.....	3,265	2,393	1,163	615	2,299	1,698	1,043	483	2,231	1,051	646	333	10,646	6,573
1965:														
State.....	560	91	360	23	203	5	85	12	1,060	69	15	3	2,283	293
City, etc.....	458	365	410	412	984	1,054	223	253	1,030	916	219	164	3,371	3,186
School district.....	1,721	1,596	0	0	0	0	0	0	0	0	0	69	1,840	1,703
Special district.....	757	278	568	125	621	354	671	185	695	201	292	64	3,772	1,219
Total.....	3,497	2,330	1,338	560	1,809	1,413	979	450	2,785	1,186	585	300	11,265	6,311

NOTE.—Subtotals may not add to totals due to rounding.

Source: Investment Bankers Association of America.

TABLE 4.—*New issues of municipal bonds by type issue and issuer, 1957-65*
[Dollar amounts in millions]

Type issuer	Type issue						Total	
	General obligation		Revenue		Public Housing Authority			
	Amount	Number	Amount	Number	Amount	Number	Amount	Number
1957:								
State.....	\$993	89	\$413	37	0	0	\$1,407	126
City, etc.....	1,891	3,240	673	506	0	0	2,565	3,746
School districts.....	1,594	2,411	4	7	0	0	1,598	2,418
Special districts.....	329	364	885	171	\$66	10	1,281	545
Total.....	4,808	6,104	1,976	721	66	10	6,850	6,835
1958:								
State.....	1,524	148	386	74	0	0	1,910	222
City, etc.....	2,099	3,244	574	569	0	0	2,673	3,813
School districts.....	1,471	2,314			0	0	1,471	2,316
Special districts.....	421	382	733	248	185	44	1,339	674
Total.....	5,515	6,089	1,693	893	185	44	7,394	7,026
1959:								
State.....	1,229	123	325	54	0	0	1,554	177
City, etc.....	1,821	3,011	633	530	105	34	2,560	3,575
School district.....	1,345	2,221	9	16	0	0	1,354	2,237
Special district.....	421	327	1,462	236	229	42	2,113	605
Total.....	4,817	5,682	2,430	836	335	76	7,581	6,594
1960:								
State.....	857	93	156	28	0	0	1,012	121
City etc.....	1,836	2,870	573	503	281	68	2,690	3,441
School districts.....	1,491	2,160	3	6	0	0	1,495	2,166
Special district.....	591	503	1,364	344	20	1	1,975	848
Total.....	4,775	5,626	2,095	881	302	69	7,172	6,576
1961:								
State.....	1,510	113	256	52	63	2	1,829	167
City, etc.....	2,333	3,110	692	585	60	45	3,085	3,740
School district.....	1,404	1,987	21	9	0	0	1,425	1,996
Special district.....	493	495	1,475	308	192	69	2,160	872
Total.....	5,739	5,705	2,444	954	316	116	8,498	6,775
1962:								
State.....	985	90	267	92	55	2	1,307	184
City, etc.....	2,437	2,887	725	572	80	22	3,242	3,481
School district.....	1,578	2,070		2	0	0	1,578	2,072
Special district.....	589	479	1,718	403	302	98	2,609	980
Total.....	5,590	5,526	2,711	1,069	437	122	8,737	6,717
1963:								
State.....	1,090	121	360	87	0	0	1,450	208
City, etc.....	2,618	2,921	1,109	867	0	0	3,727	3,728
School district.....	1,567	1,797	2	7	0	0	1,569	1,804
Special district.....	556	494	2,776	599	254	64	3,586	1,157
Total.....	5,831	5,333	4,246	1,500	254	64	10,331	6,897
1964:								
State.....	1,298	126	198	70	0	0	1,496	196
City, etc.....	2,602	2,602	1,072	648	0	0	3,674	3,250
School district.....	1,693	1,793	1	2	0	0	1,694	1,795
Special district.....	809	615	2,336	554	637	163	3,783	1,332
Total.....	6,402	5,136	3,608	1,274	637	163	10,646	6,573
1965:								
State.....	2,053	125	230	78	0	0	2,283	203
City, etc.....	2,406	2,578	964	608	0	0	3,371	3,186
School district.....	1,838	1,700	1	3	0	0	1,840	1,703
Special district.....	968	512	2,325	578	478	129	3,772	1,219
Total.....	7,266	4,915	3,521	1,267	478	129	11,265	6,311

NOTE.—Subtotals may not add to totals due to rounding.

Source: Investment Bankers Association of America.

TABLE 5.—*New issues of municipal bonds by size and type issuer, 1957-65*
[Dollars in millions]

Year and size of issuer	Type issuer						Total	
	States		Cities, etc.		School districts		Special districts and Public Authority	
	Amount	Number	Amount	Number	Amount	Number	Amount	Number
1957								
Less than 10,000.....	0	0	\$171	859	\$322	643	\$22	65
10,000 to 24,999.....	0	0	220	564	260	301	72	40
25,000 to 49,999.....	0	0	211	388	171	132	276	24
50,000 to 99,999.....	0	0	248	265	167	87	26	19
100,000 to 249,999.....	0	0	369	259	97	42	104	21
250,000 to 499,999.....	\$41	13	272	146	74	17	570	322
500,000 to 999,999.....	73	12	326	153	57	9	441	189
1,000,000 and larger.....	1,262	86	464	112	91	7	490	187
Population not recorded.....	30	15	284	1,000	369	1,180	2,142	232
Total.....	1,407	126	2,565	3,746	1,598	2,418	6,850	2,518
1958								
Less than 10,000.....	0	0	236	1,381	379	936	642	2,452
10,000 to 24,999.....	0	0	216	592	261	324	24	33
25,000 to 49,999.....	0	0	293	444	244	196	21	21
50,000 to 99,999.....	0	0	269	293	117	82	33	20
100,000 to 249,999.....	2	3	332	290	111	49	57	30
250,000 to 499,999.....	50	15	251	149	49	10	34	8
500,000 to 999,999.....	82	27	436	170	43	7	27	7
1,000,000 and larger.....	1,711	149	568	87	75	5	589	211
Population not recorded.....	65	28	72	407	192	707	2,546	264
Total.....	1,910	222	2,673	3,813	1,471	2,316	7,394	1,542
1959								
Less than 10,000.....	0	0	253	1,493	431	1,370	58	181
10,000 to 24,999.....	0	0	236	571	308	376	22	35
25,000 to 49,999.....	0	0	276	434	183	178	225	42
50,000 to 99,999.....	0	0	233	301	125	106	25	24
100,000 to 249,999.....	0	0	275	237	110	55	40	29
250,000 to 499,999.....	48	13	220	123	32	11	74	16
500,000 to 999,999.....	69	16	380	162	49	6	28	11
1,000,000 and larger.....	1,363	111	617	95	64	7	228	21
Population not recorded.....	73	37	69	159	53	128	1,399	246
Total.....	1,554	177	2,560	3,575	1,354	2,237	7,581	654

1960	Less than 10,000.....	0	177	795	196	448	19	65	392	1,308
	10,000 to 24,999.....	0	200	598	278	296	21	32	496	836
	25,000 to 49,999.....	0	238	325	160	195	8	19	406	490
	50,000 to 99,999.....	0	203	266	129	80	17	15	370	441
	100,000 to 249,999.....	0	340	211	89	45	42	23	471	279
	250,000 to 499,999.....	17	193	100	40	11	50	14	300	129
	500,000 to 999,999.....	17	295	130	41	5	78	18	430	158
	1,000,000 and larger.....	770	479	77	20	2	189	25	1,457	180
	Population not recorded.....	209	566	1,029	542	1,126	1,551	637	2,868	2,827
	Total.....	1,012	2,690	3,441	1,495	2,166	1,975	848	7,172	6,576
1961	Less than 10,000.....	0	238	1,097	226	481	103	86	567	1,664
	10,000 to 24,999.....	0	260	634	296	344	52	66	608	1,044
	25,000 to 49,999.....	0	317	447	172	168	49	37	38	642
	50,000 to 99,999.....	0	257	324	163	83	29	20	404	427
	100,000 to 249,999.....	0	307	209	105	50	76	34	477	293
	250,000 to 499,999.....	30	344	180	30	10	30	16	435	221
	500,000 to 999,999.....	60	398	164	51	6	73	22	581	201
	1,000,000 and larger.....	1,577	701	114	115	7	180	20	2,573	248
	Population not recorded.....	161	262	571	323	857	1,569	571	2,316	2,035
	Total.....	1,829	3,085	3,740	1,425	1,996	2,160	872	8,498	6,775
1962	Less than 10,000.....	0	269	1,165	250	505	30	48	549	1,719
	10,000 to 24,999.....	0	286	647	325	368	54	41	675	1,056
	25,000 to 49,999.....	0	294	304	214	193	64	17	572	654
	50,000 to 99,999.....	0	282	242	152	100	21	27	455	436
	100,000 to 249,999.....	7	400	242	110	38	37	22	553	307
	250,000 to 499,999.....	48	323	165	32	10	21	12	525	207
	500,000 to 999,999.....	37	363	192	38	4	132	22	570	162
	1,000,000 and larger.....	1,076	530	102	103	9	208	28	2,036	254
	Population not recorded.....	139	263	281	355	845	2,043	763	2,801	1,923
	Total.....	1,307	3,242	3,481	1,578	2,072	2,609	980	8,737	6,717
1963	Less than 10,000.....	0	351	1,199	162	346	62	84	576	1,629
	10,000 to 24,999.....	0	334	1,589	222	251	136	80	691	920
	25,000 to 49,999.....	0	302	461	205	163	272	51	869	675
	50,000 to 99,999.....	0	293	294	200	97	51	15	544	406
	100,000 to 249,999.....	8	446	242	176	44	72	21	702	311
	250,000 to 499,999.....	27	457	165	67	13	115	11	664	200
	500,000 to 999,999.....	168	416	123	47	5	65	10	696	183
	1,000,000 and larger.....	1,060	710	93	50	3	256	14	2,083	230
	Population not recorded.....	187	323	562	440	882	2,556	871	3,506	2,343
	Total.....	1,450	3,727	3,738	1,569	1,804	3,586	1,157	10,331	6,897

TABLE 5.—*New issues of municipal bonds by size and type issuer, 1957-65—Continued*
 [Dollars in millions]

Year and size of issuer	Type issuer								Total		
	States		Cities, etc.		School districts		Special districts and Public Authority				
	Amount	Number	Amount	Number	Amount	Number	Amount	Number			
1964	Less than 10,000.....	0	0	\$366	1,125	\$256	410	\$39	76	\$662	1,611
	10,000 to 24,999.....	0	0	402	600	305	275	64	78	771	1,951
	25,000 to 49,999.....	0	0	359	443	237	174	49	38	644	1,652
	50,000 to 99,999.....	0	0	305	305	172	99	56	21	533	425
	100,000 to 249,999.....	88	1	427	193	133	45	44	21	611	260
	250,000 to 499,999.....	105	31	337	140	45	8	45	10	532	180
	500,000 to 999,999.....	76	30	485	133	42	4	61	17	663	184
	1,000,000 and larger.....	1,267	107	815	71	25	1	90	12	2,196	191
	Population not recorded.....	40	27	178	240	478	779	3,336	1,059	4,013	2,105
	Total.....	1,496	196	3,674	3,250	1,694	1,795	3,783	1,332	10,646	6,573
1965	Less than 10,000.....	0	0	336	1,049	220	232	55	68	611	1,349
	10,000 to 24,999.....	0	0	435	616	297	256	116	75	847	1,947
	25,000 to 49,999.....	0	0	494	447	207	166	60	36	762	640
	50,000 to 99,999.....	0	0	385	293	198	97	65	30	648	420
	100,000 to 249,999.....	0	0	404	214	191	56	41	16	636	286
	250,000 to 499,999.....	45	6	491	160	55	7	58	12	649	182
	500,000 to 999,999.....	194	41	384	84	34	4	190	19	659	148
	1,000,000 and larger.....	1,830	128	384	59	84	4	367	18	2,664	209
	Population not recorded.....	215	28	200	264	554	881	2,821	945	3,790	2,118
	Total.....	2,283	203	3,371	3,186	1,840	1,703	3,772	1,219	11,265	6,311

NOTE.—Subtotals may not add to totals due to rounding and miscellaneous issuers not given in subtotals. Source: Investment Bankers Association of America.

TABLE 6.—*The volume of new issues, by State of origin and type issuer, 1957-65*

[In millions of dollars]

State and type issuer	1957	1958	1959	1960	1961	1962	1963	1964	1965
Alabama.....	77	77	138	161	147	118	120	228	369
State.....		21	2	4		9	3	10	
Cities and counties.....	43	51	61	49	91	52	46	94	83
School districts.....	4		1	1			1	1	
Special districts, public authorities.....	31	5	74	108	55	57	69	122	285
Alaska.....	2	20	16	18	36	29	34	26	12
State.....		2			14	7	8	8	
Cities and counties.....	2	15	11	10	16	11	15	2	12
School districts.....		3	4	7	5	10	2	17	1
Special districts, public authorities.....				1	2	1	10		
Arizona.....	51	26	65	65	58	96	50	86	100
State.....				2		1	1	2	3
Cities and counties.....	26	10	30	17	28	58	32	23	41
School districts.....	20	16	15	27	28	21	11	22	26
Special districts, public authorities.....	5		20	19	2	18	6	39	34
Arkansas.....	15	11	19	15	21	18	51	101	49
State.....							1		
Cities and counties.....	14	11	14	10	6	11	29	76	19
School districts.....	1		4	4	11	5	9	9	11
Special districts, public authorities.....					4	2	12	16	19
California.....	888	1,081	953	1,081	1,317	877	1,103	1,349	1,642
State.....	300	400	250	393	591	207	200	644	535
Cities and counties.....	208	242	188	216	212	225	205	177	236
School districts.....	289	239	240	232	316	251	209	254	249
Special districts, public authorities.....	92	199	275	241	198	194	489	273	622
Canada.....									
State.....									
Cities and counties.....									
School districts.....									
Special districts, public authorities.....									
Colorado.....	67	73	41	36	47	70	204	151	137
State.....	16	5	6				28	6	1
Cities and counties.....	32	43	20	21	20	30	47	53	57
School districts.....	18	24	15	12	26	35	107	46	48
Special districts, public authorities.....				2	1	6	22	45	31
Connecticut.....	263	232	209	132	185	205	117	187	189
State.....	149	127	140	64	95	102	49	94	91
Cities and counties.....	77	96	62	56	81	95	61	81	94
School districts.....		5	1	7	1	2			
Special districts, public authorities.....	37	4	6	4	8	7	8	12	4
Delaware.....	41	56	42	32	23	74	21	170	59
State.....	32	38	29	16	11	38	12	49	3
Cities and counties.....	5	6	11	16	5	1	7	6	1
School districts.....	4	12	1		7	4	1	12	8
Special districts, public authorities.....						32	1	104	3
District of Columbia.....	1	185	110	35	3			14	8
State.....									
Cities and counties.....			6						
School districts.....									
Special districts, public authorities.....	1	185	104	35	3			14	8
Florida.....	267	167	159	240	320	248	297	499	364
State.....		20	19	18	8	10			
Cities and counties.....	132	101	74	119	94	122	193	171	169
School districts.....	54	12	21	14	34	13	23	57	48
Special districts, public authorities.....	80	33	45	89	184	104	81	271	147
Georgia.....	120	108	56	49	183	212	137	171	204
State.....					30				
Cities and counties.....	55	45	36	44	40	66	68	46	65
School districts.....	14	7	18	3	10	11	28	8	7
Special districts, public authorities.....	51	56	2	2	104	135	41	116	132

TABLE 3.—*The volume of new issues, by State of origin and type issuer, 1957-65—Continued*

[In millions of dollars]

State and type issuer	1957	1958	1959	1960	1961	1962	1963	1964	1965
Hawaii.....	48	36	65	23	32	29	76	55	58
State.....	34	21	53	7	10	10	66	30	32
Cities and counties.....	15	15	12	16	22	18	11	20	10
School districts.....									
Special districts, public authorities.....						1		5	16
Idaho.....	4	11	10	10	11	11	10	8	11
State.....			1				1		2
Cities and counties.....	1	7		2	5	2	2	2	4
School districts.....	2	4	3	8	6	8	7	4	4
Special districts, public authorities.....			4			1		3	1
Illinois.....	336	379	425	324	424	426	564	344	354
State.....	4	3	8	18	124	106	183	24	8
Cities and counties.....	206	183	281	182	143	130	70	83	90
School districts.....	98	78	77	75	61	75	109	82	110
Special districts, public authorities.....	28	115	59	49	96	115	202	155	146
Indiana.....	71	145	133	78	119	143	107	137	187
State.....		43	7	6	8	10	8		2
Cities and counties.....	33	50	40	31	52	71	33	25	40
School districts.....	15	8	17	14	15	8	8	2	5
Special districts, public authorities.....	24	45	60	26	43	54	58	110	140
Iowa.....	38	68	49	48	50	59	52	53	58
State.....		25							7
Cities and counties.....	16	22	20	23	32	27	14	17	29
School districts.....	21	21	28	25	19	28	21	15	21
Special districts, public authorities.....						4	17	21	1
Kansas.....	133	56	42	55	52	60	62	64	104
State.....		1	1	1	1	1			
Cities and counties.....	76	33	21	32	28	42	22	35	71
School districts.....	16	21	20	20	19	15	9	7	8
Special districts, public authorities.....	41	1		2	4	11	31	23	25
Kentucky.....	72	60	37	102	415	138	228	147	155
State.....	35	35	3	41	169	42	85	56	21
Cities and counties.....	29	25	34	50	79	55	122	65	87
School districts.....									
Special districts, public authorities.....	8			10	166	40	21	25	47
Louisiana.....	151	140	123	140	105	288	306	190	299
State.....	12	21	31	52			61		2
Cities and counties.....	47	35	35	48	49	94	116	59	104
School districts.....	50	66	40	21	14	30	22	41	44
Special districts, public authorities.....	43	18	17	19	42	165	107	90	149
Maine.....	5	16	21	17	24	19	28	20	17
State.....		6	10	7	10	3	18	12	5
Cities and counties.....	3	4	7	6	6	12	5	6	7
School districts.....	1		2	2	4	2	1	1	4
Special districts, public authorities.....	1	7	3	2	4	2	3	2	1
Maryland.....	120	175	137	124	189	247	263	223	228
State.....	24	41	12	37	37	34	64	37	69
Cities and counties.....	68	87	86	30	96	97	135	106	99
School districts.....									
Special districts, public authorities.....	28	47	39	57	55	116	63	80	61
Massachusetts.....	256	308	324	172	231	383	219	447	251
State.....	129	159	84	35	109	40	76	62	93
Cities and counties.....	108	122	97	104	102	134	117	206	111
School districts.....	5	17	11	10	11	2	3	8	17
Special districts, public authorities.....	13	11	133	23	9	207	24	171	31
Michigan.....	267	350	373	349	397	349	288	392	380
State.....	52	103	75	93	102	86	8	6	5
Cities and counties.....	80	103	135	95	147	124	147	180	133
School districts.....	135	123	141	140	103	121	111	150	185
Special districts, public authorities.....		21	22	21	45	19	22	56	57

TABLE 3.—*The volume of new issues, by State of origin and type issuer, 1957-65—Continued*

[In millions of dollars]

State and type issuer	1957	1958	1959	1960	1961	1962	1963	1964	1965
Ohio.....	472	396	306	305	312	281	318	345	416
State.....	220	155	65	17	70	7	3	2	90
Cities and counties.....	139	139	132	125	130	127	178	102	148
School districts.....	114	102	100	153	100	116	103	117	124
Special districts, public authorities.....	---	---	8	10	12	31	35	124	54
Oklahoma.....	48	69	42	98	204	82	182	89	150
State.....	---	---	---	---	36	2	6	1	15
Cities and counties.....	26	18	25	16	45	44	53	49	74
School districts.....	18	23	17	16	11	24	28	34	26
Special districts, public authorities.....	3	27	---	66	113	13	90	6	34
Oregon.....	91	55	95	59	136	79	101	125	57
State.....	52	24	63	1	81	30	11	61	---
Cities and counties.....	15	12	11	39	18	16	53	18	19
School districts.....	19	14	16	15	21	23	24	25	31
Special districts, public authorities.....	5	6	5	5	17	11	12	22	7
Pennsylvania.....	298	384	485	395	406	588	768	649	675
State.....	11	24	131	---	---	27	22	---	27
Cities and counties.....	74	91	105	139	72	71	102	109	105
School districts.....	32	38	34	31	11	32	29	27	74
Special districts, public authorities.....	181	232	215	225	323	458	615	514	469
Puerto Rico.....	37	69	102	94	95	147	101	122	155
State.....	10	27	55	17	40	25	30	53	54
Cities and counties.....	5	1	14	35	7	38	27	17	11
School districts.....	---	---	---	---	---	---	---	---	---
Special districts, public authorities.....	22	40	33	43	49	84	43	53	90
Rhode Island.....	43	44	15	10	29	40	59	49	84
State.....	27	19	---	2	11	19	38	23	24
Cities and counties.....	16	24	13	7	14	20	21	22	30
School districts.....	---	1	1	1	---	---	---	---	2
Special districts, public authorities.....	---	1	---	---	4	---	---	4	28
South Carolina.....	44	63	44	27	36	32	46	23	63
State.....	21	46	17	5	6	5	5	---	17
Cities and counties.....	14	11	15	10	15	12	21	13	30
School districts.....	2	1	9	5	7	5	18	5	8
Special districts, public authorities.....	6	4	3	8	8	9	3	5	8
South Dakota.....	10	6	8	5	7	3	7	13	12
State.....	---	---	---	---	---	---	---	---	---
Cities and counties.....	2	4	4	3	4	1	2	3	4
School districts.....	7	1	4	2	3	2	5	8	7
Special districts, public authorities.....	---	---	---	---	---	---	---	2	---
Tennessee.....	59	92	91	106	125	156	301	157	149
State.....	10	15	15	15	16	14	25	18	25
Cities and counties.....	48	74	76	84	106	122	156	121	103
School districts.....	---	---	---	2	---	---	---	---	---
Special districts, public authorities.....	1	3	---	5	3	20	120	18	21
Texas.....	387	360	345	308	422	444	440	471	657
State.....	16	67	30	1	79	10	1	3	3
Cities and counties.....	192	160	179	158	197	217	201	244	227
School districts.....	132	103	101	102	97	136	169	141	208
Special districts, public authorities.....	47	30	36	47	49	81	70	82	218
Utah.....	8	26	16	19	21	48	21	43	102
State.....	---	---	---	---	---	---	2	5	79
Cities and counties.....	1	5	4	5	8	19	3	19	3
School districts.....	---	10	12	9	7	27	15	18	18
Special districts, public authorities.....	7	10	1	5	7	2	---	1	3

TABLE 6.—*The volume of new issues, by State of origin and type issuer, 1957-65—Continued*

[In millions of dollars]

State and type issuer	1957	1958	1959	1960	1961	1962	1963	1964	1965
Vermont.....	16	15	15	17	8	12	16	20	22
State.....	9	12	13	14	5	10	6	17	10
Cities and counties.....	4	1	1	1	2	1	7	4	4
School districts.....	3	2	1	3	1	1	3	2	7
Special districts, public authorities.....									
Virginia.....	71	53	67	308	119	128	114	110	166
State.....					1	7	2	2	34
Cities and counties.....	69	47	62	58	82	98	96	77	65
School districts.....	2		3					3	1
Special districts, public authorities.....		7	1	250	36	23	17	27	66
Virgin Islands.....				2		7			9
State.....									5
Cities and counties.....									
School districts.....									
Special districts, public authorities.....				2		7			4
Washington.....	481	104	320	211	111	203	723	540	269
State.....	85	13	38	47	3	64	37	23	56
Cities and counties.....	33	51	27	85	64	35	75	149	125
School districts.....	54	25	41	40	26	34	26	35	53
Special districts, public authorities.....	309	15	215	39	18	70	584	333	36
West Virginia.....	4	23	56	17	24	27	16	61	84
State.....		19	18	10	3	14	4	21	63
Cities and counties.....	4	4	35	1	12	7	10	14	9
School districts.....			3	1				5	
Special districts, public authorities.....				4	9	6	1	21	12
Wisconsin.....	128	100	92	113	182	164	133	160	222
State.....	93	74	78	91	122	15	90	103	124
Cities and counties.....	31	17	14	422	24	83	42	41	22
School districts.....	4	8			36	10	1	16	77
Special districts, public authorities.....									
Wyoming.....	7	8	17	13	21	4	16	10	16
State.....	3	1	9	3			6		2
Cities and counties.....	3	7	2	1	11	2	5	5	2
School districts.....	3		6	8	9	2	5	4	2
Special districts, public authorities.....	1			1				2	12

NOTE.—Subtotals may not add to totals due to rounding.

Source: Investment Bankers Association of America.

TABLE 7.—*New issues of municipal bonds, by region¹ of issue*

Year	Region							
	Northeast		South		North-central		West	
	Amount ²	Number	Amount ²	Number	Amount ²	Number	Amount ²	Number
1957.....	\$1,749	1,511	\$1,584	1,692	\$1,789	2,438	\$1,691	1,184
1958.....	2,181	1,594	1,798	1,863	1,849	2,363	1,496	1,177
1959.....	2,493	1,347	1,636	1,832	1,717	2,262	1,633	1,144
1960.....	1,953	1,459	1,932	1,698	1,579	2,145	1,611	1,253
1961.....	2,229	1,418	2,510	1,821	1,804	2,323	1,860	1,203
1962.....	2,870	1,454	2,350	1,903	1,840	2,211	1,520	1,137
1963.....	3,022	1,529	2,694	2,153	2,035	2,024	2,480	1,176
1964.....	3,162	1,461	2,854	1,979	1,935	1,954	2,573	1,166
1965.....	3,053	1,380	3,271	1,991	2,216	1,789	2,559	1,137

¹ Bureau of the Census, census region.² Millions omitted.

Source: Investment Bankers Association of America.

CHAPTER 6

Patterns of General Obligation Bonds*

INTRODUCTION

In the following discussion concerning the present availability of general obligation bond issues as a credit resource for financing State and local public facilities, consideration is given only to the type of bond issue which has traditionally been known in the municipal bond market as "general obligations," to wit: bonds to the payment of which is pledged the full faith and credit of the issuer and which are payable from and primarily secured by ad valorem taxes upon all of the taxable property within the boundaries of the issuer, subject to taxation by the issuer, without limitation of rate or amount. Not included are revenue bonds, assessment bonds, special excise tax bonds, or bonds for the payment of which the full faith and credit of the issuer is pledged, but for the payment of which the issuer has either no power or limited power to levy ad valorem taxes.

1. HISTORICAL DEVELOPMENT

A. PRIOR TO WORLD WAR II

During this period practically all of the State and municipal long-term financing was through the medium of general obligation bonds. The next largest volume of municipal financing (prior to the financial crisis of 1929) was through bonds payable from assessments on property specially benefited from the improvements constructed from the proceeds of such bonds. In the early 1930's, about \$2 billion or approximately 9 percent, of all municipal bonds then outstanding, including the bonds of at least one State, went into default, a situation which, together with very high delinquencies in tax and assessment collections, resulted in a substantial reduction in public borrowing and increased interest costs to issuers. There was practically no market for assessment bonds, as the real estate development boom had burst, and this type of new issue became only a trickle mostly locally absorbed. This was a period when States and local agencies curtailed their borrowing only to provide ultraessential public facilities, and the so-called "frills," or luxury items, were abandoned.

B. DURING WORLD WAR II

At or shortly prior to the outbreak of World War II the Capital Issues Commission was created with regional committees established in various parts of the country to implement the rules set by the Com-

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mission governing public financing. Without going into detail, the general purpose of the Commission was to limit borrowing by public agencies to those purposes closely associated to health and safety, except to provide services for rapidly growing populations in defense areas. The regional committees were very strict in examining and approving proposed bond issues for capital improvements, and the voluntary cooperation of the underwriters and dealers in municipal bonds was remarkable. As a result the amount of bonds of every type issued for new projects during this period was at a minimum, and the total amount of general obligation bonds outstanding had declined at the end of the war to approximately the same as existed in 1930, due in great part to the accelerated retirement of bonds outstanding at the beginning of the period. The drought in tax exempts caused prices of all types of bonds of public agencies to increase substantially, and many millions of dollars of outstanding debt were refunded at lower interest rates. Refunding bonds were not subject to Capital Issues Commission's approval.

C. POSTWAR PERIOD

As a result of the curtailment of construction of public facilities during the 1930's and to the end of World War II, a tremendous backlog of postponed requirements was built up. This backlog included every category of municipal requirements; schools predominantly, streets, highways, sewers, hospitals, airports, and public buildings for various public uses. Upon the lifting of the restrictions upon the creation of new debt, a great many local public agencies initiated plans to proceed with the construction of postponed facilities. The impact on the market for tax exempts was not felt immediately, as preliminary to the actual issuance of the bonds it was necessary to employ architects and engineers, prepare plans and specifications, select building sites, all preparatory to calling elections on the proposition of issuing bonds, publishing notices of elections and conducting and canvassing the returns thereof. It was not until 1946 that the volume of tax-exempt bonds brought to market showed a substantial increase, jumping from 1,876 new issues in 1945 aggregating \$818 million, to 3,319 new issues in 1946 aggregating \$1,203 million. There was no substantial increase in the volume of general obligation bonds during those 2 years, and the ratio of general obligation bonds issued to the total amount of tax-exempt financing in each year has declined as shown by the following table compiled from information published by the Bond Buyer of New York.

New State and municipal bond issues

[Dollars in millions]

Year	Number of issues	Aggregate amount	General obligation issues	Percent of total
1946	3,319	\$1,203.6	\$997.7	82.90
1947	3,808	2,353.8	1,968.1	83.61
1948	4,706	2,989.7	2,440.2	81.62
1949	5,107	2,995.4	2,312.5	77.20
1950	5,861	3,693.6	3,093.7	83.76
1951	5,281	3,278.2	2,548.1	77.73
1952	5,313	4,401.3	2,937.9	66.75
1953	5,795	5,557.9	3,990.6	71.80
1954	6,526	6,968.6	3,754.3	53.87
1955	6,660	5,976.5	4,244.1	71.01
1956	6,495	5,446.4	3,775.9	69.33
1957	6,888	6,958.2	4,933.2	70.90
1958	6,855	7,448.8	5,724.9	76.86
1959	6,711	7,681.1	5,159.7	67.17
1960	6,529	7,229.5	5,034.7	69.64
1961	6,400	8,359.5	5,761.5	68.92
1962	6,515	8,558.2	5,892.2	68.85
1963	6,577	10,106.7	6,069.2	60.05
1964	6,314	10,544.1	6,886.3	65.31
1965	6,059	11,084.2	7,445.0	67.76

2. FACTORS AFFECTING USE OF GENERAL OBLIGATION BONDS

There are many elements affecting the issuance of tax exempt securities which account for the declining percentage of general obligation bonds issued when compared to the total amount of tax-exempt bonds brought to market. These elements should probably be considered separately.

(a) *Demand and interest costs.*—So long as the demand for tax-exempt bonds and resulting spread in interest costs between general obligations and revenue or other public agency bonds is relatively narrow, the public bodies will naturally turn to financing which does not require a vote of the electorate or an increase in the levy of ad valorem taxes to pay such bonds. However, when the demand for tax-exempts dries up, and interest costs increase, the trend is to issue more general obligation bonds percentagewise as the spread between interest costs on general obligation and revenue bonds becomes wider. The latest figures available which substantiate this observation are reported in the Investment Bankers Association statistical bulletin for the first quarter of 1966 which shows that of the 1,341 new issues during that period, aggregating \$2,859 million, there were 988 general obligation bond issues totaling \$1,903 million, or approximately 74 percent of the total volume.

(b) *Authorities.*—Many public functions formerly exercised by States and local subdivisions which were supported by taxes and general obligation bonds are now being carried on by means of quasi-public agencies such as authorities, commissions and, lately, nonprofit corporations, existing pursuant to law, and authorized to issue bonds the interest on which is exempt from Federal income taxes. The bonds of such agencies are generally payable solely from the revenues of income producing facilities, but in a few instances some of the authorities and commissions are authorized to levy limited taxes, or portions of existing taxes or excise taxes have been allocated or dedicated to them for debt service. Another chapter of this study reports in more detail upon bonds of the character referred to in this paragraph.

(c) *Debt limitations.*—There are three methods of imposing limitations upon the power of States and local governmental units to incur general obligation indebtedness: constitutional, statutory, and home rule charters. As a footnote to this chapter there is appended a table of constitutional debt limits contained in the constitutions of all 50 States. The limitations therein referred to have, in almost all instances, been in effect for generations, and have been found difficult, if not impossible, to change, although in many instances, bonds of States have been authorized for specific purposes and for stated amounts by constitutional amendments adopted by the people at elections held for that purpose. Notable examples are State issues for veterans' bonuses, although many of these are not general obligations but are payable from dedicated excise taxes such as cigarette tax, beer tax, soft drink tax, etc. There is a definite reluctance on the part of State and local government officials to tamper with or enlarge long-standing constitutional limitations upon the creation of general obligation indebtedness. This is not the case, however, with statutory limitations upon local subdivisions which have been increased from time to time, as such limitations are merely authorization to local agencies to create debt up to the new limitations, and the burden of the actual increase in indebtedness is the responsibility of the local officials and electorate. Limitations in home rule charters are more difficult to change, but such limitations seem to be of little effect, as most such charters require a vote to issue any bonds, and it would seem that as long as a vote is required, no limitation is necessary, as the limitation could be raised or exceeded by the vote of the same electorate.

The traditional constitutional debt limit is expressed as a percentage of the assessed valuation of the taxable property within the boundaries of the issuer, and is so expressed in the subjoined table. Originally this method of limiting the creation of indebtedness was adopted as practically all of the revenues of the States and their subdivisions was derived from ad valorem taxes. This is not the case today with the advent of a wide variety of taxes such as the income tax, sales tax, gasoline tax, cigarette tax, beer and liquor taxes, and many other excise and occupational taxes. It can be argued with considerable force that debt limitations based upon ad valorem taxes are no longer the true measure of ability to pay. As a matter of fact, the Commonwealth of Puerto Rico and the State of Delaware have abandoned the traditional percentage of assessed value limitation and have adopted a limitation based upon a ratio of debt service to gross revenues experienced in prior years. This method has received general acceptance by investors, although many feel that there is danger in possible recessions over an extended period, and that the only true measure of security is the value of the real property behind the debt. Many investors require information with respect to the ratio of true value to assessed value, the latter being almost universally lower than true value. However, due to the necessity for additional revenues, the gap between the two valuations has been narrowing to a limited extent, which permits the issuance of additional bonds within debt limits based upon a percentage of assessed valuation. The debt limitations have not seriously impeded general obligation borrowing except in a very few instances where the per-

centage is so low (Indiana, for example) as to be unrealistic in this modern era. Local public agencies in many cases have circumvented such limitations by means of authorities, lease-purchase agreements, etc., which result in higher costs to the taxpayers.

The population explosion has changed the pattern of general obligation financing to a considerable extent. Educational facilities at all levels are of prime concern, and most of the indebtedness incurred by States and their agencies in recent years has been for that purpose. The issuance of dormitory revenue bonds has relieved the necessity for issuing State bonds for that purpose, but buildings for classrooms, laboratories, and hospitals for medical colleges still are financed by State bonds. There has also been a rise in borrowing for parks, playgrounds, and other recreational facilities. Overcrowding of streets has resulted in a rise in municipal debt for the construction, or widening of arterial streets. The Federal Interstate Highway System has not of itself increased the necessity of borrowing for highway purposes, but the narrow, outmoded State and county highways existing at the close of World War II required heavy financing immediately following that period to widen, modernize and correct the dangerous condition of those highways and to care for increased traffic.

The increasing use by cities and towns of revenue bond financing for water, electric, gas, parking, and sewer purposes has caused a decline in general obligation bond issues for those purposes. There is no uniformity in the decisions of the courts of the various States as to whether revenue bonds are exempt from constitutional debt limits. The so-called special fund theory has been adopted in full in the majority of the States and revenue bonds are not considered "debt" within the meaning of the constitutional limitations. Fifteen States originally rejected the theory in whole or in part, those that have rejected it in part permit the exclusion of bonds payable from the revenues of the facility constructed from the proceeds of the bonds, but do not permit the exclusion if revenues from the existing facilities which were being added to or extended are also pledged.

Constitutional limitations upon indebtedness do not take into consideration the debts of overlapping jurisdictions, with the exception of South Carolina, which has an overall debt limit of 15 percent of the assessed valuation of the property included in the overlapping territory, and Louisiana where parishwide and local school districts have an overall limit of 25 percent on overlapping territory. However, there are, in a few States, limitations on the maximum rate of taxes which may be levied on property which has the effect of limiting indebtedness payable from ad valorem taxes. Many sophisticated investors require information on overlapping debt before purchasing any bonds of a political subdivision.

Constitutional limitations on long-term general obligation debt (expressed as percentage of assessed valuation of taxable property)

	State ¹	County	Cities and towns	School district	Other
Alabama.....	\$300,000.....	3.50 percent; vote required.....	Under 6,000, 5 percent; for utilities, additional 3 percent; over 6,000, 7 percent; school, water and sewer bonds not included; vote required.	None.....	None.
Alaska.....	Vote required; no limit.....	Vote required; no limit.....	Vote required; no limit.....	Vote required; no limit.....	Vote required; no limit.
Arizona.....	\$350,000.....	4 percent with vote of taxpayers up to 10 percent.	4 percent; same to 10 percent; for utilities additional at 15 percent.	4 percent; with vote of taxpayers up to 10 percent.	4 percent plus voted debt.
Arkansas.....	Vote required.....	Prohibited.....	1st and 2d class cities may borrow; vote required.	Prohibited.....	Prohibited.
California.....	\$300,000 plus voted debt.....	Vote required; no limit.....	Vote required; no limit.....	Vote required; no limit.....	Vote required; no limit.
Colorado.....	\$100,000.....	\$3 to \$6 tax levy limit for debt.	3 percent; also water bonds; vote required.	Vote required.....	None.
Connecticut.....	None.....	None.....	None.....	None.....	Do.
Delaware.....	(?).....	do.....	do.....	do.....	Do.
Florida.....	Prohibited.....	do.....	do.....	do.....	Do.
Georgia.....	\$500,000.....	7 percent; vote required.....	7 percent; vote required.....	7 percent; vote required.....	7 percent; vote required.
Hawaii.....	15 percent.....	10 percent.....	None.....	None.....	None.
Idaho.....	\$2,000,000 plus voted debt.....	None; vote required.....	None; vote required.....	None; vote required.....	None; vote required.
Illinois.....	\$250,000 plus voted debt.....	5.....	5.....	5 (maintaining grades 1 through 12, 10 percent, proposed amendment).	5.
Indiana.....	Prohibited.....	2.....	2.....	2.....	2.
Iowa.....	\$250,000 plus voted debt.....	5.....	5.....	5.....	5.
Kansas.....	\$1,000,000 plus voted debt.....	None.....	None.....	None.....	None.
Kentucky.....	\$500,000 plus voted debt.....	2 percent; vote required.....	1st and 2d class 10 percent; 3d class over 15,000, 10 percent; other 3d and 4th class, 5, 6th and 6th 3, vote required.	None.....	2 percent; vote required.
Louisiana.....	Prohibited.....	10 percent; industrial aid bonds, 20 percent; vote required.	10 percent; vote required.....	10 percent; parishwide districts, 25 percent; vote required.	10 percent; vote required.
Maine.....	\$2,000,000 plus voted debt.....	None.....	7.50 percent.....	None.....	None.
Maryland.....	None.....	do.....	None.....	do.....	Do.
Massachusetts.....	do.....	do.....	do.....	do.....	Do.
Michigan.....	Vote required.....	10 percent; vote required.....	None; vote required.....	None; vote required.....	None; vote required.
Minnesota.....	None.....	None.....	None.....	None.....	None.
Mississippi.....	do.....	do.....	do.....	do.....	Do.
Missouri.....	\$1,000,000 plus voted debt.....	10 percent; vote required.....	10 percent plus 10 percent for streets, sewers, electricity; vote required.	10 percent; vote required.....	5 percent; vote required.
Montana.....	\$100,000 plus voted debt.....	5 percent; vote required.....	5 percent plus sewer, water bonds, if voted.	5 percent.....	5 percent.

Constitutional limitations on long-term general obligation debt (expressed as percentage of assessed valuation of taxable property)—Continued

	State ¹	County	Cities and towns	School district	Other
Nebraska.....	\$100,000.....	None.....	None.....	None.....	None.....
Nevada.....	1 percent.....	do.....	do.....	do.....	Do.....
New Hampshire.....	None.....	do.....	do.....	do.....	Do.....
New Jersey.....	1 percent of appropriation for fiscal year plus voted debt.....	do.....	do.....	do.....	Do.....
New Mexico.....	\$200,000 plus voted debt; also State and county debt may not exceed 1 percent.....	4 percent plus water, sewer; vote required.....	4 percent plus water, sewer; vote required.....	6 percent; vote required.....	4 percent plus water, sewer; vote required.....
New York.....	Vote required.....	10 percent.....	Cities over 125,000, 9 percent; under 125,000 towns and villages, 7 percent.....	Cities under 125,000, 5 percent; higher if voted; no limit other school districts.....	10 percent New York City and Nassau.....
North Carolina.....	Vote required; no limit.....	Vote required; no limit.....	Vote required; no limit.....	Vote required; no limit.....	Vote required; no limit.....
North Dakota.....	\$2,000,000 ²	5 percent.....	5 percent; additional 3 percent more by vote, plus 4 percent for water, sewer.....	5 percent; 5 percent extra by vote ³	5 percent.....
Ohio.....	\$750,000.....	None.....	None.....	None.....	None.....
Oklahoma.....	Vote required.....	5 percent; vote required.....	5 percent plus for utilities if voted.....	10 percent; vote required.....	5 percent; vote required.....
Oregon.....	\$50,000.....	None.....	None.....	None.....	None.....
Pennsylvania ⁴	\$1,000,000.....	2 percent; additional 5 percent if voted, plus self-liquidating debt, plus additional 3 percent by $\frac{3}{8}$ vote.....	2 percent; additional 5 percent if voted, plus self-liquidating debt, plus additional 3 percent by $\frac{3}{8}$ vote.....	2 percent; additional 5 percent if voted.....	2 percent; additional 5 percent if voted.....
Rhode Island.....	\$50,000 plus voted debt.....	None.....	None.....	None.....	None.....
South Carolina.....	Vote required.....	8 percent; 5 vote required.....	8 percent; 5 plus utilities vote required.....	8 percent; 5 vote required.....	8 percent; vote required.....
South Dakota.....	\$100,000 plus 0.50 percent to develop resources.....	5 percent plus 10 percent for water and sewers; vote required.....	5 percent plus 10 percent for water and sewers; cities over 5,000, 8 percent for electricity; vote required.....	10 percent; vote required.....	5 percent plus 10 percent for water and sewers; vote required.....
Tennessee.....	None.....	None.....	None.....	None.....	None.....
Texas.....	\$200,000.....	None, vote required.....	None, vote required.....	None, vote required.....	None, vote required.....
Utah.....	1.50 percent.....	2 percent; vote required.....	4 percent 1st and 2d class cities; 4 percent 3d class; 8 percent for water, lights, sewers; vote required.....	Vote required; no limit.....	Vote required; no limit.....
Vermont.....	None.....	None.....	None.....	None.....	None.....
Virginia.....	1 percent; vote required.....	Vote required; no limit.....	18 percent plus self-liquidating water, sewer.....	Vote required; no limit.....	None.....

Washington.....	\$400,000 plus voted debt.....	1.50 percent; additional 3.50 percent by vote.	1.50 percent; additional 3.50 percent by vote.	1.50 percent additional 3.50 percent by vote.
West Virginia.....	Prohibited.....	5 percent; vote required	5 percent; vote required	5 percent; vote required.
Wisconsin.....	\$100,000.....	5 percent.....	5 percent; plus 10 percent for schools.	5 percent.
Wyoming.....	1 percent; vote required.....	2 percent; vote required.....	4 percent plus 4 percent for for sewage; vote required.	None; vote required.

¹ When the debt limit is expressed as a dollar amount, this amount is usually an authorization of debt to meet casual deficits. In addition, State constitutions almost universally authorize unlimited debt "to repel invasion or suppress insurrection."

² A proposed amendment relates the debt limit to the revenues of the State. Debt service on all debt must not exceed a certain percentage of the State's revenues. The percentage declines from 30 percent of gross revenues in 1963 to 20 percent after 1971.

³ Proposed amendments would authorize State debt equal to 5 percent of the taxable value of the property within the State and would raise the debt limit of subdivisions to

7 percent. An incorporated city would be allowed to incur an additional 4 percent debt if voted and school districts an additional 6 percent. Any city could also incur debt up to 5 percent of taxable value for water and sewer purposes.

⁴ Proposed amendment authorizes State debt if authorized by popular vote. Another proposed amendment raises the subdivision debt limit to 15 percent. After debt equal to 5 percent has been incurred, additional debt must be voted.

⁵ If 2 or more subdivisions cover same territory, total debt 15 percent.

CHAPTER 7

Patterns of Revenue Bond Financing*

1. THE GROWING IMPORTANCE OF REVENUE BOND FINANCING, 1946-65

Prior to World War II, revenue bond financing by municipal and other public instrumentalities enjoyed only a limited acceptance. While municipal public utility revenue bonds had been known since the turn of the century, this type of public financing of revenue projects in the prewar years was not extensive, particularly through the medium of independent instrumentalities such as public authorities. Among such projects in 1946 were the Hudson and East River crossings of the Port of New York Authority and the Triborough Bridge Authority and the toll road constructed by the Pennsylvania Turnpike Authority.

In the immediate years before the war, public authority revenue financing received an important impetus from decisions of the Federal courts affirming the status of the Port of New York and Triborough Authorities as political subdivisions entitled to exemption from Federal income taxation of interest on their bonds. *Commissioner of Internal Revenue v. Shamberg's Estate* (1944), 144 F 2d 998, Cert. denied, 323 U.S. 792; *Commissioner of Internal Revenue v. White's Estate et al.* (1944), 144 F 2d 1019; Cert. denied, 323 U.S. 792. With the termination of the war in 1945, the demand for public improvements, long subordinated to military requirements, became vocal. The elimination of price controls and the need for higher taxes to finance ordinary municipal operations led State and municipal officials to seek new means for raising capital for needed public improvements without a corresponding rise in the tax level. They turned to revenue bond financing, which offered a welcome combination of primary expense to the user and primary risk on the investor without a corresponding drain on the general funds or (in most cases), a charge against the debt limit. With an increasing awareness on the part of the courts of the expanding nature of public purpose, the acceptance by State legislatures of revenue bond financing of self-liquidating projects was swift.

In 1946, new issues of revenue bonds by municipal and public agencies accounted for \$205,860,000, or 17 percent of the total municipal bonds issued. In 1947 this ratio fell to slightly more than 16 percent. In 1954, the peak year of toll road financing, revenue bonds accounted for \$3,214,381,100, or 46 percent, of total municipal bonds issued; 1963 saw the largest annual volume of revenue bonds, amounting to \$4,037,470,000, or nearly 40 percent of the total municipal

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bonds issued. This peak figure was occasioned in part by the large number of refundings which were authorized by issuers in order to take advantage of improved market conditions. In 1965, the volume of new issues of revenue bonds amounted to nearly 33 percent of the total of municipal bonds.

The following is a statement of municipal general obligation and revenue bonds sold during the years 1946-65:

Year	General obligations	Revenue bonds	Total	Percent revenue
1946.....	\$997,697,000	\$205,860,000	\$1,203,557,000	17.1
1947.....	1,963,081,000	385,690,000	2,353,771,000	16.4
1948.....	2,440,230,000	549,501,000	2,989,731,000	18.4
1949.....	2,312,471,799	682,953,250	2,995,425,049	22.8
1950.....	3,093,680,965	599,926,200	3,693,604,165	16.2
1951.....	2,548,057,853	730,095,200	3,278,153,053	22.3
1952.....	2,937,866,967	1,463,450,500	4,401,317,467	33.3
1953.....	3,990,639,799	1,567,256,570	5,557,887,369	28.2
1954.....	3,754,260,796	3,214,381,100	6,968,641,896	46.1
1955.....	4,244,089,370	1,732,414,450	5,976,503,820	29.0
1956.....	3,775,931,126	1,670,488,445	5,446,419,571	30.7
1957.....	4,933,240,520	2,024,911,625	6,958,152,145	29.1
1958.....	5,628,086,000	1,772,281,000	7,400,367,000	23.9
1959.....	5,159,656,123	2,521,397,500	7,681,053,623	32.8
1960.....	5,034,679,948	2,194,820,411	7,229,500,359	30.4
1961.....	5,761,504,589	2,598,007,545	8,359,512,134	31.1
1962.....	5,892,188,262	2,666,012,400	8,558,200,662	31.2
1963.....	6,069,195,364	4,037,470,000	10,106,665,364	39.9
1964.....	6,879,923,836	3,650,752,608	10,530,676,444	34.7
1965.....	7,444,968,995	3,639,219,720	11,084,188,715	32.8

2. SIGNIFICANT DEVELOPMENTS IN REVENUE BOND FINANCING, 1946-65

Probably the single most important development in revenue bond financing in the past two decades has been the broadened concept of public purpose—the object for which such bonds may lawfully be issued by a municipal or public corporation. Prior to 1946 certain municipal utility services, such as electricity and water, were recognized in a number of States as legitimate purposes for municipal revenue bond financing. Toll roads and bridges, though not yet widely financed by this means, were generally accepted. With the increasing demand following the war for public services and improvements without a corresponding increase in the tax burden, legislatures have authorized and courts have approved as public purposes a variety of facilities and undertakings scarcely contemplated in prewar years. Airports throughout the country have been constructed or expanded through the issuance of revenue bonds secured by long-term leases with participating airlines. Public parks and recreation areas and facilities have been successfully financed with revenue bonds, as have stadiums and public sports facilities. Huge power projects have been erected on the Nation's major rivers as a result of revenue bond financings, in many cases by public authorities or corporations. Rapid transit facilities, public markets, college dormitories, port facilities, a world trade center in New York City, and various other public improvements are being financed through revenue bonds.

Industrial development by States and municipalities, commenced 30 years ago in Mississippi, has been increasingly accepted in recent years by numerous State courts as a public purpose for the issuance of revenue bonds. The vast majority of the States have enacted legislation authorizing State or local governments to promote and develop new

industry in order to revitalize areas suffering from unemployment and economic recession. With limited exceptions, the courts have held that the economic objectives of such development justify the issuance of revenue bonds by municipal corporations. In a typical case, the proceeds of these bonds are used by the municipality to acquire and construct an industrial plant which is leased to a company on a long-term basis. The rentals are sufficient to pay the debt service on the bonds and are unconditionally guaranteed by the company. The operating costs are usually assumed by the company. In most cases the credit of the municipality is not involved since the bonds are secured solely by the revenues derived from the leasing of the plant.

Another development in revenue bond financing during the past two decades has been in the nature of the issuer. Prior to World War II, a large amount of revenue bond financing was by municipalities, particularly with respect to electric, water, and other utility services. Public authorities and special districts were active—Port of New York, Triborough, Pennsylvania Turnpike, Consumers Public Power District, among others—but they had not attained the importance which they acquired during the 1950's. In that decade most of the toll road authorities were created and issued their bonds. Power authorities and districts, such as Power Authority of the State of New York, became active and financed their great revenue projects. Several regional compact agencies with revenue bond-issuing powers were created during this period and issued bonds. In addition, the period saw the creation of nonprofit corporations as governmental subdivisions for the purpose of issuing revenue bonds and constructing public improvements.

The year 1954 witnessed the second largest annual volume of revenue bond issues, in large part due to the toll road financings. Public authorities in New York, New Jersey, and Illinois financed turnpikes through giant revenue bond issues. These and others proved financially successful. The successful financings of this period far outweighed the few disappointments. These latter included toll roads in West Virginia and Illinois, bridges on the Missouri River, and a few others.

A development in revenue bond financing during the period 1946–66 was the increased use of advance refunding. Refunding of revenue bonds is, of course, not new. Bond resolutions and trust indentures ordinarily provide for the issuance of bonds to refund outstanding revenue bonds when subject to redemption. During the past 5 years, issuers were anxious to replace outstanding high-interest bonds with more moderately priced obligations. In addition, some issuers felt the need to modify or eliminate restrictive conditions in outstanding bond resolutions, particularly with respect to the issuance of additional bonds. In many cases, the bonds to be refunded were not callable for several years. Accordingly, advance refundings were developed, whereby the issuer sold refunding bonds and placed the proceeds in escrow pending the redemption of the outstanding bonds on the first call date. Where the resolution securing the outstanding bonds contained adequate defeasance provisions, the placing of sufficient funds in escrow to retire the outstanding bonds on the redemption date had the effect of discharging the outstanding bond resolution or indenture. Where such provisions were absent, interest on the refunding bonds was paid from investment income until the out-

standing bonds could be redeemed and the old resolution discharged. This method of advance refunding, which could be justified either because it offered savings in overall interest cost to the issuer or because it aided in removing onerous bond restrictions which prevented additional financing of public improvements, reached its peak in 1963 and accounts in part for the record volume of revenue bond issues in that year.

A development which has affected revenue bond financing is the controversy as to whether national banks may lawfully underwrite certain revenue bonds as general obligations under the Glass-Steagall Banking Act of 1933. The Comptroller of the Currency has ruled that revenue bonds issued by certain public authorities—e.g., the Port of New York Authority—are general obligations within the meaning of the Federal law, even though not supported by a pledge of tax funds, and are therefore eligible for underwriting by national banks. The question is presently before the courts.

3. SIGNIFICANT CHANGES IN PREVAILING ATTITUDES REGARDING CERTAIN REVENUE BOND SECURITY REQUIREMENTS

There have been important changes since 1946 in revenue bond security requirements contained in bond resolutions, trust indentures, and similar instruments securing the issuance of revenue bonds. These changes reflect an increased market for revenue bonds, particularly among institutional investors and fiduciaries, and this expanding market has resulted in a greater demand for reasonable assurance against falling off of revenues which might lead to a default on the bonds. Also, as they became more experienced with revenue bonds as a vehicle for financing public improvements, responsible issuers, bond counsel, and underwriters, have sought to strengthen and improve upon the instruments securing the bonds in order to afford greater protection both to the public and the investor in the application of many hundreds of millions of dollars of bond proceeds and revenues.

Debt service coverage requirements are stricter in 1966 than they were in 1946. In many resolutions and trust agreements in the 1946 period, it was not uncommon to require an issuer to maintain tolls or other revenues sufficient only to meet operating expenses and debt service as it became due. Today it is generally customary to require that tolls shall be maintained at a rate sufficient to provide revenues equal to operating expenses and debt service plus a margin of safety, depending upon the nature of the issuer, the project, and the certainty of the flow of revenues. A hydroelectric power project financed by revenue bonds secured by long-term power contracts with responsible purchasers may not need a margin greater than 10 or 20 percent. Water and sewer revenue bond issues, with their assured consumer demand, do not ordinarily require large coverage margins. However, a toll road or bridge, dependent upon motorists' needs and subject to competition with federally financed free roads of comparable standards, may require a margin of 25, 30, or 50 percent of net revenues over debt service.

Related to the debt service coverage requirement is the requirement for debt service reserves. Provision for this reserve is customarily contained in the flow of funds established by the bond resolution and often follows immediately upon the allocation of revenues for current

interest and principal payments. The amount required to be deposited in the bond reserve is greater today than it was in 1946. Having experienced isolated revenue bond defaults in recent years resulting from a failure of estimated revenues, investors now frequently demand a reserve large enough to meet both interest and principal payments for at least a year beyond a point of temporary cessation of revenues. Often this reserve requirement is tied to the maximum annual interest and principal requirement during the term of the bonds.

Reserves for repairs and replacements have become more important in bond instruments during the past 20 years. In the earlier years of revenue bond financing, there was often no distinction between the payment of revenues for ordinary operating expenses and extraordinary maintenance expenses of a type that did not recur annually. This was often because the earlier revenue bonds were secured by a pledge of gross revenues, which meant that debt service was paid ahead of operating expenses, and the distinction between ordinary and extraordinary maintenance expenses was a matter of little concern to the investor. However, with the trend from a pledge of gross revenues to a pledge of net revenues, the difference took on an obvious significance. The investor was not prepared for extraordinary repair expenditures, such as the costly resurfacing of a toll road, to take precedence over the payment of his interest and principal. Hence, the reserve for repairs and replacements was created, often following the bond reserve in the flow of funds, and subject to restrictions and conditions designed to prevent extravagance in the application of the reserve. The amount of the reserve is frequently based upon the issuer's annual budget requirements.

Earnings tests governing the issuance of additional revenue bonds which are *pari passu* with outstanding bonds are stricter today, both as to the earnings base and the required ratio or coverage of net earnings over debt service. With the exception of additional bonds required solely to complete the project, an earnings test is today required for the issuance of additional parity bonds under the same bond resolution in order to minimize the dilution of the revenues available to service the outstanding bonds. In the earlier years of revenue bond financing, it was often believed sufficient if the earnings base of the test was limited to estimated future revenues. In other words, additional parity bonds could be issued if the future net earnings from the project, as estimated by the issuer's consulting engineer, would cover debt service plus a margin of safety. It is rare today when an earnings base does not include a showing of actual net revenues during the preceding year or period in relation to debt service. Frequently, the actual, or historical, earnings test stands above, unadulterated by the estimate of earnings for future years. One reason for this is the insistence of at least one of the rating agencies that the authority to issue additional parity revenue bonds—even completion bonds—without a historical earnings test is cause for refusal to rate the bonds. The second part of the earnings test—the times coverage—has also become stricter in recent years. The margin required depends again upon the nature of the issuer and the project but percentages of 135 and 150 are not uncommon today. In all of these earnings tests, more thought is given today to reflecting possible adverse conditions, such as the effect of construction or threatened construction of competitive facilities, as well as eliminating speculative elements wherever possible.

There has been an increased interest during the past two decades in the use of subordinate liens in the field of revenue bond financing, in part because of the inability to issue additional *pari passu* bonds because of strict earnings tests. The use of the subordinated lien in temporary or interim financing is fairly common. However, it is also receiving wider acceptance today as a means of creating new bonds without disturbing the prior pledge of revenues securing the outstanding bonds. Sometimes this is done with the consent of the prescribed percentage of holders of the outstanding bonds, as in the case of the New Jersey Turnpike Authority in 1952. It may also be accomplished without requiring bondholders' consent where the existing bond resolution authorizes the use of surplus revenues for general corporate purposes. In that case, the surplus revenues may be made available to the subordinated lien bonds, and upon the retirement or payout of the prior lien bonds the new bonds will succeed to the position of the first lien. Where the coverage was insufficient to support an entire issue of first lien bonds, projects have also been financed initially through the use of first and second lien bonds, and in some cases third lien bonds.

The maximum repayment period for revenue bonds, while regulated largely by market conditions prevailing and the time of issuance, has probably lengthened on the average in the past 20 years, subject, of course, to the statutory limits which may be prescribed in each case. This is due in part to a market demand for long-term investments. It is also due in part to the desire of the issuer to spread its debt service burden in order to accommodate future possible bond issues for other projects or improvements which share in the same revenues.

Capitalization of interest out of revenue bond proceeds is more common today than it was 20 years ago. In the case of new projects with a lengthy construction period, it is almost essential to provide for funded interest during the period before the project becomes revenue-producing. In addition to the security provided by funded interest, it is also a source of investment income during the initial period. Most revenue bond laws provide for capitalization of interest during the construction period and a reasonable time thereafter, and most issuers financing new projects take advantage of its benefits.

CHAPTER 8

Patterns of Lease-Rental Financing*

A. INDUSTRIAL AID FINANCING

1. NATURE OF INDUSTRIAL REVENUE BONDS

Industrial development bonds are issued by local government bodies—city, State, county, municipality, etc.—to buy or build plants and equipment to be leased to private enterprise. The most common variety of industrial development bonds is a revenue bond, which is supported solely by rents derived from the facility. Some issues, however, have been general obligations which pledge the credit and taxing power of the issuer in addition to rents from the project.

The primary purpose of industrial development bonds is to attract new industries to areas by offering lower costs than would be incurred through traditional methods of corporate bond financing. Since the interest on municipal bonds is exempt from Federal income taxes, local governments are usually able to borrow funds in the capital markets at interest rates lower than those available to private borrowers.

Typically, a municipality will sell bonds to purchase a site and build a plant for a particular company, usually to the company's specifications. It is then leased to the company for a period of time sufficient for rental payments to cover principal and interest on the bonds. Should the tenant default, he is subject to eviction and another company is then sought to fill the premises. If the plant was financed by revenue bonds, any loss must be stood by the bond holders.

The first industrial aid bond was issued in the State of Mississippi in 1936. Authority for the issue came from Mississippi's then new "balance agriculture with industry" (BAWI) plan which was State sponsored and legislatively approved, and made industrial aid financing available to all Mississippi's communities. The first issue originated in Durant, Miss., for the construction of a factory for the Realsilk Hosiery Mills. The amount of the issue was \$85,000. Between 1936 and 1950 only Mississippi and Kentucky had authorized the use of industrial development bonds, but during that period very few such bonds were issued.

In 1952, the city of Florence, marketed an issue of bonds convertible into stock.

The first issue of industrial development bonds by Durant, Miss., was of the general obligation type. Today only Mississippi uses general obligation bonds extensively, though Tennessee, Arkansas, and Louisiana have made some use of this technique. Both revenue bonds and general obligation bonds are tax exempt, but they differ in the credit standing behind the issue. Since general obligation bonds

* Prepared by James F. Reilly, Partner, Goodbody and Co., with minor editing by committee staff.

pledge the full faith and credit of the municipality they have the advantage of being easily marketed. However, most States limit the amount of local bonded debt to the value of local property. Communities are often restricted to small scale financing and one issue may exhaust the possibility of further general obligation financing for many years.

Thirty States have authorized the use of industrial development bonds, although in some States the authorization is not statewide.

The following table lists the States allowing industrial development bonds and the year such enabling legislation was passed.

TABLE 1.—*States allowing industrial development bonds*

Mississippi -----	1943	Wisconsin -----	1957	Virginia -----	1962
Kentucky -----	1948	Arkansas -----	1958	Iowa -----	1963
Alabama -----	1951	Georgia -----	1960	Michigan -----	1963
Illinois -----	1951	Maryland -----	1960	Arizona -----	1963
Tennessee -----	1951	Missouri -----	1960	West Virginia -----	1963
Louisiana -----	1953	Nebraska -----	1961	Wyoming -----	1963
New Mexico -----	1955	Oklahoma -----	1961	Hawaii -----	1964
North Dakota -----	1955	Kansas -----	1961	South Dakota -----	1964
Vermont -----	1955	Minnesota -----	1961	Montana -----	1965
Washington -----	1955	Maine -----	1962	Rhode Island -----	1965

Four States—Arkansas, Mississippi, Alabama, and Kentucky—accounted for 80 percent of total industrial development bond financing accomplished during 1964, and 90 percent of the total in the first half of 1965.

Of the 30 States allowing the use of industrial development bonds, only Louisiana has limited itself to general obligation bonds, although the authority to issue revenue bonds exists. All other States use revenue bonds which are not subject to the restrictions placed on general obligations.

Of all Government sponsored plans to aid industry, industrial development bond financing has become the most popular type of State and local industrial financing. Through the first half of 1965, the Investment Bankers Association estimates \$729 million of municipal industrial bonds have been issued. This exceeds the combined total of all other forms of State and local industrial aid financing.

TABLE 2.—*Volume of industrial development bonds*¹

<i>Year</i>	<i>Amount</i>
Before 1951 -----	\$5, 715, 000
1951 -----	6, 920, 000
1952 -----	8, 790, 000
1953 -----	9, 300, 000
1954 -----	4, 759, 000
1955 -----	11, 790, 000
1956 -----	6, 421, 000
1957 -----	7, 612, 000
1958 -----	12, 740, 000
1959 -----	22, 946, 000
1960 -----	46, 867, 000
1961 -----	71, 771, 000
1962 -----	89, 342, 000
1963 -----	143, 535, 000
1964 -----	178, 627, 000
1965 -----	211, 531, 000

¹ Investment Bankers Association.

The volume of industrial development bonds issued has risen sharply in the last few years. Since 1960, issues have averaged more than \$100 million a year. The great increase in dollar amount of industrial development bonds is largely attributable to their use by large national companies for new buildings and equipment.

Further impetus to the growth of industrial development financing came in 1963 when the Internal Revenue Service ruled (63-20) that nonprofit corporations may, under certain conditions, issue tax-exempt industrial bonds. This has allowed municipalities in States which do not have legislation authorizing industrial development bonds to make use of this type of financing. Thus far, several issues have been made under the ruling in North Carolina and Arizona, the largest for the American Sugar Co. (\$22,250,000 first mortgage bonds, series A of the Industrial Development Corp. of Maricopa County, Ariz., August 1, 1964).

2. BOND YIELDS

Buyers are attracted to industrial development issues for two basic reasons: (1) they are a good credit risk, and (2) they yield a high interest rate (some of the smaller issues having found local markets). Assuming reasonable credit, the most outstanding attraction of industrial development bonds has been their high yields. These rates have served to break down many objections to this form of financing. The spread between good general market bonds and good industrial development bonds has been decreasing, but the difference is still substantial, as shown by the following table.

TABLE 3.—Comparative yields (selected Alabama issues)

Date	Issue	Rate 20-year bond	Bond buyer 20 bond average	Differential
		<i>Percent</i>	<i>Percent</i>	
August 1957.....	Decatur-Fruehauf.....	5.00	3.57	1.43
March 1961.....	Cherokee-Armour.....	4.75	3.48	1.27
September 1962.....	Opelika-U.S. Rubber.....	4.25	3.10	1.15
November 1962.....	Mobile-Diamond Alkali.....	4.15	3.05	1.10
May 1963.....	Decatur-Fruehauf.....	4	3.08	.92
August 1963.....	Carbon-Hill-Cluett Peabody.....	3.80	3.12	.68
August 1965.....	Scottsboro-Revere Copper.....	4	3.36	.64

Bond dealers have been very successful in creating markets for this type of paper. More than one-third of all industrial development bonds issued have been placed with insurance companies. A good part of the remainder has gone to banks. As these issues have become more widely known, private individuals have also become an important group of buyers.

3. LEGAL ASPECTS

Industrial development bonds have caused little difficulty in Federal courts for they easily satisfy the requirements of the 14th amendment. The problem has been more difficult in State courts. All States require that the borrowing and taxing powers of the State conform to the public service doctrine, but more importantly, almost all States prohibit the use of State or local funds to aid a private party.

For example, the Alabama constitution states:

"The legislature shall not have the power to authorize any county, city, town, or other subdivision of this State to lend its credit, or to grant public money or thing of value in aid of, or to any individual association, or corporation whatsoever, or to become a stockholder in any such corporation, association, or company, by issuing bonds or otherwise.¹

Objections to industrial development bonds were overcome in Mississippi when the highest court, and later the U.S. Supreme Court, ruled for the defendants in the case of *Albritton v. Winona*. The Mississippi court stressed that a constitution could not be a static document; it had to change as times and conditions dictated.

In 1950, the Kentucky Court of Appeals, upheld the State's revenue bond act.² The court in this instance, avoided discussion of public purpose, concluding instead that revenue bonds do not constitute a use of municipal money or taxing power. The court stated that it was, in fact, unconstitutional for a city to lend its credit for use. However, the opinion continued, the use of a city's name and the performance of services as a trustee alone was not a loan of credit.

Other State courts' decisions in favor of industrial development bonds have basically followed the precedents set in the two cases just discussed. There have, however, been decisions which were against industrial development programs.

In 1952, the highest court of Florida held that a proposed revenue bond issue³ was unconstitutional on the grounds that the State constitution specifically prohibited the lending of public credit for private use. In contrast to the Kentucky decision, the Florida court held that the proceeds of the bond issue would be public funds and, as such, could not be used to aid private enterprise.

Decisions in Nebraska⁴ and Idaho⁵ followed the reasoning of the Florida court. The Nebraska court stated that allowing revenue bonds for industrial development involved "fundamental fallacies of reasoning" which would constitute a death blow to the private enterprise system and reduce the constitution to a shambles insofar as its protection of private enterprise is concerned.⁶ The Idaho court felt that earlier decisions which allowed revenue bonds were apologies dictated by expediency. The Nebraska decision was overridden by a constitutional amendment in 1960.

Georgia presents an interesting situation. There is no statewide authority for the issuance of industrial development bonds. However, in 1952 the State constitution was amended to allow for local constitutional amendment. Under this system a proposed amendment to the constitution is reviewed to determine if it is of general and local application; if it is only local then it is voted on by the citizens of the political subdivision affected; if ratified it becomes a local constitutional amendment. In this way many Georgia counties have been authorized to issue revenue bonds or revenue anticipation certificates for industrial development purposes.

¹ Alabama constitution, art. 4, sec. 94.

² *Faulconer v. City of Danville*, 313 Ky. 468, 232 S.W. 2d 80 (1950).

³ *State v. Town of North Miami*, 59 So. 2d 779 (Fla. 1952).

⁴ *State ex. rel. Beck v. City of York*, 194 Neb. 223, 82 N.W. 2d 269 (1957).

⁵ *Village of Moyie Springs v. Aurora Mfg. Co.*, 82 Idaho 337, 353 P. 2d 767 (1960).

⁶ 82 N.W. 2d, p. 274.

Decisions for industrial development programs, or against them, have resulted from those points the court chose to emphasize—either public funds aiding private enterprise or, on the other hand, private enterprise benefiting the community. The question of cause and effect in this area will continue to be debated in the courts.

The Internal Revenue Code provides that interest on obligations of a State or any of its political subdivisions is not included in gross income.⁷ This includes revenue bonds and bonds issued by municipally owned corporations regardless of the purpose for which the bonds are issued.⁸ In 1957, the Internal Revenue Service ruled that bonds issued by an industrial development board authorized by a State would be considered as issued on behalf of a political subdivision of the State and therefore exempt from Federal tax.⁹

In a 1963 ruling,¹⁰ the Internal Revenue Service showed its disapproval of the "abuse of privilege" by some industrial corporations and acted to prevent the use of industrial development bonds as a means to circumvent the law. The IRS set forth specific requirements for tax exemption. The ruling stated that bonds issued by a nonprofit corporation formed under the general corporation laws of a State for the purpose of financing the acquisition, lease, and sale of industrial facilities would not be considered as having been issued on behalf of a political subdivision within the meaning of the code where: (1) the municipality did not have a beneficial interest in the corporation while its bonds were outstanding; (2) although the articles of incorporation provided that the corporate property would be transferred to the county, upon retirement of the bonds or dissolution of the corporation, there would not necessarily be a vesting of full legal title in the county since the corporation may never be dissolved or the bonds retired; and (3) neither the State nor any political subdivision had approved the specific bonds issued by the corporation even though they may have authorized the creation of the corporation and approved its general objectives.

B. LEASE RENTAL AND AUTHORITY FINANCING

1. NATURE OF FINANCING

When World War II ended in 1945, State and local governments were faced with a huge backlog of needed public facilities. Funds for these projects would have been expected to have come from State and municipal bond issues. But most States, as a result of excessive borrowing in the 19th century, had constitutional and statutory restrictions on the issuance of debt. These debt restrictions took the form of:

1. Prohibitions against public aid to private enterprise.
2. Debt limitations fixed as a percentage of property valuation.
3. Requirement of a referendum for all bond issues.
4. Maximum periods beyond which debt could not run.
5. Mandates that a direct tax be levied at the time the bonded debt is incurred and annually thereafter to pay the interest as it accrued and the principal at maturity.

⁷ Int. Rev. Code of 1954, sec. 103.

⁸ Rev. Rul. 54-106, Cum. Bull. 1954-1, p. 28.

⁹ Rev. Rul. 57-187, Cum. Bull. 1957-1, p. 65.

¹⁰ Rev. Rul. 63-20, Cum. Bull. 1963-1, p. 24.

As an illustration, Kentucky provides an excellent example. The present constitution of Kentucky was adopted in 1891 and represents the natural reaction at that time to the fiscal irresponsibility of the Reconstruction era which followed the Civil War. Attempts to revise or amend it have been generally unsuccessful.

The constitution prescribes very low general obligation debt ceilings for cities, counties, school districts, and all other public bodies having the power of taxation. No district may incur in any year debt exceeding the income and revenue provided for such year without the assent of two-thirds of the voters thereof. School districts may incur indebtedness only up to 2 percent of the assessed value of taxable property within the district.

Thus, even if a school district is able to marshal a two-thirds majority to authorize general obligation indebtedness, the 2-percent limit is so low that the building needs of most school districts would not be satisfied.

The dilemma was resolved when, during the 1930's, a school board devised a plan which was approved by the Kentucky Court of Appeals.

A nonprofit corporation was created and the school board conveyed the site to the corporation, and the corporation then constructed the desired school building, sold bonds to pay for the construction, and simultaneously leased the building to the school board for only 1 year at a time—at such rentals, if renewed from year to year, as would amortize the bonds and still not cause the school board to exceed its budget in any year. It was agreed that after the bonds were retired, the building would be deeded back to the school board.

This, then, is authority or lease-rental financing.

Lease-rental financing has been used primarily for two major purposes:

(a) For construction of school buildings.

(b) For construction of other public buildings.

School buildings have been built under lease-rental plans in the following States: Georgia, Indiana, Kentucky, Maine, and Pennsylvania.

Most lease-rental projects have financed school building programs in States whose constitutions impose debt limitations. Through this method of financing, adequate school systems have been provided. This method of bypassing constitutional restrictions has also been successfully employed for the construction and maintenance of State office buildings. In this case, an authority is established which issues bonds to construct or acquire a building to be leased to the State (or municipality or appropriate agency). Bond principal and interest are secured by the pledge of rental payments from the State.

States in which authorities have constructed public buildings on a lease-rental basis include: California, Colorado, Georgia, Illinois, Indiana, Kentucky, Michigan, Missouri, Pennsylvania, West Virginia, and Wisconsin.

THE AUTHORITIES

CALIFORNIA

Lease-rental financing has been used extensively in California on a citywide or countywide basis (i.e., a city or county, but not the State became lessee). Its major function has been the construction of civic buildings (courthouses, community centers, etc.) and stadiums, such

as Candlestick Park in San Francisco. The largest issues outstanding today follow:

SAN DIEGO STADIUM AUTHORITY

Created through agreement between the city of San Diego and San Diego County as an agency for borrowing funds for construction of a multipurpose stadium to be leased to the city or county.

April 7, 1966, authorized and issued \$27 million.

LOS ANGELES MEMORIAL COLISEUM COMMISSION

An agency existing under article 1, chapter 5, division 7, title 1 of the Government Code of California to acquire and construct and maintain exhibition building coliseums, sports arena, and other buildings for sporting events.

Commission owns and operates Los Angeles Memorial Coliseum and Los Angeles Sports Arena and receives rental payments from the city.

Outstanding June 1964, \$6,300,000.

ANAHEIM (CITY) STADIUM, INC.

Incorporated June 18, 1964, under provision of general nonprofit corporation law of State, established to provide financial assistance for and on behalf of city of Anaheim. Stadium leased to city.

October 1, 1964, \$21,500,000.

ANAHEIM (CITY) AND ANAHEIM UNION HIGH SCHOOL DISTRICT
COMMUNITY CENTER AUTHORITY

Created March 1, 1965, by agreement between city and school district for purpose of construction of a convention center, leasing it to the city for 35 years beginning in 1965.

Issued and outstanding, \$14,500,000.

FRESNO CITY-COUNTY COMMUNITY AND CONVENTION CENTER AUTHORITY

Created by joint exercise of powers agreement between city and county of Fresno. Authority empowered to do all things necessary to finance and construct a center to be leased to the city.

May 1, 1964, \$8,500,000.

OAKLAND-ALAMEDA STADIUM, INC.

Bonds issued April 1, 1964, \$25,500,000.

COLORADO

State Highway Department Office Authority organized June 21, 1951, under Colorado Statutes Annotated 1935, to acquire land and erect buildings for lease of same to State highway department for offices and for housing highway equipment.

Authorized, \$2,388,000.

Outstanding June 30, 1965, \$593,000.

GEORGIA

Certain authorities and agencies are allowed to issue bonds supported by lease-rentals from the State under a 1960 constitutional obligation placed on legislature to meet such rentals (art. VII, sec. VI, par. I(a) of the constitution of the State of Georgia as amended (Georgia Laws, 1960, pp. 1273-1276) and ratified by voters November 8, 1960, and proclaimed by the Governor November 29, 1960.

On October 15, 1962, U.S. Comptroller of the Currency ruled that bonds of the Georgia State authorities are exempt securities within the meaning of section 5136 of the Revised Statutes and may be underwritten by national banks, and portfolio holdings are not subject to limitation.

GEORGIA STATE SCHOOL BUILDING AUTHORITIES

Public bonds created by 1951, Georgia Legislature:

(1) To acquire, construct, and operate self-liquidating projects embracing school buildings, classrooms, laboratories, etc., for students, etc., of any institution under control of State board of education or governing bodies forming part of the State school system.

(2) To execute leases of such facilities with various county boards of education, city boards of education or independent districts.

(3) To issue revenue bonds of the authority payable from revenues, rents, and other funds of the authorities; to pay costs of such projects and authorize collections and pledging of revenues and other charges for payment of such bonds and for maintenance costs of the projects.

In 1952, the State began a program of school construction. From 1952-55 \$157 million bonds were issued. In 1960, new surveys showed that more funds were needed. An additional \$70 million was authorized in 1961-62 followed by a continuing annual allotment of \$5.5 million beginning in the year ended June 30, 1961, for capital outlay to provide funds to pay annual rentals in lease agreements between the authority and local school units (State board of education became joint lessee).

Total authorized to June 30, 1965, \$270,134,000.

Outstanding, \$164,657,000.

GEORGIA STATE OFFICE BUILDING AUTHORITY

Created by General Assembly of the State of Georgia at the 1951 session as amended in 1953. Organized to (1) construct, acquire, own, equip, and manage self-liquidating office building projects and lease them to State departments or agencies; (2) issue and service bonds of the authority to finance cost of projects.

Rentals charged to the State departments and agencies are calculated to pay bond principal, interest, and costs of operation and maintenance of buildings.

Total authorized, \$26,600,000.

Outstanding, \$12,644,000.

CITY OF ATLANTA AND FULTON COUNTY RECREATION AUTHORITY

The authority was created by the General Assembly of the State of Georgia at its 1960 session. In 1964 bonds were issued by the authority

to acquire and construct a multipurpose athletic stadium and related facilities. Principal and interest on the bonds would be had through rental payments by the city of Atlanta.

May 1, 1964, authorized and outstanding, \$18 million.

ILLINOIS

ILLINOIS BUILDING AUTHORITY

Created by act of 1961 (amended 1963) to provide hospital, housing, classrooms, laboratories, offices and other such facilities for the State of Illinois.

Bonds may be issued, secured by revenues from projects or combinations for which they were issued, including rent from State agencies, departments, and universities.

Authorized and outstanding, \$25,000,000, for :

University of Illinois.....	\$11, 224, 646
Department of Public Safety.....	6, 320, 930
Teacher's College Board.....	5, 354, 308
Southern Illinois University.....	1, 388, 020
Department of registration and education.....	712, 096
Total	25, 000, 000

INDIANA

INDIANA STATE OFFICE BUILDING COMMISSION

Created in 1953 by the general assembly (amended 1957) to construct a State office building.

Issued, \$30 million, July 1, 1958.

Outstanding, June 30, 1965, \$28,525, 000.

Payable from and secured by pledge of net income and revenues of a 13-story State office building (rentals from 50 departments of State).

Local school building corporations—In Indiana (all organized under act of 1947, as amended).

Total bonds issued, \$223,591,000, divided among 103 school corporations.

KENTUCKY

KENTUCKY STATE PROPERTY AND BUILDINGS COMMISSION

Created to acquire real estate and buildings projects for any State agency—to purchase, lease, rent, or acquire by condemnation real estate needed for use of State or State agencies.

Total bonds authorized, \$17,255,000.

KENTUCKY PUBLIC SCHOOL AUTHORITY

Created by H.B. 273, general assembly re session 1960, as instrument of the Commonwealth to assist the board of education of county and independent school districts in financing school projects.

The authority can issue bonds payable solely from rentals received from the board of education (as lessee).

No bonds have been issued.—Local and county school district authorities have issued more than \$200 million in revenue bonds payable from rents received from the boards of education.

MAINE

MAINE SCHOOL BUILDING AUTHORITY

Created by chapter 405, Maine laws of 1951, to build and lease public school facilities.

Debt limited to \$25 million—outstanding at any particular time.

As of August 1, 1965, total of all issues was \$8,810,000. This amount has been divided among 28 issues.

MICHIGAN

MICHIGAN STATE OFFICE BUILDING AUTHORITY

Incorporated under provisions of Act 31 Public Act of Michigan 1948 (first extra session), as amended. Issued April 5, 1966, \$2,150,000 to acquire a building and site in the city of Grand Rapids for the use of the city as an administration building.

MISSOURI

MISSOURI BOARD OF PUBLIC BUILDINGS

Board of public buildings created under 1959 legislation and authorized to acquire sites and construct buildings for use by State agencies in any city of 10,000 population and to issue revenue bonds. February 17, 1966, issues were \$5 million for State office building in Kansas City.

PENNSYLVANIA

GENERAL STATE AUTHORITY OF THE COMMONWEALTH OF PENNSYLVANIA

A public corporation and instrument of the government created by the general State authority—act of 1949 (Act 34; Public Law 372, subsequently amended).

The authority can, among other things, lease to the Commonwealth any project and property of the authority.

Authorized in 1949 to borrow up to \$175 million. By 1963, authorization had risen to \$1,092,734,600.

Bonds are direct and general obligations of the authority secured by the full faith and pledge of rentals (sufficient to meet annual principal and interest payments).

Completed projects, 897—cost	\$456, 961, 365
Projects under construction, 200—cost	383, 916, 860
Planned projects, 296—cost	216, 203, 662

Departments benefited :

Public welfare.	Agriculture.
Public instruction.	Justice.
State-aid colleges.	Military affairs.
Forest and waters.	Pennsylvania State Police.
Pennsylvania Historical and Museum.	Property and supplies.
Health.	Revenue.
Penn State University.	Fish commission.

PENNSYLVANIA STATE PUBLIC SCHOOL BUILDING AUTHORITY

Created by act of July 5, 1947, Public Law 1217 (as amended) to construct, improve, and operate public schools and collect rentals for the use thereof.

Bonds of the authority are not obligations of the Commonwealth but of the school districts—payable only from rentals—constitutionality of act was upheld by the Supreme Court of Pennsylvania.

All lease rentals are calculated to produce 120 percent of principal and interest requirements.

Through 1965 the Commonwealth appropriated (through legislative act) \$469,608,136 as subsidy to school districts—portions are to reimburse rental payments.

From beginning of the authority in 1949 to June 30, 1965, 586 projects were completed or begun.

PUBLIC AUDITORIUM AUTHORITY OF PITTSBURGH AND ALLEGHENY COUNTY

The authority was incorporated in 1954 by the county of Allegheny in the city of Pittsburgh, pursuant to the public auditorium authorities law (act of July 29, 1953, Public Law 1034), to acquire, construct, improve, maintain and operate public auditoriums. Issued October 9, 1961, \$15 million (rental payments are made by both the city and the county).

WEST VIRGINIA

WEST VIRGINIA STATE OFFICE BUILDING COMMISSION

The commission maintains and operates a State office building which is leased to three State agencies. The building was constructed with an authorized bond issue of \$1,700,000. Amount outstanding July 2, 1965, \$874,000.

WISCONSIN

WISCONSIN STATE AGENCIES BUILDING CORP.

Organized under Wisconsin nonstock corporation law, chapter 181, Wisconsin statutes, as a nonstock, nonprofit corporation to construct, equip and furnish buildings, structures, and facilities and other permanent improvements for university, State college, and general State purposes.

Thus far, bonds totaling \$125,680,000 have been issued. They are payable from rental revenues and other funds to be derived from lease of certain buildings and facilities.

WISCONSIN STATE PUBLIC BUILDING CORP.

Organized as above to construct, equip, and furnish buildings for general purposes including housing for State offices.

Seventeen million dollars in bonds have been issued and are outstanding.

CHAPTER 9

Municipal Bond Underwriting* ¹

INTRODUCTION

Underwriting of municipal bonds is the process by which an investment banker purchases bonds from the issuing city or other governmental unit and, in turn, distributes them to the ultimate investor. The underwriter both assumes the market risk during this period and fulfills a distribution function.

As indicated in a previous chapter, the vast preponderance of new municipal bond issues are distributed through the underwriting efforts of investment dealers and dealer banks. Relatively few municipal issues are privately placed with investors or sold to investors through a dealer acting as agent for the issuer.

The purpose of this chapter is to describe briefly (1) the nature and function of the investment banker, (2) the industry within which he operates, and (3) selected characteristics of new issues of municipal bonds which partially reflect the structure and evolution of the underwriting process. As with any study that artificially dissects its subject, this examination was plagued with the lack of information in the form required. And as with similar studies, indirect measures were used in lieu of the preferred but unavailable direct measures. This necessary substitution is noted where appropriate.

THE INVESTMENT BANKER

GENERAL CHARACTERISTICS

In acting as an underwriter, the investment banker ² performs his primary function by purchasing bonds from the "municipality" and selling them in turn to his investor clients. As a catalyst in the marketplace, he is responsible for obtaining the best terms possible for both the buyer and seller and his business success is dependent on this ability.

The investment banker also may act at different times as a dealer in the secondary market, buying and selling bonds for his own account; as a broker, buying and selling for the account of investors and being compensated by fee; or as a financial consultant.

*Prepared by John E. Walker, research director, Investment Bankers Association of America, with minor editing by committee staff.

¹ The author is indebted to the Research Committee of the IBA and in particular to Mr. Winthrop S. Curvin of Smith, Barney & Co., Inc., for their extensive comments and help. Almost needless to say, the prerogatives of the author were maintained and errors beyond the control of the committee have been included.

² In speaking of "investment banker" in municipals, the term must include not only dealers but also dealer banks, inasmuch as, under Federal banking laws, banks are permitted to underwrite municipal "general obligation bonds."

When acting as either underwriter in the primary market or dealer in the secondary market, the investment banker contemplates making a profit by marking up his merchandise in much the same manner as a wholesale or retail merchant in commodities. He invests his own capital—or borrowed funds—in bonds, assumes all of the risks inherent in ownership thereof, and if in the judgment of the market provides a valuable product, is able to pay his overhead and carrying costs, compensate his salesmen, and make a profit.

As a dealer in the secondary market where the "float," or inventory, of bonds will at any particular time measure several hundred million dollars, the dealer provides a means for the orderly exchange of seasoned bonds among investors. Since the municipal market is almost exclusively an over-the-counter market, the services of the hundreds of dealers operating on a nationwide basis assure the marketability of bonds—the ready conversion of bonds to cash and vice versa—which is so vitally important to all investors.

As a broker the investment banker provides a further service to his clients by undertaking to seek out the best market for a particular bond and to enable an investor to purchase or sell bonds at a reasonable commission.

Operating in the primary market as an underwriter, the investment banker provides a necessary service to municipalities. He stands ready to risk his capital in bidding for bonds offered in blocks by the issuer and distributes the bonds to his clients who are seeking profitable investments. It is thus through his efforts that the hundreds and thousands of investors of all sizes and types funnel their resources to municipalities which need funds for schools, civic improvements, public utility enterprises, roads, etc.

SOURCES OF FINANCING

The inventory required in order to effectively conduct business is an important consideration for the investment banker. Because of the almost infinite variety of bonds available for sale (rating, maturity, coupon rate, type security, and issuer are all important considerations for the investor), municipal bond inventories are large relative to inventories of other securities.³ The method of financing of these inventories is thus an important aspect of the business.

Inventories of municipal bonds are financed basically in the following three ways: (1) by use of the investment bankers' own capital, (2) by commercial bank loans, and (3) through repurchase agreements.

The most common form of financing is through use of the investment bankers' own capital. This is true whether the firm is a dealer bank or a dealer, or whether the firm is a partnership or a corporation. Additionally, the size of the firm is not of great significance.

³ As evidenced by a survey conducted by the Wharton School of Finance and Commerce of broker-dealer inventory practices for the first quarter of 1962. Although the variability among individual firms was great, inventory-sales ratios for new issues "averaged 4 percent for common stock, 9 percent for corporate bonds, and 29 percent for municipal bonds; for outstanding issues, the figures were 8 percent for common stock, 11 percent for U.S. Governments, 24 percent for corporate bonds, and 30 percent for municipals." Irwin Friend, "Investment Banking and the New Issues Market—Summary Volume," University of Pennsylvania, 1965.

Very few firms have so much excess capital that all fluctuations in the demands for capital can be met internally. Investment bankers are no exception. Commercial bank loans are an important source of short-term funds for use in carrying peak inventories. The use of commercial bank loans can be, however, particularly costly. Since investment bankers cannot deduct such interest charges for carrying municipal bonds in inventory as a business expense, the effect is that the firm may be paying 6 percent from after tax funds to carry bonds which are yielding tax free (and thus after tax) income of only 4 percent—a loss of 2 percent.

Repurchase agreements at one time were a rapidly increasing method for financing. At present this is not widely used. Under such a system the investment banker sells the bonds to a short-term investor with an agreement to repurchase within a specified time. The effect of such an agreement is to provide the investor with a short-term tax exempt investment and enables the dealer to minimize his cost of carrying inventory.

RISK

In assuming his role as an underwriter of municipal bonds, the investment banker is obviously faced with certain risks against which he attempts to protect himself to the greatest extent possible, and for the acceptance of which he expects to receive a reasonable compensation. He is operating in an intensely competitive market in which the difference between the winning and second bids is normally a minute fraction of 1 percent of the principal amount of the bonds being offered for sale and in which the margin of gross profit—from which all of his costs must be paid—is usually in the range of 1 to 2 percent of the price of the merchandise. He is faced with delicate decisions of judgment as to the acceptability by investors of the particular bonds for which he is bidding. He must weigh the effect that a myriad of sensitive factors can have upon the markets in general and upon the particular bond issue in question. His objective is a rapid turnover of his capital at a small profit margin; he is not voluntarily a long- or intermediate-term holder of the bonds for which he is bidding. Thus, if he is to be successful, he must bid aggressively for new bond offerings but at the same time be constantly alert to assure that he does not set so high an offering price on his merchandise that it is unsalable or unattractive in relation to the hundreds of other comparable bonds which may at the time be offered either in the primary or secondary market.

As an example of the narrow margin between profit and loss and the risks involved in this underwriting operation, consider the hypothetical instance of a \$1 million bond issue. For simplicity, assume that these bonds mature in 25 years and bear interest at 4 percent. In underwriting this issue, a dealer might bid par (\$1,000 per bond) hoping to offer the bonds at a price of 101 (\$1,010 per bond), making a gross profit of 1 percent or \$10,000. At the proposed offering price the bonds would yield approximately 3.94 percent to the investor. Should the dealer find that investors are unwilling to purchase the bonds unless the yield is 4 percent, then the dealer would have to cut his offering price to that level or down to \$1,000 per bond—a price equal to his own cost. His loss would equal those costs which he could not avoid. If the best price acceptable to investors should be

4.04 percent—a mere 0.10 percent away from the dealer's market appraisal, he would then receive only about 99% (\$993.75 per bond) and suffer a loss of some \$6,250 in capital plus whatever costs he incurred.

THE DECISION TO UNDERWRITE ALONE OR WITH OTHERS

In considering a bond underwriting, the dealer must appraise the state of the market, his own inventory position, the quality and acceptability of the bond itself, and other factors which may have an immediate bearing upon his bidding capabilities and then determine whether he will bid for the issue alone or ask another dealer or other dealers to join with him in a group—or syndicate—to spread the risk of the venture and to share price ideas and selling potentials. This sort of decision is faced every day and often several times a day by the investment banker.

Obviously, the size of the bond offering has a decided bearing upon the decision as to whether to bid alone or in concert with others acting as a syndicate, and, just as obviously, the size of the offering will have a material bearing upon the number of members in a syndicate. Whereas an investment banker may feel comfortable in bidding alone for a \$500,000 issue, he may want, say, two joint partners in bidding for a \$1 million issue, and he may form a group—or join a group—consisting of 100 or more dealers in bidding for a \$50 million issue.

Thus, the system of syndicate bidding—or syndication—has grown in the municipal bond industry. By means of the syndicate arrangement, dealers of all sizes and of all geographical locations may be brought together in a group to participate in bidding for and offering bond issues of all sizes and types. At any one time a dealer may be a member of as many as 10 to 20 syndicates which, depending upon market conditions, may have undistributed balances varying from a few bonds to several million dollars worth of bonds. Without the syndicate method the full underwriting strength of the investment banking industry could not be brought to bear in an orderly fashion in the distribution of the myriad of issues of varying amount, quality, maturity range, and geographical diversity.

SYNDICATE MANAGEMENT

The organizer of the syndicate is termed the "manager." In many instances two or more firms may be "joint managers." The presence of joint managers may come about by reason of several factors. For example, if a municipality offers for sale a \$20 million issue, two (or more) firms may commence the formation of a syndicate and determine to combine their efforts. Again, two complete syndicates may be formed but, during the process of determining the bid price, they may decide that they can have a stronger syndicate and make a higher bid if they merge the two syndicates into a single group prior to bidding.

Once a manager has formed a syndicate to bid for the bonds offered by a particular municipality, he will normally invite the same group to join him when that municipality sells a like amount of bonds at a subsequent sale. Although the members thus invited are at liberty, of course, to make other arrangements, there is a tendency to continue with the same group. Should this municipality at some other time

offer, say, twice as many bonds as it had in the past—a not infrequent occurrence—then two (or more) syndicates may merge for that particular sale and submit a single bid. In extreme cases, all of the groups formed to bid for an issue may, for one reason or another, determine to merge together into a single large syndicate and submit one bid to the issuer. In modern competitive markets this seldom occurs unless there is some special consideration such as the unusual size of the offering or the presence of an unusual degree of risk involved in the underwriting.

In the formation of syndicates the primary goal of the managers is to form as strong and competitive groups as possible. The manager invites firms with strong underwriting and strong selling potentials. Many times in a single week dealers A, B, and C may bid against each other in syndicates, or dealers A and B may be together bidding against C, or dealers A and C may be in a syndicate bidding against B. In short, the composition of the syndicate for a particular issue—e.g. Port of New York Authority—may be entirely different from that formed by the same manager for, say, State of North Carolina.

PARTICIPATION AND UNDERWRITING LIABILITY WITHIN A SYNDICATE

In forming a syndicate, the manager assigns to each participant a definitive number of bonds which that participant will underwrite. These amounts are assigned on the basis of size of firm, underwriting and selling potential, historical and known ability to distribute a certain issue or type of bonds, and in part upon the request of the participant. Each group contains one or more "major underwriters," including the manager, who take the largest participations. Following this group are other underwriters in various groups or categories appropriate to their underwriting and distributing capabilities. During the pricing process, changes in participations may occur as members withdraw and participations must be revised. After the submission of the bid, the participations are frozen.

With respect to individual liability of the members of a syndicate, two types of agreements exist—the "eastern or undivided account" and the "western or divided account." In the undivided account, each member is liable for his proportionate share of any bonds remaining unsold in the account at any time, regardless of the number of bonds which such member may have sold himself. In the divided account, the liability of each member is limited to his participation in the account at the time of purchase of the bonds; a member may sell a volume of bonds equal to his participation and eliminate his liability, even though bonds remain unsold in the syndicate. Both forms are prevalent, although the undivided account is more widely used, particularly in underwriting serial bond issues. Divided accounts are customarily formed for term bond issues, and occasionally part of an issue may be on an undivided liability basis and part on a divided liability basis. Examples of the typical syndicate agreement forms for each type of account are found in the appendix.

SYNDICATE PRICING

Having formed a syndicate to bid for an issue, the manager(s) then proceeds to determine what price should be bid. The usual pro-

cedure is to ask the members present at the syndicate price meeting. In many instances a single meeting is sufficient to reach agreement among the members as to the bid, but if the issue is large and/or complex, two or three meetings may be required. At the meeting the manager discusses the issue and any unusual problems involved and inquires as to the price ideas of each of the members—some of whom may be represented by proxies if unable to attend the meeting. Each member, of course, is free to express his ideas of offering price(s), profit margin, and bid price, and each is free to withdraw from the syndicate if he believes the price to be bid is higher than merited by his own appraisal of the issue, the demand therefor, and the condition of the market. To the extent that members withdraw, other members must be willing to increase their own participations in the syndicate so that at the time of bidding the issue is fully underwritten. Should it appear that the group lacks sufficient underwriting at a given price, the price will be lowered until agreement is reached that the best possible bid is obtained. Occasionally a minority in an underwriting participation may feel that a better bid should be made and this group may attempt to merge with the strong elements of another bidding group to form a new syndicate.

The procedure in pricing bonds is to determine the highest price at which a majority interest in the syndicate believes the bonds may be reoffered to investors. Having determined this price, the group then determines the spread or gross profit margin which they wish to work for. Deduction of the spread from the offering price results in the bid.

COMPENSATION FOR UNDERWRITING AND SELLING EFFORTS

The syndicate compensates the member who actually sells the bonds through a mechanism called the takedown concession. If it is assumed as a typical case that the gross spread expected by the syndicate is \$10 per \$1,000 bond, a portion of this amount will be considered as underwriting profit and a portion selling profit. Assuming an offering price of \$1,010 per bond, a bid of \$1,000 per bond, and a gross spread of \$10 per bond, \$5 of this spread may be determined as "selling compensation" or "takedown." The selling dealer, then, would withdraw bonds from the syndicate account at the offering price less the takedown or at \$1,005, and in selling the bond (at \$1,010) will be compensated to the extent of \$5 per bond. Of this amount, the syndicate member may realow a portion—say \$2.50 per bond—to other dealers who are not members of the syndicate but who, nevertheless, may wish to sell bonds to their own investor clients. In this event the syndicate member would sell the bond to the nonmember at \$1,007.50 retaining \$2.50 as his selling compensation, and the nonmember would earn \$2.50 upon selling the bond to his client at \$1,010.

After all of the bonds have been withdrawn (or "taken down") by syndicate members or otherwise sold by the manager for the benefit of the syndicate, there remains in the syndicate the difference between the gross spread and the takedown. This amount, less syndicate expenses, is distributed by the manager to the various syndicate members in proportion to their participations in the account as underwriting compensation. (Of course, if the syndicate operation results in a loss,

each participant is assessed in proportion to his participation for such loss.)

THE STRUCTURE OF THE INVESTMENT BANKING INDUSTRY FOR MUNICIPAL BONDS

The municipal underwriting industry consists, for the most part, of elements of municipal bond departments (the departments performing other related functions) which are themselves part of an organization which operates in other securities or money markets. Because of the interrelation of these areas, single operations (such as municipal bond underwriting) are rarely considered alone. It is necessary, therefore, to consider entire securities firms which coincide more realistically with the actual operations. Thus, this section describes the industry in terms of: (1) the number of municipal bond dealers, (2) personnel within the securities industry, (3) the membership in the Investment Bankers Association, and (4) the managing underwriters of new municipal issues.

MUNICIPAL BOND DEALERS

The "Directory of Municipal Bond Dealers of the United States"⁴ provides a good measure of the number of firms that actively participate in the underwriting and distribution of new and outstanding municipal bonds. A compilation of the number of main and branch offices has been made from the 1965 midyear edition of this directory, and the results are presented in table 1. Few branch offices of commercial banks are listed, and this understates the municipal bond activity conducted by such branches.

⁴ Published 3 times a year by the Bond Buyer, New York City.

TABLE 1.—*Main and branch offices of municipal securities dealers: 1965*

[By type dealer and geographic location]

State	Main		Branch	
	Dealers	Dealer banks	Dealers	Dealer banks
Alabama.....	17	7	13	
Alaska.....		1		
Arizona.....	6	3	7	
Arkansas.....	10	2	2	
California.....	29	12	83	1
Colorado.....	11	2	7	
Connecticut.....	7	2	33	
Delaware.....	4		1	
District of Columbia.....	7		7	
Florida.....	24	4	46	
Georgia.....	16	3	14	
Idaho.....			2	
Illinois.....	55	7	55	
Indiana.....	5	2	7	
Iowa.....	14	1	5	
Kansas.....	9	1	3	
Kentucky.....	15		2	
Louisiana.....	15	3	19	
Maine.....	1		8	
Maryland.....	7	1	11	
Massachusetts.....	22	5	56	
Michigan.....	13	2	47	
Minnesota.....	15	5	23	
Mississippi.....	13	1	11	
Missouri.....	25	5	25	1
Montana.....			6	
Nebraska.....	6		9	
Nevada.....			3	
New Hampshire.....			3	
New Jersey.....	22	4	20	
New Mexico.....	3		5	
New York.....	185	9	64	6
North Carolina.....	13	3	13	
North Dakota.....	1		6	
Ohio.....	44	3	38	
Oklahoma.....	7	3	4	
Oregon.....	2	1	7	1
Pennsylvania.....	61	3	88	
Rhode Island.....	1	1	8	
South Carolina.....	8	1	6	
South Dakota.....	1		4	
Tennessee.....	24	4	13	
Texas.....	47	8	67	
Utah.....	4	3	4	
Vermont.....			1	
Virginia.....	17	1	7	
Washington.....	16	7	12	
West Virginia.....	2		7	
Wisconsin.....	5	2	11	
Wyoming.....		1	2	
Total.....	809	123	895	9

Source: "Directory of Municipal Bond Dealers of the United States," 1965 midyear edition, the Bond Buyer, New York City.

The table shows that a main office of a municipal securities dealer is present in all but 5 of the 50 States; 35 of the States have 7 or more main offices of dealers. A total of 932 main offices existed in 1965.

A listing of branch offices has been included to present a more accurate picture of the municipal underwriting capability by individual State. Branch offices allow many dealers to effectively operate on a national or at least an interstate basis. Thus, active municipal securities dealers are present in all States, with 39 States having 10 or more offices.

PERSONNEL WITHIN THE SECURITIES INDUSTRY

With the exception of a very few specialists, personnel engaged in the securities business are involved in nearly all types of negotiable securities. The most up-to-date and complete survey of the number of securities representatives was published by the Midwest Stock Exchange.⁵ Table 2 is reproduced in part from this newsletter and presents a tabulation of the number of registered representatives, or salesmen, by State. In 1966 the total number of registered representatives is 177,000 which is 49 percent above the level of 1960.⁶

Although the number of representatives is most directly related to transactions in outstanding corporate securities, this measure provides some information on the size of the industry and the ability to attract personnel to distribute the increasing volume of securities of all types.

TABLE 2.—*Securities salesmen by State*¹

<i>State</i>	<i>Number of salesmen</i>	<i>State</i>	<i>Number of salesmen</i>
Alabama -----	² 1, 050	Nebraska -----	1, 167
Alaska -----	140	Nevada -----	² 176
Arizona -----	³ 2, 584	New Hampshire -----	525
Arkansas -----	724	New Jersey -----	15, 675
California -----	² 14, 447	New Mexico -----	448
Colorado -----	² 2, 037	New York -----	² 60, 000
Connecticut -----	3, 408	North Carolina -----	1, 462
Delaware -----	³ 473	North Dakota -----	410
District of Columbia -----	³ 773	Ohio -----	4, 430
Florida -----	² 4, 025	Oklahoma -----	² 1, 600
Georgia -----	² 1, 500	Oregon -----	1, 171
Hawaii -----	972	Pennsylvania -----	7, 599
Idaho -----	420	Rhode Island -----	814
Illinois -----	5, 800	South Carolina -----	² 650
Indiana -----	² 2, 750	South Dakota -----	574
Iowa -----	² 3, 000	Tennessee -----	² 1, 012
Kansas -----	1, 580	Texas -----	3, 178
Kentucky -----	1, 159	Utah -----	860
Louisiana -----	1, 608	Vermont -----	395
Maine -----	² 600	Virginia -----	2, 509
Maryland -----	² 2, 550	Washington -----	² 2, 400
Massachusetts -----	4, 828	West Virginia -----	687
Michigan -----	2, 617	Wisconsin -----	2, 049
Minnesota -----	2, 084	Wyoming -----	453
Mississippi -----	² 577		
Missouri -----	² 4, 500	Total number of sales-	
Montana -----	² 597	men -----	177, 027

¹ Source : Midwest Stock Exchange News, vol. II, No. 2, September 1966.

² Estimate by State commissioner.

³ News estimate.

⁵ Midwest Stock Exchange News, vol. II, No. 2, September 1966.

⁶ Ibid.

The IBA is an association which represents, primarily, the underwriting element of the securities industry. An examination of the membership of the Investment Bankers Association of America with respect to admissions of new members and losses through dissolutions, consolidations, and mergers provide some indication of mobility into and out of the industry. Table 3 is a tabulation of this information for the association accounting years⁷ of 1957 through 1965. The column of the table listing mergers is self-explanatory with the majority of mergers occurring between investment bankers. The column listing dissolved firms consists primarily of firms which ceased to exist. Some firms still operate, but not as investment bankers. Additions of new firms represent, in the majority of cases, relatively new firms to the investment banking industry either through the addition of underwriting functions by existing securities dealers or through creation of new firms.

MEMBERSHIP IN THE INVESTMENT BANKERS ASSOCIATION

TABLE 3.—*Changes in the number of members of the Investment Bankers Association resulting from mergers, consolidations, dissolutions, and additions of firms*

Year	Consolidation or merger of existing members	Dissolution of member firm	Addition of new firms
1957.....	-12	-16	25
1958.....	-2	-17	18
1959.....	-7	-11	22
1960.....	-7	-18	20
1961.....	-14	-11	20
1962.....	-6	-12	22
1963.....	-24	-14	9
1964.....	-15	-10	19
1965.....	-13	-12	16
Total.....	-100	-121	171

Source: Investment Bankers Association of America.

NOTE.—Membership in the IBA was 732 at the end of the 1965 association year.

Except for the year 1959 and 1962, the number of firms within the industry⁸ has constantly declined accompanied by a continuous inflow and outflow of firms. Although the figures given are for all types of investment banking firms, including some who do not engage in the municipal business, the tabulation gives a general picture of developments in the investment banking industry which is applicable to the municipal sector as well.

MANAGING UNDERWRITERS OF NEW ISSUES

The Bond Buyer's Directory⁹ for mid 1965 lists over nine hundred active municipal bond dealers. Virtually all of these dealers underwrite bonds at some time or another but unfortunately no record of this activity exists. The Investment Bankers Association does, how-

⁷ The association figures are for years ending approximately the first of each December.

⁸ As measured by Investment Bankers Association of America membership.

⁹ See footnote 4.

ever, collect and maintain data on managing underwriters¹⁰ of new issues. As a measure of the number of firms underwriting new issues, these data are an understatement in view of the many firms that frequently underwrite but never manage. From the IBA files for 1965, a compilation was made of the number and identity of managing underwriters for that year. Table 4 is a tabulation of managing underwriters in 1965 by type of dealer and geographic location. The 388 managing underwriters listed for that year¹¹ in the IBA files were distributed among 40 States and Puerto Rico.

Firms which do not underwrite periodically are not identified by code number in the IBA data and are thus not included with tabulations based on the 388 underwriters which were coded.

TABLE 4.—*Managing underwriters¹ by type dealer and geographic location, 1965*

State	Number of dealers		State	Number of dealers	
	Dealer banks	Dealers		Dealer banks	Dealers
Alabama.....	1	8	New Jersey.....	6	3
Arizona.....	3	1	New Mexico.....	1	1
Arkansas.....	1	4	New York.....	13	54
California.....	7	12	North Carolina.....	4	6
Colorado.....	1	3	North Dakota.....	1	1
Connecticut.....	1	1	Ohio.....	1	20
Florida.....	1	4	Oklahoma.....	2	5
Georgia.....	1	7	Oregon.....	1	1
Illinois.....	4	20	Pennsylvania.....	4	17
Indiana.....	1	3	Puerto Rico.....	1	1
Iowa.....	3	5	Rhode Island.....	1	1
Kansas.....	1	4	South Carolina.....	1	2
Kentucky.....	6	6	Tennessee.....	3	8
Louisiana.....	2	9	Texas.....	6	26
Maryland.....	4	4	Utah.....	1	1
Massachusetts.....	4	5	Virginia.....	1	6
Michigan.....	2	5	Washington.....	5	7
Minnesota.....	4	7	West Virginia.....	1	1
Mississippi.....	1	10	Wisconsin.....	2	4
Missouri.....	5	14			
Nebraska.....	1	2	Total.....	93	295
Nevada.....	1	1			

¹ Based on all managing underwriters of new issues in 1965 about which the Investment Bankers Association had knowledge.

Source: Investment Bankers Association of America.

Table 5 lists the number of managing underwriters by type of security underwritten and type of dealer. Of the 93 managing dealer banks in 1965, 79 managed only general obligation issues, no banks managed only revenue issues, and 14 managed both general obligation and revenue issues.¹² Of the 295 dealers listed, 196 managed only general obligation issues, 43 managed only revenue issues, and 146 managed both general obligation and revenue issues.

¹⁰ The classification "managing underwriters" in the IBA statistics includes those dealers who underwrite the entire issue themselves, or who coordinate the activities of a syndicate (in which case comanagers may exist). The duties of the manager are many and varied but include bookkeeping, preparation of advertising, preparation of bids, polling members to obtain a syndicate bid, etc.

¹¹ During the 10-year period that data have been maintained by the IBA, more than 1,200 firms have at some time or another been the syndicate manager or sole underwriter of a municipal bonds issue.

¹² Federal banking laws limit banks in their underwriting of "municipal" bonds to "general obligations" of a State or of any political subdivision thereof (12 U.S.C.A. 24). The term "general obligation" has been variously interpreted by the banking authorities. Thus, some banks have underwritten bonds which are classified "general obligations" by their appropriate authority but which are classified as "revenue" bonds by the definition employed in this chapter.

Chart I is a distribution of the number of managing underwriters for 1965 by the number of issues managed. The majority of firms managed fewer than 25 issues, with nearly half of the firms managing fewer than 5 issues.

It was possible to obtain net worth data for 157 of the 295 dealers, who were managing underwriters, from Finance magazine.¹³ One hundred and thirty-eight dealers who managed issues in 1965 are not listed in the survey conducted by Finance magazine either because they did not respond to the survey, or because their net worth was less than \$100,000. Chart II presents the results of this tabulation and itself encompasses a wide range of capitalization, from the smallest firm at \$100,000 to the largest firm with a net worth of over \$133 million. Nearly 40 percent of the firms reported net worth of from \$1 to \$5 million.

As a measure of change within the industry, a similar tabulation was made for 1957. Of the 413 managing underwriters, 148 were listed in Finance's survey for that year. Chart III is a distribution of this tabulation. Only about 30 percent of the firms reported net worth of \$1 to \$5 million. The overall level of capitalization was definitely lower with over three times as many firms in the smallest category and less than one-third as many firms in the largest category. Although even the largest firms in the investment banking industry are not particularly large when compared with large firms of other industries, the two charts indicate that the industry has been able to attract over the past decade the capital needed to meet the needs of an ever increasing volume of business. This is particularly noteworthy in view of the sharp decline of profit margins from 1958 to 1965 (see next section).

TABLE 5.—*Managing underwriters¹ by type dealer and issues underwritten*

Type dealer	Type issue			
	General obligation	Revenue	General obligation and revenue	Total
Dealer banks	79	-----	² 14	93
Dealers	106	43	146	295
Total	185	43	160	388

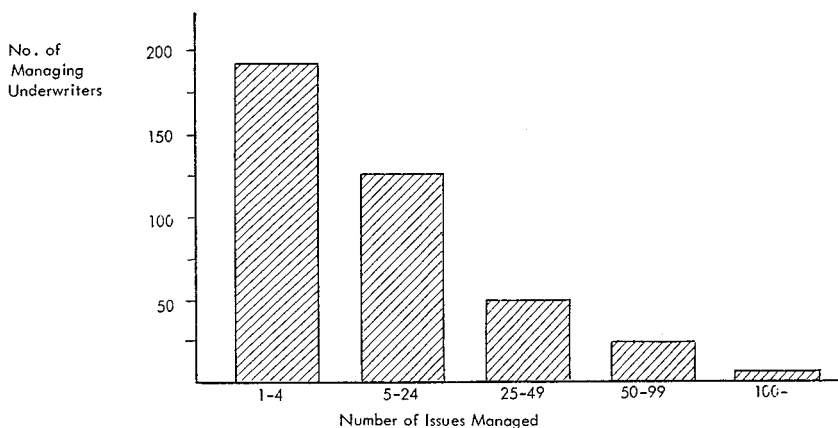
¹ Based on all managing underwriters of new issues in 1965 about which the Investment Bankers Association had knowledge.

² See footnote 12, of text.

Source: Investment Bankers Association of America and Finance magazine, March 1966.

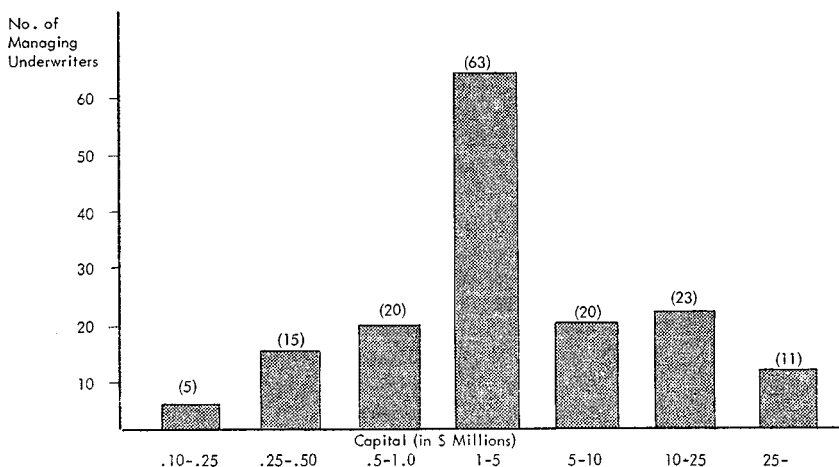
¹³ Finance magazine, March 1966, which reports the results of a survey of firms reporting \$100,000 or more of net capital. Commercial banks are not included. The capital figures apply to the entire reporting organization and do not represent the capital available for underwriting (a figure which is unobtainable).

CHART I

DISTRIBUTION OF MANAGING UNDERWRITERS
BY NUMBER OF ISSUES MANAGED, 1965

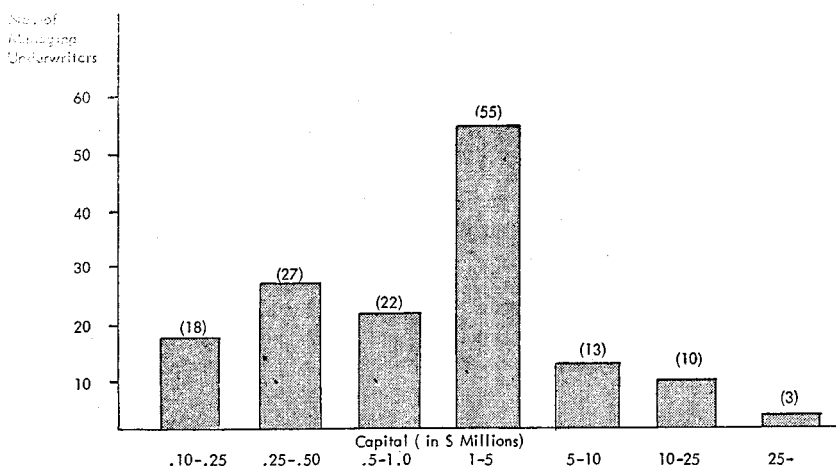
Source: Investment Bankers Association of America.

CHART II

DISTRIBUTION OF NON-BANK MANAGING UNDERWRITERS¹
BY CAPITALIZATION, 1965Sources: Investment Bankers Association of America and *Finance* magazine, March, 1966.

1. Based on all managing underwriters of new issues in 1965 about which the Investment Bankers Association of America has knowledge and for which net worth figures were published in *Finance* magazine.

CHART III

DISTRIBUTION OF NON-BANK MANAGING UNDERWRITERS¹
BY CAPITALIZATION, 1957

Sources: Investment Bankers Association of America and *Finance* magazine, March, 1958.

1. Based on all managing underwriters of new issues in 1957 about which the Investment Bankers Association of America has knowledge and for which net worth figures were published in *Finance* magazine.

THE MUNICIPAL BOND MARKET

This section focuses on those aspects of the bond market that reflect directly the underwriting process. As such, the examination is concerned with underwriter¹⁴ specialization and method of purchasing bonds (by competitive bidding or negotiation), the extensiveness of competitive bidding, and the spread (gross fee) received by the underwriter for his services. The statistics used are taken from the data file maintained by the IBA and cover the period 1957 through 1965. Statistical information is available on spreads only for the years 1958, 1959, 1963, 1964, and 1965.

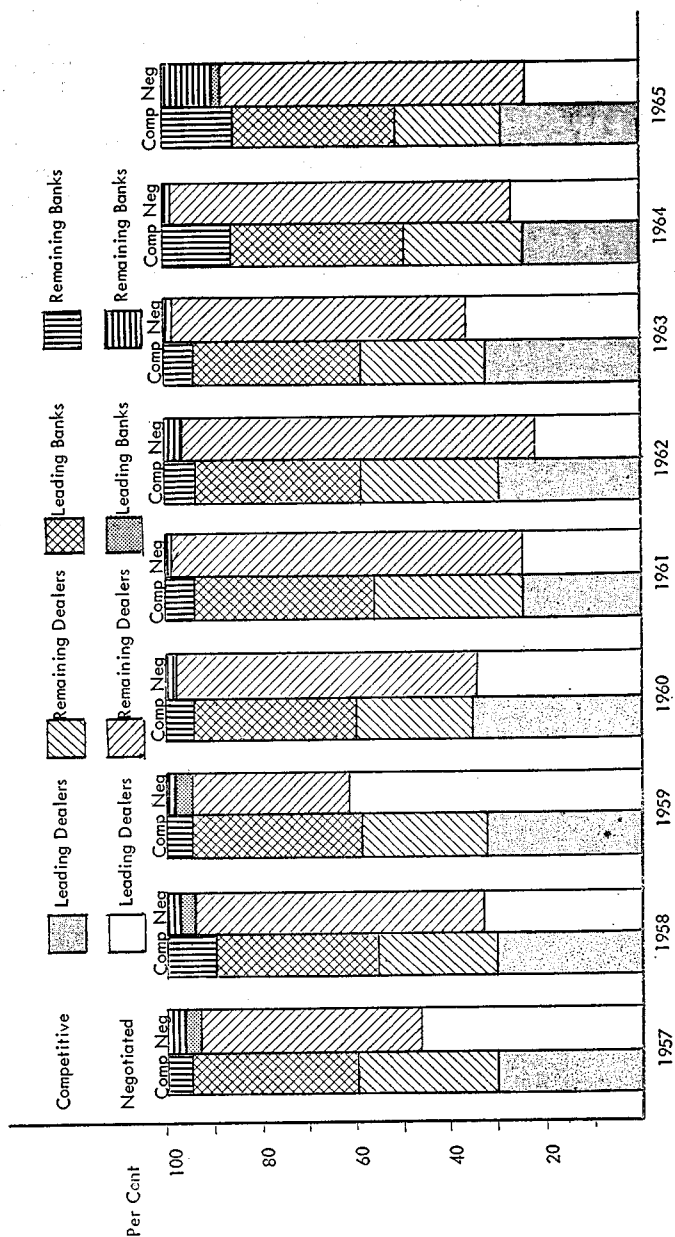
Underwriting management.—Due to legal requirements and the demands of the market, specialization has developed among the underwriters of municipal bonds. This specialization, to a limited extent, is investigated by separating underwriters into four groups: (1) Leading dealers, or those 10 dealers who managed the largest dollar volume—among dealers—of bonds in a given year (this group varied from year to year); (2) remaining dealers; (3) leading banks, or those 10 dealer banks who managed the largest dollar volume—among banks—of bonds in a given year (this group also varied from year to year); and (4) remaining banks. Additionally, the bonds underwritten by each type of dealer are separated by type of issue (general obligation and revenue) and offering (negotiated or competitive bidding).

¹⁴ Again, for lack of underwriting participation data, underwriting management figures are used.

The data in this section are taken from the underwriting management file maintained by the IBA.¹⁵ In this file, dealers who are sole underwriters of an issue or managers of a syndicate are credited with the entire dollar amount of the issue. For co-managers, the amount of the issue is equally divided among the co-managers and each is credited with one issue. Due to incomplete information, some records were not used. Additionally, a few new issues of municipal bonds are not underwritten and thus are not included in the compilations. These two factors account for the difference in yearly totals when compared with the data in chapter 1.

¹⁵ The tabulations used as basic information are contained in the appendix.

New issues of Municipal Bonds, 1957-1965



Source: Investment Bankers Association of America.

Chart IV is the percentage distribution of the dollar value of all bonds by type underwriter (dealers or dealer banks) and offering (competitive or negotiated). The left bar for each year is a distribution of competitively offered issues and the right bar is a distribution of negotiated issues.

Management of competitively bid bonds is equally divided (not by design, of course) between banks and dealers. Banks other than the 10 leading banks have grown in importance as underwriting managers of competitive issues. All dealers, as a group, have declined in this area. These relationships do not hold true for negotiated issues, however (the large increase for remaining banks in 1965 is not statistically significant). With the exception of 1965, dealers managed more than 90 percent of these issues. From 1957 through 1965, leading dealers declined in importance as the remaining dealers managed more of this form of financing.

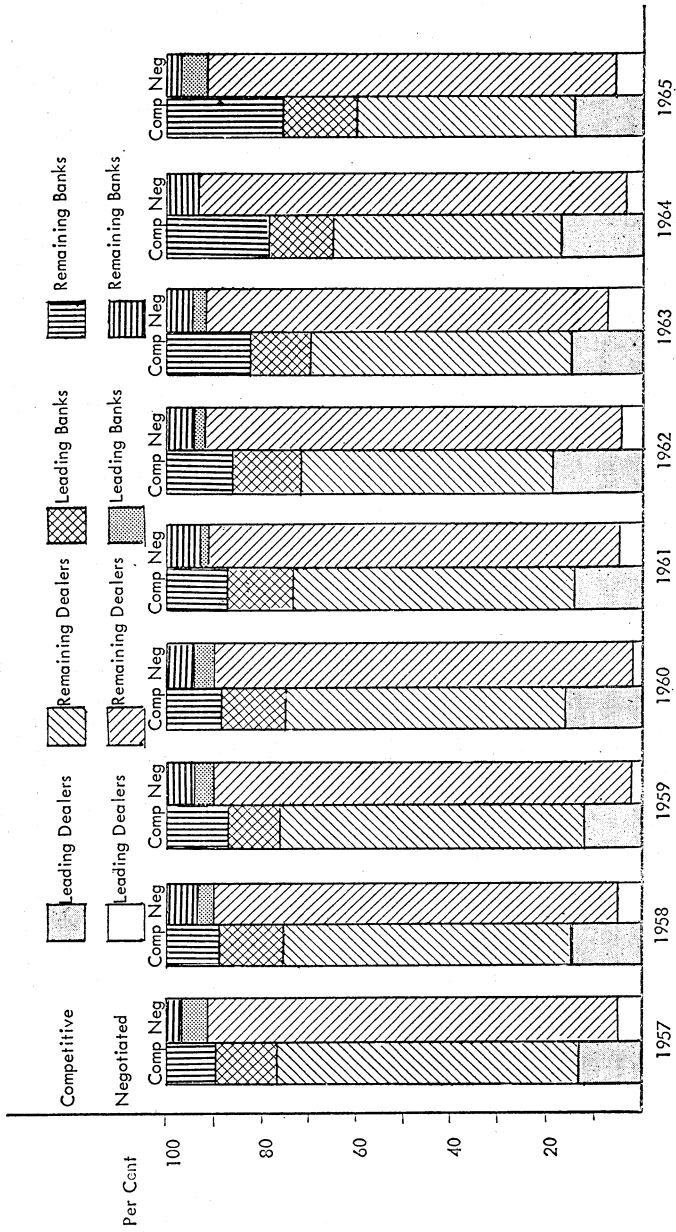
Chart V compares the same characteristics but is measured by number of issues instead of dollar volume. The share of the market managed by other (remaining) banks of competitive issues has markedly increased during the past decade offset by a decline in management by other dealers. A comparison with chart IV shows that while leading dealers and banks manage much less than half of the competitively offered bonds, their percentage of the dollar volume is much larger. Thus, leading dealers and banks on the average manage larger issues than those issues managed by other dealers and banks.¹⁶

Other dealers have consistently managed a large majority of negotiated issues.

Chart VI examines the distribution of the dollar volume of general obligation bonds. A similar relationship exists for competitively bid issues of general obligation bonds as did for competitively bid issues of all bonds (chart III). This was to be expected due to the dominant role played by general obligations in a total listing of competitive issues. The variability within negotiated issues results from the relatively small volume in this category (less than 5 percent of general obligations) and, therefore, the large influence of a change in the management of a few issues.

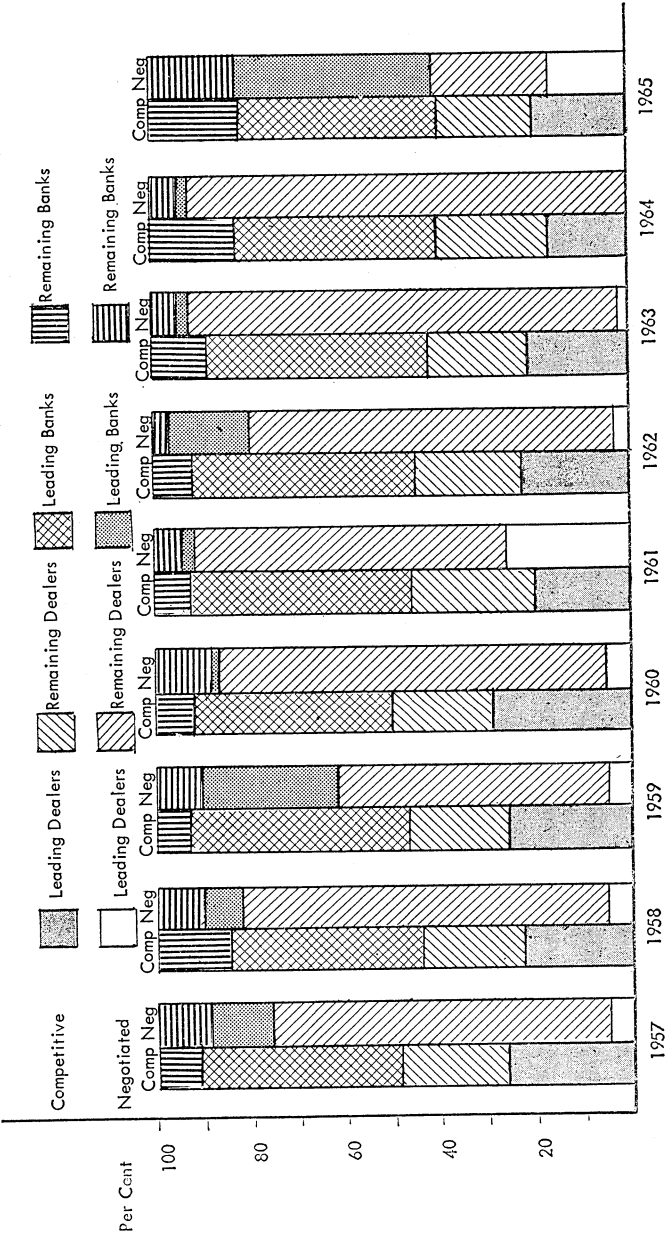
¹⁶ Of course, they, as well as other underwriters, participate in many other issues both large and small in a capacity other than managerial.

CHART V
PERCENTAGE DISTRIBUTION OF THE NUMBER OF UNDERWRITTEN ISSUES
By Type Underwriter and Offering
All Bonds, 1957-1965



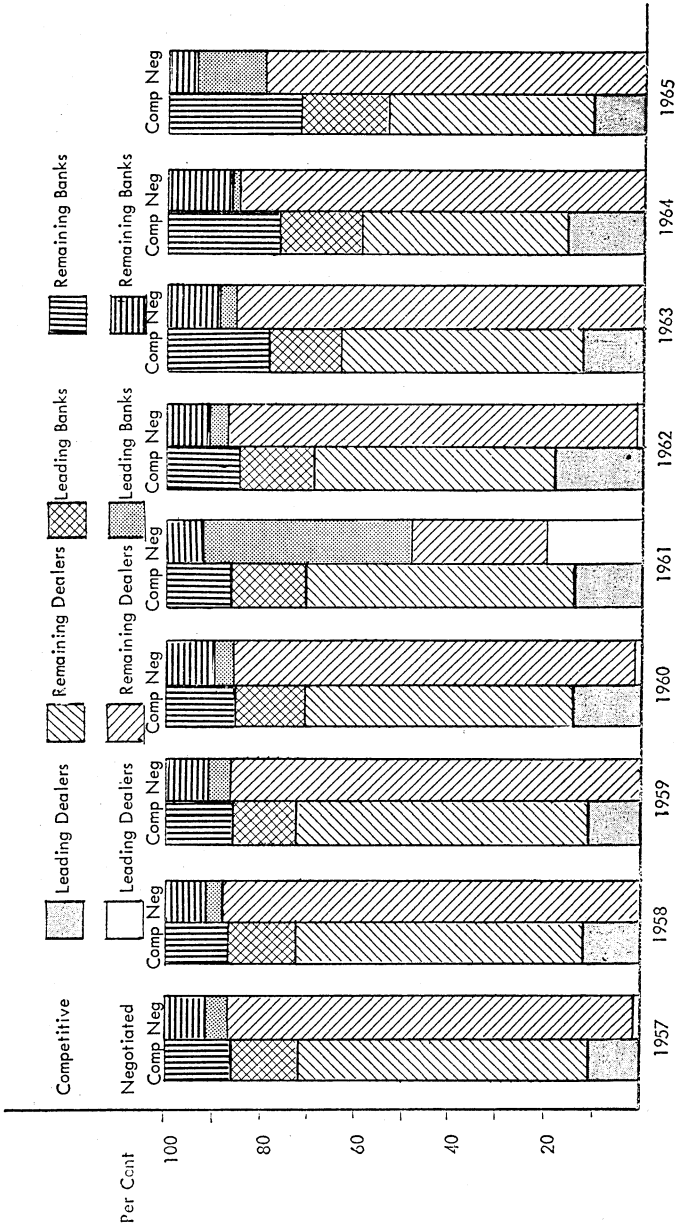
Source: Investment Bankers Association of America.

CHART VI
PERCENTAGE DISTRIBUTION OF THE VALUE OF UNDERWRITTEN ISSUES
By Type Underwriter and Offering
General Obligation Bonds, 1957-1965



Source: Investment Bankers Association of America.

CHART VII
PERCENTAGE DISTRIBUTION OF THE NUMBER OF UNDERWRITTEN ISSUES
By Type Underwriter and Offering
General Obligation Bonds, 1957-1965



Source: Investment Bankers Association of America.

Chart VII measures the management of the number of issues of general obligation bonds rather than the dollar volume. It reflects the same pattern as chart V (all bonds) with respect to competitive issues. Minor changes in the distribution of negotiated issues are not significant.

With the exception of a few issues, banks are not permitted to underwrite bonds classified in this chapter as revenue bonds (see footnote 12). Leading dealers have managed 50-60 percent of the dollar volume of competitively offered revenue issues with little change over the years (chart VIII). With respect to negotiated issues, however, the share of this group has declined noticeably.

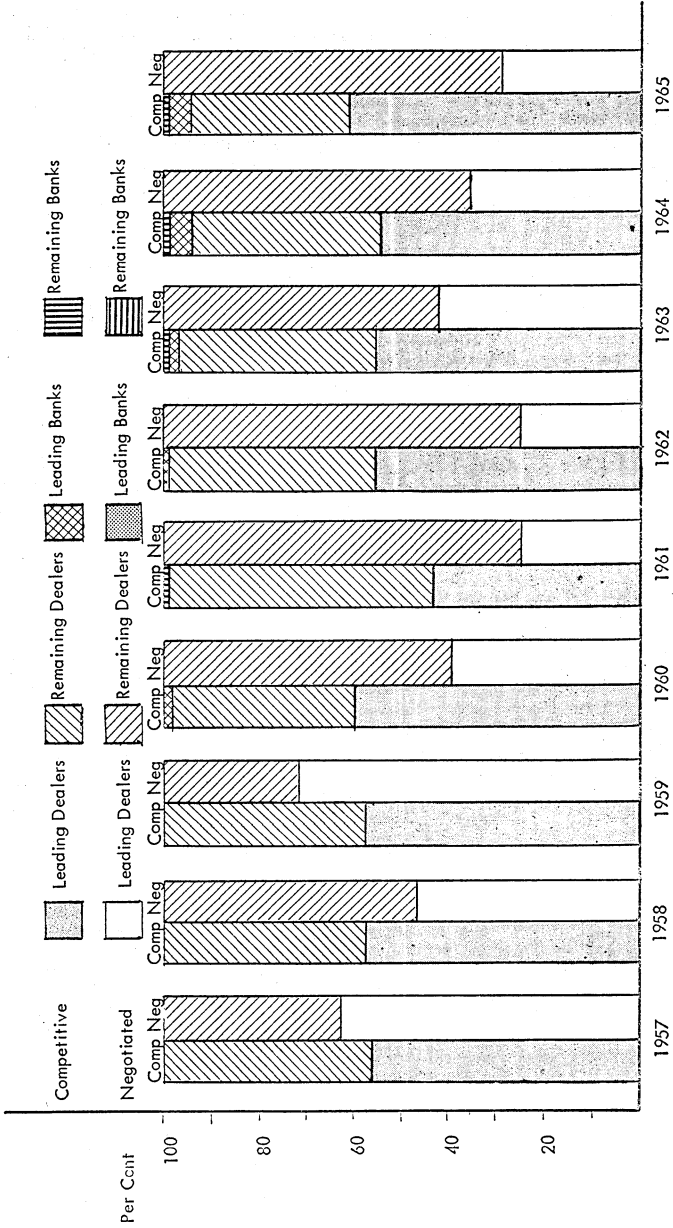
As with negotiated issues of all bonds, other dealers manage the great majority of the issues of negotiated revenue bonds, averaging nearly 90 percent (chart IX). Again, on the average, leading dealers manage issues which are large relative to those managed by other dealers.

Competitive bidding.—Chapter 1 presented detailed information on the method of sale of new issues of municipal bonds. This information showed that competitive bidding accounts for about 95 percent of the dollar value of general obligation bonds and over 60 percent of revenue bonds sold. Overall, about 85 percent of new issues are sold through competitive bidding.

Table 6 is a tabulation of the average number of competitive bids per bond issues, based on available data maintained by the IBA. The information is grouped by dollar size of issue and covers the years 1957 through 1965. Much of the IBA data represents at least one less than the minimum number of bids.¹⁷ As a result, the averages in the table are known to be too small. Because of the nature of data collection, the understatement should be greatest in those categories containing the greatest number of bids. One additional bias in the data concerns the number of issues. Due to data recording and processing procedures, a duplication in the number of issues appears to a limited extent in all categories, but more for the larger issues. There is no reason to believe that this affects the average number of bids, however.

¹⁷ In recording the number of competitive bids, only the known bidders are utilized. Frequently it is known that there was at least one (usually more) additional bidder. Rather than estimate the additional number of bidders, only the known number is recorded.

CHART VIII
PERCENTAGE DISTRIBUTION OF THE VALUE OF UNDERWRITTEN ISSUES
By Type Underwriter and Offering
Revenue Bonds, 1957-1965



Source: Investment Bankers Association of America.