

The National Association of Independent Insurers advised:

This is the only question on which all companies were in agreement. They all feel that making the interest on such securities subject to Federal income tax would make these obligations less attractive and would require a much higher interest rate.

One company indicated that, depending on the call features attached to such bonds, they would have limited attraction to them at a yield of under 7 percent. Two companies indicated 5 to 5½ percent at present levels. Two companies indicated at near the yields available on "A" rated corporate bonds.

It appears that since the operations of the companies are predicated upon an underwriting profit, taxable bonds will yield them an aftertax return equal to only 52 percent of the pretax return. Therefore, the pretax yield must be very high in order to give the company an adequate aftertax return on their investment.

C. PROSPECTIVE LOANS AND INVESTMENTS

1. MUNICIPAL SECURITIES

For the stock companies it was noted that during the early post-World War II period, the fire and casualty industry participated actively in the substantial State and local borrowing to finance postponed and expanded public improvements. Large amounts of U.S. Government bonds purchased during the war were sold during those years, and provided a nonrecurring source of funds. During the years 1946-55, the stock fire and casualty companies increased their municipal bond holdings by an average of 29 percent annually. In more recent years, especially with sizable underwriting losses reducing the need for the tax-exemption feature, the increase in State and municipal bond holdings has been reduced to around 6 to 6½ percent annually—reasonably close to that for the economy as a whole. Using a 6-percent annual growth rate (which seems reasonable considering the emerging trends as noted above, and the basic assumption by the Joint Economic Committee of a 5.5-percent growth rate in GNP), and assuming no significant change in the Federal income tax laws applicable to stock fire and casualty companies, nor changes in other factors, the following amounts (millions of dollars) might be invested in State and municipal bonds—general obligations and special revenues:

1966-----	468	1971-----	626
1967-----	496	1972-----	663
1968-----	525	1973-----	703
1969-----	557	1974-----	745
1970-----	590	1975-----	790

In the case of the mutual companies, because of the close relationship between the individual mutual fire and casualty insurance company's tax picture and its purchases of tax-exempt municipals, few companies were able to make any firm estimates of how much they will invest in such securities during the next 10 years. Since respondents are principally larger companies their intentions might not be typical of the mutual insurance industry. Several large companies gave rough estimates of about \$10 million a year as their likely purchases per year over the next decade. Others estimated that about

5 percent of admitted assets will go each year into tax-exempt municipals, others indicated that at any one time from about 30 to 50 percent of their portfolios would be invested in municipals, the annual rate of investment depending upon their portfolios' present composition.

The important point is that there recently has been little underwriting profit in the business, and this seems to be the prospect for the immediate future. Since this makes the advantage of tax-exempt securities slight it seems unlikely that they will be attractive as investments for fire and casualty insurance companies until the underwriting picture changes.

The survey of the independent companies reported that the 14 companies responding to this question indicated that they would be likely to invest in excess of \$100 million each year for the next 10 years. Only one of the companies indicated that they had a tax carry forward until 1971 and would not purchase any municipal securities until that time. The other years would depend on their profitability in the years to come. Since this is only a sample of our companies, I believe that it would be reasonable to assume that our members could purchase between \$500 and \$750 million of municipal securities in each of the next 10 years.

2. OBLIGATIONS OF PRIVATE, NONPROFIT ORGANIZATIONS

Mutual companies express little or no interest in investments in debt obligations of private nonprofit organizations. There have been some purchases of university dormitory revenue bonds, but these have been considered as being in the same category as municipals. There was no information regarding stock company interest in these obligations.

Only 1 of the 15 independent companies indicated that they would purchase these types of securities. This was an insignificant amount of \$150,000 annually. The rest all indicated that they would not purchase these types of securities or that only very little amounts would be purchased. It appears that these types of obligations are not attractive to our companies.

3. POSSIBLE EXPANSION OF INVESTMENTS OF MUNICIPAL SECURITIES

The stock companies advise that although the competition from the commercial banks in the past 3 years (1962-64) in the municipal bond market may have been a slight factor in the relative decline in the amounts of municipal bonds purchased, the principal factor accountable for this decline has been the unprofitability of the fire and casualty insurance business. The need for tax-exempt income has not been as great as when the industry was recording statutory underwriting profits. An increasing volume of profitable business will enable the industry to increase its volume of State and local municipal bond purchases.

In the case of the mutual companies answers were varied as to what circumstances would lead to expansion of investment in State municipals (not private nonprofit bonds). More than normal increase in admitted assets, or the decision to expand municipal holdings relative to other classes of securities, could lead to expansion, as would further improvements in determinants that would be to the companies' advan-

tage. Municipal purchases might be expanded if tax exemption were assured, and apprehension of Federal Government tampering with the tax-exempt feature relieved. The investment in municipal bonds can be increased only if companies require tax exemption. This implies a level of underwriting income sufficiently high to encourage purchase of tax-exempt income securities. The only really important factor in deciding whether municipal bonds should be acquired is the profit position of the company. There certainly is no incentive to buy municipals when no tax liability exists.

The independent companies noted that the biggest factor that would contribute to the expansion of investments in these securities would be an increase in underwriting profits. Profitability is the big factor since this influences the attractiveness of the investment in tax-exempt securities. Other items that would affect this would be more attractive yields and a deterioration in common stock as an investment.

CHAPTER 25

State and Local Public Retirement Funds*

INTRODUCTION

PURPOSES—OBJECTIVES—FUNCTIONS

A retirement fund whether in public or private enterprise seeks to accomplish two broad purposes; namely: (1) to create a systematic method for removing from the active working force superannuated and disabled employees who are in fact hidden pensioners, effectuating by this process the recruitment policy and stabilizing employment conditions; and (2) to meet in the most economical manner the social obligation of aiding workers to provide against insecurity in old age and disability, and assisting them in making provision for their immediate dependents.

That a reasonable expenditure for retirement purposes is justified has been demonstrated by the advantages to government. They consist of improved service, economies in operation, the retention of competent and skilled workers, and the attraction to the service of persons of proved ability and special skills.

Translated into monetary terms, these advantages offset partially, if not entirely, the governmental expenditures for pensions.

A public employees' retirement fund, therefore, though concerned with the end objective of financial security after retirement, has as its primary aim the furnishing of an indispensable factor in an effective personnel program for government. It seeks to induce the entry of competent people into public administration and their retention in service. Through a formula which relates the pensions directly to length of service, age, and salary, it provides the incentive for the retention in service of the employees which the fund in the first instance has been recruited. It constitutes in essence, therefore, an incentive program. Finally, by providing an annuity reasonably related to the final average earnings, it encourages the retirement of superannuated employees. Through this orderly system of retirement, the fund affords an opportunity for systematic promotion in salary and rank to the younger employees.

The recruitment of personnel in the trained professions for public work is at best hazardous and uncertain. Competition from private enterprise plus a natural inclination toward self-employment with its higher financial rewards tends to restrict the attractiveness of governmental service. And yet this personnel must be obtained if the various services are to be provided.

*By A. A. Weinberg, consulting actuary; chairman, Committee on Retirement of the Municipal Finance Officers Association of the United States & Canada 1942-65; actuary Illinois Public Employees Pension Laws Commission 1945 to date, with minor editing by committee staff.

The competition for services is extreme and the retirement fund plays an important role in the recruitment and retention of the employees. The retirement fund, therefore, is an indispensable factor in providing these services and in the effectuation of this policy.

NUMBER OF SYSTEMS AND PRESENT ASSETS

Practically all full-time employees of the States and local governments are in some form of retirement fund. Many part-time and temporary employees are also provided retirement coverage. The total number of individual funds exceed 2,300 having approximately 6.2 million members. A small decrease in the number of separate funds has occurred during recent years through mergers with other and larger funds. Coverage includes teachers, policemen and firemen, clerks, mechanics, and all other employees of States and local governments necessary to provide public services to the country's expanding population.

Present assets of State and local public retirement funds are \$31.8 billion. This compares with \$2.6 billion of assets in 1946. Since the year 1946, the rate of increase in assets has been 14 percent per year. During the last several years, however, the rate of increase has slackened to about 11 percent per year. Recent compilations indicate that public employee retirement funds are bringing to the capital funds market more than \$3.5 billion of new money (new funds less benefit payments) annually.

SOURCES OF FUNDS AND RELATIVE QUANTITIES

The sources of funds and their relative quantities for the 1964-65 fiscal year have been as follows:

[In millions of dollars]

	Amount	Percent
Total receipts.....	\$5,260	100.0
Employee contributions.....	1,625	30.9
Government contributions:		
From States.....	1,026	19.5
From local governments.....	1,393	26.5
Earnings on investments.....	1,216	23.1

Source: Bureau of the Census, U.S. Department of Commerce.

RECEIPTS—DISBURSEMENTS—ASSETS

Trends during recent years point to a steady and persistent increase over the years in finances as indicated by the latest compiled figures:

(Amounts in millions of dollars)

Period	Receipts	Benefit and withdrawal payments	Assets—Cash and security holdings
1964-65.....	\$5,260	\$2,098	\$31,814
1963-64.....	4,787	1,844	28,639
1962-63.....	4,894	1,665	25,629
Percent increase:			
1964 to 1965 from 1963 to 1964.....	9.9	8.9	11.1
1965 to 1964 from 1962 to 1963.....	8.9	10.8	11.7

Source: Bureau of the Census, Department of Commerce.

MAJOR CATEGORIES OF INVESTMENTS

The following table illustrates the major categories of investments for the 1964-65 fiscal year with the amounts for the 1963-64 fiscal year given for comparison:

[Dollar amounts in millions]

Items	1964-65		1963-64	
	Amount	Percent of total	Amount	Percent of total
Cash and security holdings at end of fiscal year.....	\$31,814	100.0	\$28,639	100.0
Cash and deposits.....	323	1.0	309	1.0
Government securities:				
Federal.....	7,397	23.3	6,954	24.3
State and local.....	2,745	8.6	3,082	10.8
Nongovernmental securities:				
Corporate bonds.....	15,098	47.4	13,346	46.6
Corporate stocks.....	1,422	4.5	1,123	3.9
Loans to members.....	15	.1	18	.1
Mortgages.....	3,379	10.6	2,809	9.8
Other.....	1,436	4.5	1,007	3.5

Source: Bureau of the Census data.

SUPPLY OF CAPITAL FUNDS

BASIC FACTORS

The investment history of public retirement funds has consisted of a concentration in U.S. Government bonds, and State and municipal bonds. For many years the investments of these funds in State and municipal bonds were confined exclusively to the State of their operation. Since 1946, a considerable relaxing of restrictions occurred and bonds of other States and municipalities were made eligible for investment subject to prescribed limitations and conditions. The realization during recent years that larger earnings could be obtained on other types of securities with reasonable safety has resulted in a broadening of the investment authority by the inclusion of corporate bonds, mortgages, and common stocks. The increasing need of additional revenues has contributed in some measure to this change of policy.

While the investment objectives of private pension funds and public pension funds are basically the same; namely, the realization of the maximum amount of earnings consistent with safety of principal, certain factors exist in public administration which influence in some degree the investment policies of public retirement funds and tend to restrict their operations.

By their very nature, these funds cannot maintain the same freedom and flexibility as funds operating for private enterprise. Legislative controls and statutory regulations, and the rigid screening of the operations of public agencies, impose some restrictions in this regard.

Public retirement funds are frequently subjected to pressures from local agencies to divert a part of their investable assets toward local projects within areas served by the retirement funds even though the investment may be of dubious quality or may call for a lower rate of income. A public sale of bonds for the financing of municipal projects may not bring as favorable a price to the governmental agency as the rate stipulated for the acquisition of these securities by the retirement funds.

Liabilities of retirement funds are of long-term character maturing many years after they have been initiated. The investment objective, therefore, should give emphasis to this factor. The period of accumulation may extend anywhere from 20 to 40 years, followed by a period for the payment of the retirement annuity which may range from 10 to 20 years. The investment policy, therefore, is generally formulated with this factor in mind.

Because of the basic characteristics of retirement fund operations, a continuous flow of revenue to the fund is assured from employee and employer contributions, and interest on investments. This assumes that the employer is currently meeting his funded obligations in a full or partial measure. Whether funding is total or partial, the revenues accruing to the fund are substantially in excess of outgo for benefit payments. The need for emphasis on short-time securities, therefore, or for liquidating securities to meet benefit payments generally does not exist.

The public retirement funds as public agencies are exempt from direct Federal taxation. They have nothing to gain, therefore, from investments in State or municipal bonds. Those who advocate these investments claim that the acquisition of these bonds by public retirement funds is a factor in making a market for these securities, thus facilitating the financing operations of the State and its political subdivisions. This may have some merit in the case of small governmental units involving unknown credits of low quality. Notwithstanding the objections to these investments, conditions have existed in former years, for a relatively short period, where bonds of this type were obtainable at higher yields than U.S. Government bonds or high quality corporate bonds. Under such circumstances, substantial investments in these securities were made.

Interest income is a basic factor in any insurance plan and particularly so in the operation of a retirement fund. Costs are based upon the theory that the reserves of the retirement fund will be continuously invested at an assumed rate of interest. The mortality tables forming the basis of pension cost and used in the calculation of liabilities and reserves reflect the factor of interest. A retirement fund

relies on interest income to meet a substantial portion of its required revenues. Interest has a pronounced effect on pension cost. A differential of one-fourth of 1 percent in the investment income may be considered the equivalent of 5 to 6 percent in contributions, or in the amount of benefits to be provided. Translated into other proportions, any large increase in interest earnings has a market impact on financing the requirements of the retirement fund.

The primary objectives of a realistic investment authority for public retirement funds are the preservation of principal and the realization of a reasonable rate of income. The governing policies are the same as those which reflect prudent management of any investment account except that recognition must be given to prescribed statutory regulations and the factors that are characteristic to the operations of government. The investment base should be such as to bring about a diversified investment account well balanced as to the several types of securities that may be considered appropriate for a public retirement fund in the light of the applicable factors and conditions.

One important principle inherent in the formulation of an investment policy is that a public retirement fund must protect itself to the extent possible against any impairment of principal. Because of the rigid budgeting of governmental revenues and expenditures, and the limitations on revenue sources for government, any loss of principal is not readily recoverable. Conservatism, therefore, dictates all areas of investment operations and constitutes a guiding and predominant policy.

Problems of valuation of investments do not exist for public retirement funds as with banking or insurance institutions, except for a periodic appraisal for purposes of determining changes in the status of the investment credits or in the market value of equity securities.

Conditions in the securities markets during recent years have afforded an excellent opportunity to make conversions of municipal bonds for the purpose of increasing income and upgrading the quality of the investment account. With yields on long-term U.S. Treasury bonds of 40 to 100 basis points higher than the best quality municipal issues, a sale of municipal bonds and the purchase of governments has been advantageous. An even larger rate of income was realized by conversions into corporate securities.

The impetus for an extension of the investment authority into higher yielding corporate bonds has stemmed from the ever increasing tax requirements of the funds and inadequate funding. It also has been due to the recognition that maximum income on invested assets must be a primary objective and that the funds should seek as large an income on investments as is prudent and feasible. The relaxation of limitations and the greater investment latitude for the funds have also been due to their explosive growth in the last decade in terms of memberships and assets.

ANNUAL DOLLAR VOLUME

For the period from 1946 to 1965, the annual dollar volume of new moneys available for investment, that is, total revenues from all sources less benefit and administration expense payments, has been \$30 billion. This is at an annual dollar volume of \$1.5 billion.

Over the years, the proportion of available funds for investment has been steadily and persistently upward. The prospects for the period 1966-75 may be quite striking. Based upon the results of current financial operations of the retirement funds, new moneys currently becoming available for investment exceed \$3.5 billion per year. With the continuous increase in the membership of these funds and a broadening of their benefit schedules, the amount of available funds for investment should increase steadily in future years. Within the next 5 years, this amount will in all probability attain a level of \$4.3 billion. By 1975, if the present rate of growth of these funds is maintained, a level of close to \$6 billion is a reasonable expectation.

RELATIVE PROPORTIONS OF MUNICIPAL SECURITIES

The proportion of State and municipal bonds acquired by the public employee retirement funds has shown a marked change since the year 1946. At that time, State and municipal bonds of the several types for all public funds was equal to 40 percent of total invested assets or approximately \$1 billion. This rate 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. For example, on June 30, 1965, out of total assets of State and local retirement funds amounting to \$31.8 billion, holdings of State and municipal bonds were equal only to 8.6 percent. This compares with 10.8 percent at the end of the preceding year and about 15 percent 2 years ago.

It appears that the change in the proportion of State and municipal bonds held was more pronounced in the case of the larger retirement funds than those of smaller size. This is clearly shown by the figures compiled by the Investment Bankers Association on investments only of State retirement funds whose aggregate assets amounted to \$21.4 billion, being more than two-thirds of the aggregate assets of all 2,300 public retirement funds. For these State retirement funds alone State and municipal bonds amounted to \$790 million. This is equal to 3.7 percent of total assets. The following table is illustrative:

Investments of State retirement funds

	1965		1963		1961	
	Value	Proportion	Value	Proportion	Value	Proportion
		Percent		Percent		Percent
U.S. Governments.....	\$5,062,605,864	23.6	\$4,117,652,354	24.3	\$3,961,052,880	29.9
Municipal bonds.....	797,153,429	3.7	1,161,176,928	6.9	1,752,559,262	13.2
Corporate bonds.....	9,797,860,371	45.8	7,771,130,156	45.9	4,964,176,396	37.5
Mortgages.....	3,125,300,450	14.6	2,268,391,712	13.4	1,447,896,456	10.9
Stock.....	1,063,569,746	5.0	664,415,554	3.9	333,557,587	2.5
Other investments.....	1,563,481,774	7.3	959,974,801	5.7	773,566,024	5.9
Total.....	21,409,971,634		16,942,741,505		13,234,808,605	

Source: Investment Bankers Association.

NOTE.—The figures in this table relate only to State retirement funds. They do not include municipal retirement funds whose invested assets represent approximately an additional 50 percent of the foregoing totals.

In past years pressures have oftentimes been exerted on public retirement funds to help local areas to market their bonds at low interest rates. This was based on the premise that there was some obligation to support the community financial needs. Some retirement funds holding local municipal issues have suffered from lack of geographical diversification. In the event of a regional recession which curtailed tax collections, the retirement fund might have run into financial difficulty collecting interest on its local obligations. However, the growing realization that investment earnings are of paramount importance in the financing of pensions has resulted in significant changes in investment policy in recent years.

In the case of New York City, for example, in 1959 under former investment policies, the several retirement funds of the city had 73 percent of their assets invested in New York City bonds. By mid-1965, following a change of policy, their investment in New York City bonds had been reduced to 35 percent of total investments. This came about as the result of sales of these bonds and by a replacement of matured bonds by corporate issues. As a result of this program investment earnings increased from 3.07 percent in 1959 to 3.93 percent in 1965.

POSSIBLE FUTURE TRENDS

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. The larger funds particularly have engaged in this process and have converted large amounts of their State and municipal bonds. During the past several years, the funds have looked to corporate bonds as the main outlet for their cash. For example, funds in the States of California, Kansas, and Tennessee have more than 75 percent of their assets invested in corporate bonds. State and local retirement funds seem to have been the main prop of the corporate bond market during recent years.

Most of the State and municipal bonds purchased by the public retirement funds have been general obligations. Revenue bonds comprise a small proportion of these securities, probably about 15 percent thereof. Few special assessment bonds have been acquired. The relative proportions have not varied materially over the years since a highly restrictive policy has been in effect with the emphasis on security and safety of principal regardless of the rate of return.

Most of the State and municipal bond issues in prior years have been of long term. The more discriminating funds have confined themselves to medium-term bonds, wherever available, during periods of low interest rates when State and municipal bonds could be had at reasonable rates. In times of high interest rates, the policy was to concentrate on long-term securities.

BOND RATINGS—PURPOSE OF ISSUES

Bond ratings by municipal security rating services have not been a material factor in the selection of State and municipal bonds for investment. The great majority of bonds acquired in prior years were

issues of small municipalities which could not be rated because of a policy of the rating services not to deal with issues of less than, say, \$1 million. As a result, large amounts of unrated bonds were acquired. It is only the larger issues and issues of the larger municipalities that were assigned ratings. But ratings were generally not a factor in the investments in State and municipal bonds.

Nor was the intended use of the proceeds of material interest or concern to the State and local retirement funds as investors. Rarely did a fund investor inquire of the purpose of the issue or the use of the funds. Bonds were acquired indiscriminately so long as it was a municipal issue of a local government whose identity was well known to the investor.

For the most part purchases were made of the municipalities in the locality, which were known to the managers of the retirement funds. Few funds acquired bonds of other States or municipalities. The managers of these funds, generally a board of trustees, were not sufficiently informed on the subject of investments and were inclined to confine themselves to the local area. It is only in relatively recent years that investment counsel has been employed, and this has occurred for the most part among the larger retirement funds. The seeking of advice and counsel of trained specialists on the subject of investments has led to the extension of the scope of the investment authority to corporate securities and a corresponding diminution of interest in State and municipal securities on the part of these funds.

OBLIGATIONS OF PRIVATE NONPROFIT ORGANIZATIONS

During recent years several retirement funds have financed projects of private nonprofit organizations. One large fund financed the construction of a building for the county whose employees it serviced. Another applied a part of its investable funds toward the construction of a building to house certain services of the particular governmental unit. A third provided funds for the building of a hotel which was outside of the nonprofit classification.

These loans are limited in scope and character. Very few such loans have been made. Such loans as have been made have usually taken the form of mortgage notes. The loans were not influenced by bond ratings. The intended use of the proceeds was an important consideration. The purpose was one which would be helpful to the particular governmental unit since the loans were made generally for the construction of certain facilities for such unit. The geographical location was also an important factor. The projects were in areas under the jurisdiction of the governmental unit or in close proximity thereto.

It is frequently maintained that from the standpoint of the public interest, some part of the reserves of the retirement fund might be utilized to assist the governmental unit whose employees are covered by the fund in financing new facilities or additions to existing facilities.

PORTFOLIO CONSIDERATIONS

STATISTICS ON INVESTMENTS AND LOANS

Annual statistics on yearend holdings of investments and loans for former years are not available. No such compilation had been made

by any agency, either Federal or local or by any research organizations. Considering the fact that in prior years the scope of the investment authority was limited to U.S. Government bonds and State and municipal obligations, there was no demand for information on year-to-year changes in the composition of the investment account. It is only in relatively recent years that the Federal Government initiated the practice of requiring current reports on Government bond holdings. The purpose of this inquiry is to ascertain the changes that have occurred from time to time in such holdings by public employee retirement funds.

As previously stated, the aggregate assets in 1946 were \$2.6 billions. Of this amount about \$1 billion represented State and municipal securities, consisting principally of general obligation bonds. On June 30, 1965, the public retirement funds held State and municipal bonds worth \$2.74 billions. Hence, the increase for the period from 1946 to 1965 was at the rate of \$915 millions per year. These figures, however, are not clearly indicative of the basic trend.

A more correct understanding of the changes in the holdings of these bonds may be had by showing the trend during recent years in holdings of State and municipal securities in the case of the State retirement funds. These funds represent two-thirds of the total assets of all public retirement funds in operation. The following is illustrative:

Year:	<i>Proportion of total investments, percent</i>
1957 -----	25.8
1959 -----	15.7
1961 -----	13.2
1963 -----	6.9
1965 -----	3.7

Federally insured mortgages and conventional mortgages now represent an important media of investment for some of the larger State and municipal retirement funds. Municipal bonds are not competitive with these loans and could not be because of the large differential in interest income. This differential is at least 1 percentage point in favor of mortgage loans.

In order to be competitive with mortgage loans and with corporate bonds, municipal securities would have to provide at least 30 percent greater yield than is now the case. For example, where a long-term municipal bond now sells to yield 3.75 percent this would have to be increased to about 4.75 percent to meet the competition from mortgages and corporate bonds, as well as U.S. Treasury bonds. This level would give effect to the stability and security aspects of these bonds considering that they would be backed by the full faith and credit of the particular State or municipality.

GOVERNMENT GUARANTEE

If a Federal Government guarantee is provided on the payment of interest on these bonds in exchange for making interest income thereon subject to Federal income taxes, the securities would seek a higher level in terms of income, a level probably comparable to that of Federal agency issues. It would seem that a guarantee would have to include principal as well if the bonds are to be made more attractive to

public retirement fund investors. The price of these bonds and the income yield would still fall short of the yields obtained on "AAA" rated corporate bonds.

The guarantee by the Government, however, would provide greater security to principal and interest payments than exists in the case of AAA corporate bonds. It may be expected, therefore, that the bonds would still yield about 40 to 50 basis points below the level of AAA corporate bonds. From the standpoint of diversification, however, the funds might be inclined to take on a certain proportion of these bonds, just as they do in the case of Federal Governments, particularly if they are bonds of their own State or a municipality thereof.

FUTURE INVESTABLE FUNDS

On the basis of past experience and emerging trends, public employee retirement funds are likely to invest during each of the next 10 years, 1966 to 1975 approximately \$3.6 to \$5.9 billion per year. By 1975, total assets of these funds should approximate \$85 billions. There would probably be no large investments in municipal securities unless a change occurs in their status in relation to public retirement funds. On the contrary, we may look for a continuance of the downward trend in the holdings of the bonds by these funds resulting from sales or maturities.

Estimated amounts of investable moneys of public employee retirement funds 1966-75

[In millions]

Year:	Amount	Year—Continued	Amount
1966 -----	\$3,600	1972 -----	\$4,560
1967 -----	3,700	1973 -----	4,840
1968 -----	3,820	1974 -----	5,130
1969 -----	3,960	1975 -----	5,480
1970 -----	4,130	1976 -----	5,900
1971 -----	4,325		

About 50 percent of these investable moneys of the public retirement funds will probably be invested in rated corporate bonds, 20 percent in common stocks, 10 percent in mortgages (insured and conventional), 15 percent in U.S. treasury bonds and 5 percent in other securities.

EXPANDING INVESTMENTS IN MUNICIPAL SECURITIES

The best and most effective way to expand investments in these securities is by increasing the rate of yield. Practically all public employee retirement funds are in need of larger revenues. The States and municipalities are finding it increasingly difficult to meet their normal requirements because of their restricted sources of revenue. The managers of the retirement funds have come to the realization that investment income is one source of revenue which has not been fully exploited or developed. This explains why a great many funds have had their investment authority extended during recent years to include other investment media such as insured and conventional mortgages, corporate bonds, and common stocks.

Investment income constitutes an important source of revenue for financing pensions. For the 2,300 public retirement funds in operation in the United States, investment earnings are equal approximately to 23.1 percent of total receipts from all sources. (See January 1966 publication of the Bureau of the Census, U.S. Department of Commerce.) This rate may be increased to as much as 35 to 40 percent of total receipts under an investment policy which includes higher yielding good quality securities.

If the Federal Government guarantees the principal and interest on municipal bonds, in lieu of the tax exemption, public retirement funds might be inclined to channel a part of their investable moneys into these bonds as a means of providing greater diversity for their investments and to aid the States and municipalities in financing capital improvements.

CHAPTER 26

State and Local Governments*

INTRODUCTION

State and local governments have been, and are, prime users of loan funds, as evidenced by the increasing sale of State and local bonds and the mounting outstanding debt, rather than a prime or even secondary lending source of such loan funds. The relationship of debt to construction expenditures makes this quite clear, particularly for local governments where, in some instances, the amount of debt incurred in recent years has exceeded the total construction expenditures for the year. This, in part, is because of refunding issues included in the total debt issued and, in part, because local governments particularly may have issued bonds prior to need for funds and then temporarily invested the proceeds.

State and local construction expenditures and debt issuance

[Dollar amounts in millions]

Year	State governments			Local governments		
	Construction expenditures	Debt issued	Percent of expenditures	Construction expenditures	Debt issued	Percent of expenditures
1965-----	\$7,508	\$3,022	40.2	\$8,909	\$8,227	92.3
1964-----	7,263	2,793	38.4	8,127	8,450	103.9
1963-----	6,717	2,103	31.3	7,764	7,861	101.2
1962-----	5,960	3,070	51.5	7,593	6,326	83.3
1961-----	5,699	2,205	38.6	7,515	5,876	78.1
1960-----	5,509	2,283	41.4	6,843	5,673	82.9

Source: U.S. Bureau of the Census, Government Finances for selected years.

CASH AND SECURITY HOLDINGS

However, cash and security holdings of State and local governments have increased substantially in the past 15 years. This has been particularly true for such insurance trust funds as unemployment compensation, workmen's compensation, and employee retirement funds. Increases in retirement fund assets, which are discussed elsewhere in some detail, have been very rapid. But cash and security holdings of State and local governments for other than insurance trust funds have also increased, rising from \$18,702 million in 1952 to \$44,042 million in fiscal 1964-65; an increase of 146.8 percent. Substantial amounts of such cash and security holdings would not be available as loan funds since they represent offsets to, or sinking funds for, debt that has been issued, or represent bond fund proceeds that have not as yet been expended or required.

*Prepared by the Municipal Finance Officers Association, with minor editing by committee staff.

In fiscal 1964-65, long-term debt offsets amounted to \$8,261 million and unexpended bond funds totaled \$9,764 million, or 18.8 percent and 22.2 percent of the total cash and security holdings of \$44,042 million. The balance of \$26,016 million, or 59 percent of the total, represented other types of fund holdings.

Of necessity, some cash must be kept on hand and some of the assets must be of a liquid nature in order to assure amounts to meet payrolls and other current bills as they are presented for payment. For fiscal 1964-65, cash and deposits totaled \$19,289 million representing 43.7 percent of total cash and security holdings. Securities held amounting to \$24,752 million, were distributed 8.4 percent in State and local government securities, 68.4 percent in Federal securities, and 23.2 percent in other types of securities.

More and more State and local governments are developing sophisticated cash management programs whereby temporarily idle and other funds are invested for maximum periods of time and maximum rates of return. Since the tax exempt feature of State and local government bonds is of no value to them as investors in securities, and because most of their assets would need to be invested for short-term periods rather than for long-term investment yields, much of the investment of State and local governments has been concentrated in various Federal Government obligations or in certificates of deposit offered by banks. This has resulted in higher interest earnings than if the amounts available for investment had been placed in State and local obligations. Many smaller municipalities have deposited substantial sums in savings and loan associations. Except possibly for some of the turnover or multiplier effects that could be engendered by amounts placed in savings and loan institutions or invested in certificates of deposit, the bulk of the securities held by State and local governments could not be construed as reflecting States and local governments as sources of loan funds to finance capital improvements of State and local governments.

Local governments, while not a major source of loan funds for capital outlay financing, do provide some minor sources that are of benefit to the citizens in the affected areas. Some cities have revolving funds used to finance the cost of projects benefiting a particular property or properties. About 220¹ cities have utilized this approach to finance sidewalks, curbs, and sewer main extensions. The approach used by the city of Jacksonville, Fla., is illustrative. That city has a sidewalk and curb revolving fund which initially began with a \$25,000 appropriation and in 1966 totaled \$360,000. The fund is used exclusively to finance installation of sidewalks upon receipt of a proper petition from the property owners desiring the improvement. The amount loaned is payable in 5 years. The local fund of the city of Buffalo, N.Y., which is used to finance improvements and services to be paid by special assessments, had cash and investments of \$122,000 in 1965. The city of Detroit has two revolving funds to which the general fund contributed capital: sidewalk fund, \$207,999 and other revolving funds, \$550,000. The funds noted are among the larger of this type. In aggregate, they are not apt to total over \$5 million.

States have been the source of loan funds to a greater extent than is true for local governments. However, even in these instances, the

¹ "Municipal Year Book," 1959, p. 211.

amounts have not been large except in one or two instances. The purposes for which the funds were made available have also been limited to (1) industrial loan funds, and (2) school facility loan funds.

INDUSTRIAL LOAN FUNDS

As part of their effort to encourage industry, some States have established State loan and loan guarantee programs. Fourteen States² have varying types of such programs whereby loans are extended to industry under varying circumstances (Alaska, Georgia, Hawaii, Kentucky, Minnesota, New Hampshire, New Jersey, New York, North Dakota, Ohio, Oklahoma, Pennsylvania, West Virginia, and Wyoming). The program is quite new in Ohio and comparatively so in New Jersey and New York. Most of the experience has been in 11 States with Pennsylvania beginning the program in 1956. In 1963, some \$60 million³ of long-term loans for industry, primarily in depressed areas, had been made. In 1965, this amount had risen to \$151⁴ million largely because of activity in New York and Pennsylvania.

Although more States may make direct industry loans as one of the approaches to attract or encourage industry, or may do as some have by merely guaranteeing such loans, it is unlikely that the total made available in this manner will loom large. The alternative approach of financing industrial plants either through general obligation bonds or revenue bonds issued by local governments, appears to be utilized more frequently at the present time.

SCHOOL FACILITY LOAN FUNDS

While most States have taken a direct approach to aid local schools to finance both operating and capital outlay expenditures through grants in aid, 16 States have also authorized loan programs⁵ to aid financing capital facilities by local schools. In two of these instances (Michigan and New York), funds are loaned to local school districts to meet debt service obligations on State-approved building projects. In the other 14 instances (Arkansas, California, Hawaii, Illinois, Indiana, Maine, Maryland, Minnesota, North Carolina, North Dakota, Ohio, Virginia, Wisconsin, and Wyoming), loans are provided for capital outlay. In some instances, the programs do not appear to have been activated although authorized—Indiana, Minnesota, Ohio, and Wyoming—and in others—Maine and North Carolina—they have been limited in extent or amount. In at least two instances, California and Maryland, funds for the program have been obtained by the State borrowing through the sale of bonds and then loaning the amounts to the school district requiring loan assistance.

² "New War Between the States," *New England Business Review*, December 1963; Advisory Commission on Intergovernmental Relations, "Industrial Bond Financing," pp. 77-85.

³ *New England Business Review*, Federal Reserve Bank of Boston, December 1963, p. 4.

⁴ "Industrial Financing Facts on the 50 States," *Industrial Development and Manufacturers Record*, October 1965, p. 39.

⁵ Office of Education, U.S. Department of Health, Education, and Welfare, "Financing Public School Facilities," 1959, pp. 170-198.

General public school construction loans authorized by Maryland, since the inception of the program in 1949, total \$265 million:

Year:	<i>Amount authorized</i>	Year—Continued	<i>Amount authorized</i>
1949-----	\$50,000,000	1962-----	\$20,000,000
1953-----	20,000,000	1963-----	50,000,000
1956-----	75,000,000	1965-----	50,000,000

The State school building aid program in California is the largest of the school construction programs. Since its inception in 1949, bonds totaling \$1,615 million have been authorized of which \$1,405 million have been sold. Amounts authorized by California are:

Year:	<i>Amount authorized</i>	Year—Continued	<i>Amount authorized</i>
1949-----	\$250,000,000	1958-----	\$220,000,000
1952-----	185,000,000	1960-----	300,000,000
1954-----	100,000,000	1962-----	200,000,000
1956-----	100,000,000	1964-----	260,000,000

The Maryland program amounts to about 11 percent of the total State loan programs for financing local schools and that of California comprises about 75 percent of the total of all such State programs.

The programs in two other States—Virginia and Wisconsin—have been in operation since well before 1900. Two other programs have been in operation since 1930—North Carolina and Arkansas. These four programs are considered to be permanent programs. Unlike other permanent State school funds, which may be invested in school bonds, the program in these four States is made primarily for the purpose of assistance rather than investment.

While the State loan programs have been substantial, particularly in California, in terms of the total national picture for such loans have comprised only about 4 percent of the funds required for school plant facilities. Direct State aid, rather than loans, has been a more important factor; but the bulk of the local school facilities have been financed from loans made directly by the schools.

Other than for amounts available from State and local retirement systems, States and local governments have not been, and are not apt to be, a major source of loan funds in the future.

CHAPTER 27

Municipal Bond Investment Funds *

INTRODUCTION

Municipal investment funds, or tax-exempt bond funds, are registered investment companies, the assets of each of which are invested in a diversified portfolio of interest-bearing obligations issued by or on behalf of States, counties, municipalities, and territories of the United States and authorities and political subdivisions thereof, the interest from which, in the opinion of bond counsel, is exempt from all Federal income taxes under existing law.

Each such fund is a closed-end trust created under the terms of a trust indenture by an investment banking firm—or firms—which acts as “sponsor.” The sponsor establishes each municipal investment fund by acquiring a selected portfolio of municipal (public) bonds, depositing said securities with a trustee bank—or trust company—and receiving in return therefor certificates, or units, each representing a fractional undivided interest in the principal and net income of the trust.

The certificates, or units, then are distributed to investors, either by the sponsor or by a group of investment firms forming an underwriting syndicate. Such distribution may be made at retail or at wholesale to other investment firms. The sponsor and all firms participating in such distribution must be members of the National Association of Securities Dealers, Inc.

The first municipal investment funds were established in 1961 by John Nuveen & Co. (Inc.) and by Ira Haupt & Co. The growth in investment popularity of these funds has been rapid and, to date (March 15, 1966), a total of 20 funds has been created. They had an aggregate portfolio of \$234 million of municipal (public) bonds.

John Nuveen & Co. (Inc.) has been sole sponsor-underwriter of the Nuveen Tax-Exempt Bond Fund, Series 1 to 10, inclusive, representing an aggregate principal amount of \$143 million. Ira Haupt & Co. and its successor sponsor, Bache & Co., and Goodbody & Co., by those firms and Hornblower & Weeks Hamphill, Noyes, and by Goodbody & Co. alone, have syndicated eight different series of the municipal investment trust fund and two series of the tax-exempt income fund, representing an aggregate principal amount of \$91 million.

Such municipal investment funds have numerous similarities, one with another. Substantially all of the units of fractional undivided interest therein have been purchased by private investors, rather than institutional investors, although they are suitable for use by trust companies, the trust departments of banks and the smaller fire and casualty insurance companies.

*Prepared by E. H. Davis, vice president, research, John Nuveen & Co. (Inc.), with minor editing by committee staff.

The weighted net current return to certificateholders of all of such funds—at the original offering price in each case—was 3.84 percent, exempt from Federal income taxes. During the period April 1, 1961, to March 15, 1966, inclusive, which was the entire market history of municipal investment funds, the simple average of the Dow, Jones Weekly Municipal Averages (index) was 3.34 percent.

Twenty million dollars of municipal investment funds were created during 1961, \$33 million during 1962, \$27 million during 1963, \$68,500,000 during 1964, and \$80,500,000 during 1965—and \$5 million during 1966 to March 15—thus establishing a rapid upward trend during the initial 5 years of their existence. It is the opinion of the sponsors of municipal investment funds that the volume to be distributed annually in the future will continue to increase.

Additional series of existing municipal investment funds are contemplated by their respective sponsors. It is probable that other investment banking firms will sponsor new municipal investment funds. It appears likely at this time that the existing funds will be vastly expanded as need arises and as the market is developed for this particular type of investment medium.

DESCRIPTION OF MUNICIPAL INVESTMENT FUND PORTFOLIOS

On a composite basis all 20 municipal investment funds contained a total of \$234 million of municipal (public) bonds at their respective creation dates, of which 13.5 percent were classified as general obligation (tax-secured) bonds and 86.5 percent were classified as revenue-secured bonds. The simple average municipal investment fund portfolio contained bonds from 31 different issuers and each issue in the simple average portfolio had an average initial size of \$380,000.

All of the municipal investment funds, excepting only the tax-exempt income fund, series 1 and series 2 sponsored by Goodbody & Co., set forth the Standard & Poor's Corp. "quality" rating of each component of the portfolios. In the aggregate, for 18 municipal investment funds, 1 percent of the total initial portfolio was rated "AAA," 4 percent was rated "AA," 23 percent was rated "A" and 72 percent was rated "BBB," a total of 100 percent. As a generality, municipal (public) bonds carrying a rating of "BBB" or higher are investment category, thus considered eligible for investment by banks.

The total amount of interest earned by all of the funds during each year, a composite based upon each of the funds at its respective date of creation, was \$9,538,790, equal to a weighted gross average return—before selling expense, trustee fees and evaluation fees—of 4.07 percent. A representative trustee fee is approximately 72½ cents per year per \$1,000 principal amount of bonds in the portfolio. The initial selling expense, or sales charge is 4½ percent of public offering price of the funds sponsored by John Nuveen & Co. (Inc.) and by Goodbody & Co. alone, and 4¼ percent of public offering price on the other funds. Funds other than those sponsored by John Nuveen & Co. (Inc.) charge their unitholders a nominal amount for evaluation, or regular pricing. The initial weighted net average current return, after all expenses, of all of such funds was 3.84 percent.

PORTFOLIO DIVERSIFICATION

A representative municipal investment fund had a total initial portfolio of \$13 million of municipal bonds having the following elements of diversification: (1) 14 percent general obligation (tax secured) and 86 percent revenue secured; (2) 27 percent rated "A" and 73 percent rated "BBB"; (3) issued from 19 States (Alabama, Alaska, Arkansas, California, Colorado, Florida, Illinois, Indiana, Kentucky, Mississippi, Nevada, New Jersey, Ohio, Oklahoma, Pennsylvania, Tennessee, Texas, Virginia, and Wyoming); (4) comprised of 29 different issues averaging \$448,000 each; (5) purpose and security: water revenues, 10 percent (4 issues); gas revenues, 7 percent (2 issues); water, sewer, and gas revenues, 2 percent; water and sewer revenues and property taxes, 3 percent; bridge revenues, 5 percent; lease rental revenues, 5 percent; university revenues, 18 percent (6 issues); automobile parking revenues, 5 percent; miscellaneous public works, property taxes, 7 percent (2 issues); toll highway revenues, 8 percent (3 issues); school buildings, property taxes, 7 percent (2 issues). At the date of its creation—October 14, 1965—the weighted average interest rate was 3.95 percent and the net current return was 3.70 percent.

The elements of diversification of any particular municipal investment fund depend in considerable part upon the sponsor's yield and quality objectives with respect to such fund and the bond offerings that were in the market and available to the sponsor during the period when the portfolio was being accumulated—in advance of deposit with the trustee. Such funds have included, in addition to bonds secured by general taxing power—general obligations—utility earnings and tolls, bonds secured by urban transit, incinerator, harbor, park, garage, school-lease and industrial-plant-lease revenues, among others.

INVESTMENT OBJECTIVES OF MUNICIPAL INVESTMENT FUNDS

Tax-exempt bond funds have been advertised to the public as having the following general investment objectives: "Conservation of capital and an attractive tax-exempt return are the principal objectives of the fund."

Municipal investment funds also may have one or more of a number of special objectives. For example, the municipal investment trust fund, first Pennsylvania series, was created for sale to investors who are residents of the Commonwealth of Pennsylvania. It has the special objective of exemption from local tax in Pennsylvania. With respect to such fund, it was "the opinion of counsel, under existing law interest income to the fund and to certificate holders is exempt from all Federal income tax and *certificates for units are not taxable under the Pennsylvania County Personal Property Tax Act.*" Likewise, the Municipal Investment Trust Fund, First Florida Series, was created for sale to residents of the State of Florida for the reason that "In the opinion of counsel, under existing law interest income to the fund and to certificate holders is exempt from all Federal income tax and *certificates for units are not taxable under the Florida intangible personal property tax law.*"

The Tax Exempt Income Fund, Series 1, is described as follows in the prospectus: "The fund is designed for investors who are willing to invest in a portfolio of *unrated* municipal bonds in order to achieve

higher tax-exempt income than is available through an investment in a portfolio of rated tax-exempt municipal bonds." [Emphasis supplied.]

BASIS OF EXEMPTION FROM FEDERAL INCOME TAXES

The tax exemption of municipal investment trust funds is provided by a special ruling by the Commissioner of Internal Revenue, to the effect:

In view of the foregoing and based upon the information submitted, it is held that since under the proposed trust instrument there is no power to reinvest in additional bonds or other securities or vary the investment in any manner, the "Tax-Exempt Public Bond Trust Fund, Series 1," will not constitute an association taxable as a corporation for Federal income tax purposes, provided it is operated strictly in accordance with the provisions of the trust instrument.

Under the provisions of the trust instrument, each certificate holder has a right at any time to tender his certificate or certificates to the trustee for liquidation. It is concluded, therefore, that each certificate holder will be considered the owner of a pro rata portion of the trust under section 676(a) of the code and taxable on the income therefrom under section 671. An item of trust income includible in computing the taxable income of the certificate holders by reason of his being treated as the owner of a portion of the trust will have the same character as if such item had been received directly by the certificate holder. Accordingly, to the extent that the income of the trust consists of interest excludible from gross income under section 103 of the code, such income will be excludible from the gross income of the certificate holder.

LIQUIDATION OF PORTFOLIO

The indenture, or trust agreement, authorizing and securing a representative municipal investment fund does not permit either the sponsor or the trustee to acquire or deposit bonds either in addition to, or in substitution for any of the bonds initially deposited in the fund except that refunding securities may be exchanged for bonds under certain conditions specified in the indenture.

Therefore, over a period of time a fund cannot retain its original size and composition because the bonds comprising the portfolio will, by their terms, be paid by the issuers at their maturity or by operation of sinking funds established for that purpose by the issuers. The sponsor also may direct the trustee to liquidate bonds upon the happening of certain other events, such as default in the payment of principal and/or interest, an action of the issuer that will adversely affect its ability to continue payment of the principal of and interest on its bonds, or an adverse change in market, revenue, or credit factors affecting the investment stability of the bonds. The trustee is obligated to liquidate any bonds in default as to the payment of principal and/or interest in the event that it has received no instructions from the sponsor with respect to such bonds.

The indenture authorizing and securing each municipal investment fund also provides that any certificate holder may offer his units to the trustee for their conversion into cash (at the bid side of the market for the underlying portfolio) and the trustee is required to sell a portion of the portfolio sufficient in amount to purchase the offered units, provided, however, that the sponsor may purchase for redistribution such units as may be offered to it directly by the certificate holder or, indirectly, by the certificate holder through the trustee. It is important to note that, to date, the respective sponsors have been will-

ing and able to "make" an active secondary market for units of their municipal investment funds and have purchased for resale all such units offered, so that no part of any portfolio has been liquidated for the purpose of redeeming units.

As and when portions of the portfolio of a particular municipal investment fund have been redeemed at maturity, by refunding or by sinking fund operation, the proceeds thereof have been distributed semiannually by the trustee to the certificate holders on a pro rata basis. Such distribution occurs at the time of the semiannual accounting by the trustee, at which time the income from the portfolio also is distributed.

No municipal investment fund has a maturity date. However, at the time each such fund was established, the sponsor thereof recognized that practically the entire portfolio would be redeemed by some distant future date, leaving only a small remnant against which even minimum trustee fees and other costs might be disproportionately high. Therefore, each such fund will reach a specified minimum portfolio level, say, 20 percent of the initial portfolio, at some future date when complete liquidation by the trustee is mandatory.

UNIT VALUE AND YIELD IN RELATION TO THE MUNICIPAL (PUBLIC) BOND MARKET

Yield or rate of return is, of course, one of the major factors determining the desirability of any investment medium. The absolute yield for municipal investment funds has been mentioned in preceding sections of this study. However, yield of a municipal investment fund in relation to the yield available from other tax-exempt securities, also, is a significant factor. For the purposes of this study, the initial yield or yields from a municipal investment fund or funds will be described in relation to the Dow, Jones weekly municipal average index of yields.

During the 5-year market history of municipal investment funds the Dow, Jones weekly municipal average index of yields has averaged 3.34 percent. The point of lowest yield (highest price) during that period was 3.10 percent, which occurred during January and February 1965. The point of highest yield (lowest price) during that period was 3.87 percent, which occurred during the first week of March 1966.

The prices (and yields) for tax-exempt bond funds are determined by the trustee (1) on the basis of current bid prices of the underlying bonds obtained from dealers or brokers (including the sponsor) who customarily deal in bonds comparable to those held by the fund; (2) if bid prices are not available for any of the bonds, on the basis of bid prices for comparable bonds; (3) causing the value of the bonds to be determined by others engaged in the practice of evaluating, quoting, or appraising comparable bonds; or (4) by any combination of the above.

The record from time to time of the average yield for one significant tax-exempt bond fund as compared with that of the Dow, Jones index at identical times shows that this fund (1) always produced a yield higher than the Dow, Jones index (largely due to the composition of the bonds included within the Dow, Jones index, as compared to the bonds held in the funds) and (2) that the "spread" between the fund

and index yields in favor of the funds expanded during periods of relatively low yields (and relatively high prices), as follows:

[In percent]

	Lowest yield during mar- ket history (January 1965)	Highest yield during mar- ket history (March 1966)
Tax-exempt bond fund.....	3.72	3.91
D-J index.....	3.10	3.87
Spread.....	.62	.04

The market history of municipal investment funds indicates that—

(1) the yield (and price) established for municipal investment funds from time to time appear to fluctuate less than the municipal (public) bond market, as a whole (as measured by the D-J Index), and

(2) during periods when there is a relatively widespread between fund yields and general market yields, fund units are a more popular investment medium than when the spread is relatively narrow; a major investment advantage of municipal investment funds has been that, under usual and normal conditions in the municipal (public) bond market, the net current return from such funds averages about fifty one-hundredths of 1 percent higher return than the general market for municipal (public) bonds.

INVESTORS IN MUNICIPAL INVESTMENT FUNDS

Prior to 1961, the concept of municipal investment funds was unknown to securities underwriters, dealers and brokers, and of course, most investors also were completely uninformed. In such a situation, the so-called starting-up problems were extensive, not the least of which was the necessity of advertising the new product (municipal investment funds) and explaining its merits to investors on a national scale.

Although some units of the certain tax-exempt bond funds have been purchased by insurance companies and by banks for their trust account beneficiaries, probably 95 percent of the total has been purchased by individuals for private investment. The trustee for one such fund reported that it has approximately 12,500 registered certificate holders. It has been estimated that, making allowance for the fact that some of such holders own units of 2 or more series, there currently are at least 10,000 different individuals owning units of this or comparable funds. Available records show that the average transaction had a market value of more than \$10,000 and that there were more transactions in the \$50,000 to \$100,000 range than there were in the minimum amount (10 units, or approximately \$1,000).

Analysis of fund sales records indicates that at least 75 percent of all transactions were made with individual investors who had not previously purchased any municipal (public) bonds.

It is evident that during a period of only 5 years there has been developed an entirely new concept of tax-exempt investment and an

almost entirely new market area for municipal (public) bonds in the form of fund units. As a generalization municipal investment funds are not heavily invested in the "higher quality" securities (those rated "A", "Aa" and "Aaa") for 2 reasons: (1) They cannot "afford" to do so because they must strive to offer the highest return consistent with safety, and (2) their basic concept of wide diversification of portfolio is, in itself, a significant safety factor so that inclusion of such "higher quality" bonds is unnecessary. Therefore, such funds can be a "home" for unseasoned obligations which might not otherwise command a ready market. "Unseasoned" bonds, by definition, include those of new, sparsely populated or, otherwise lower echelon governmental bodies without established credit ratings. In the long run this could mean more favorable interest rates for such issuers than would otherwise be the case. The extent of such new market area is conjectural, but may ultimately prove to be multibillion in size.

It has been the experience of a major sponsor-underwriter of tax-exempt bond funds that the creation and distribution of this new investment medium is a profitable activity, as compared to the net profits that might have been earned through an alternative underwriting and distribution of municipal bonds.

Offsetting the possibility of such greater profit, is the fact that the sponsor-underwriter subjects itself to market exposure and the possibility of financial loss. Such exposure exists in two separate areas. A sponsor finds it necessary to accumulate and hold during a period of several months a large part of the municipal (public) bonds which will form the portfolio for the next series of a municipal investment fund. The sponsor may gain or lose on the portfolio accumulation phase of the operation because the value of the bonds on the date of deposit with the trustee may be greater or less than cost. When the series is created, the sponsor-underwriter is exposed to risk of financial loss during the period when such series is being distributed. The risk of financial loss while holding units is, to some extent, even greater than while holding the bonds by reason of the fact that the offering price is inflexible (under the terms of the trust indenture the public offering price of units is defined as a price "equal to the offering price per unit of the bonds in the fund plus a sales charge of 4½ percent of the public offering price"). Thus the sponsor-underwriter cannot terminate its exposure by distributing units at retail at a price differing from that produced by application of the formula. This concept warrants maximum clarification: on occasion the municipal (public) bond market is subject to vigorous and extended fluctuations; if market prices for bonds fall sharply, a dealer may prefer to liquidate his inventory quickly at whatever price is offered in the free market, rather than to hold them and risk further loss in an extended decline (i.e., "cutting his losses short"); however, fund units do not have a free market in the same sense; a dealer owning fund units must adhere to the selling terms established in the Prospectus (i.e., he cannot sell to anyone at any price he chooses and his flexibility of action is inhibited).

However, the price of municipal bonds is subject to considerable fluctuation. For example, during the last 13 months (February 1965 to March 1966, inclusive) the D-J Index of Yields increased from 3.10 to 3.80 percent. Relating that increase to the market price of a

4-percent bond due in 20 years results in a decline in dollar value from 113.34 to 101.80, or 11.54 points (equal to \$115.40 per \$1,000 of par value). Although market fluctuations of municipal bonds usually are relatively narrow as compared with those of the recent past, it is obvious that market risk is a real risk which must be accepted by any who would aspire to the sponsorship of a municipal investment fund.

It is probable, therefore, that other large investment banking organizations, after analyzing the profit potential of sponsoring and underwriting municipal investment funds, will enter the field in due course. It is almost certain that those investment banking organizations already in the field will vastly expand their fund operations as the market potential is gradually developed. A parallel trend will be the development by municipal investment funds of an equally vast capacity to absorb "new money" issues of municipal (public) bonds.

EXHIBIT I

Name of trust fund	Sponsor	Underwriters	Prospectus	Deposited	Proportion of—	
					Tax bonds	Revenue bonds
Municipal investment trust fund:						
Series A	Ira Haupt & Co.	Ira Haupt & Co. and 46 other firms	Apr. 7, 1961	\$10,000,000	\$835,000	\$9,085,000
Series B	Bache & Co.; Goodbody & Co.	Bache & Co., Goodbody & Co., and 4 other firms.	June 1, 1964	10,000,000	600,000	9,400,000
Series C	Goodbody & Co.; Bache & Co.	Goodbody & Co., Bache & Co., and 7 other firms.	Oct. 21, 1964	8,500,000	1,557,000	6,943,000
Series D	Bache & Co.; Goodbody & Co.	Bache & Co., Goodbody & Co. and 10 other firms.	Jan. 26, 1965	15,000,000	1,309,000	13,691,000
Series E	Goodbody & Co.; Bache & Co.	Goodbody & Co., Bache & Co., and 10 other firms.	June 2, 1965	12,500,000	2,009,000	10,491,000
Series F	Bache & Co.; Hornblower & Weeks; Goodbody & Co.	Bache, Hornblower, Goodbody, and 10 other firms.	Oct. 19, 1965	15,000,000	2,766,000	12,234,000
Total or average				71,000,000	9,176,000	61,824,000
Municipal investment trust fund:						
1st Pennsylvania series	Ira Haupt & Co.	Haupt and 21 other firms.	Apr. 13, 1962	5,000,000	250,000	4,750,000
1st Florida series	Goodbody and Bache.	Goodbody, Bache, and 2 other firms.	Jan. 6, 1965	5,000,000	215,000	4,785,000
Tax-exempt income fund:						
Series 1	Goodbody	Goodbody	Aug. 18, 1965	5,000,000	1,393,000	3,607,000
Series 2	do.	do.	Mar. 11, 1966	5,000,000	915,000	4,085,000
Total or average				10,000,000	2,308,000	7,692,000
Nuveen tax-exempt bond fund:						
Series 1	John Nuveen & Co., Inc.	John Nuveen & Co., Inc.	July 21, 1961	10,000,000	2,274,000	7,726,000
Series 2	do.	do.	Jan. 15, 1962	15,000,000	2,240,000	12,760,000
Series 3	do.	do.	Oct. 15, 1962	13,000,000	1,590,000	11,410,000
Series 4	do.	do.	May 1, 1963	12,000,000	250,000	11,750,000
Series 5	do.	do.	Aug. 28, 1963	15,000,000	1,584,000	13,416,000
Series 6	do.	do.	Jan. 30, 1964	15,000,000	520,000	14,480,000
Series 7	do.	do.	June 2, 1964	20,000,000	3,886,000	16,114,000
Series 8	do.	do.	Dec. 18, 1964	15,000,000	3,055,000	11,945,000
Series 9	do.	do.	Apr. 29, 1965	15,000,000	2,478,000	12,522,000
Series 10	do.	do.	Oct. 14, 1965	13,000,000	1,530,000	11,470,000
Total or average				143,000,000	19,707,000	123,293,000
Total or average				234,000,000	31,656,000	202,344,000

EXHIBIT II

Name of trust fund	Number of issuers	Average size of block	Standard & Poor's Ratings (principal amount)				Interest earned per year	Weighted average interest rate (percent)	Percent net current return to certificate- holders; weighted average; interest rate (less expense) to original offering price (percent)
			AAA	AA	A	BBB			
Municipal investment trust fund: Series A..... Series B..... Series C..... Series D..... Series E..... Series F..... Series G..... Series H..... Series I..... Series J..... Total or average.....	49	\$196,000	\$430,000	\$380,000	\$3,732,000	\$5,458,000	\$419,324	4.20	4.15
	34	294,000	0	420,000	2,271,000	7,309,000	399,289	3.99	3.90
	33	258,000	0	745,000	867,000	6,888,000	339,304	3.99	3.90
	40	349,000	0	905,000	1,359,000	12,736,000	601,029	4.01	3.80
	37	321,000	0	0	2,040,000	10,460,000	499,317	3.99	3.77
	47	313,000	0	0	2,540,000	12,460,000	598,476	3.99	3.78
Municipal investment trust fund—First Penn- sylvania series..... Municipal investment trust fund—First Florida series..... Tax-exempt income fund—Series 1..... Tax-exempt income fund—Series 2..... Total or average.....		289,000	430,000	2,450,000	\$12,809,000	\$55,311,000	2,856,839	4.02	3.87
	31	161,000	0	100,000	1,395,000	3,505,000	201,922	4.04	3.85
	18	278,000	0	0	215,000	4,785,000	198,179	3.96	3.86
	22	227,000	(1)	(1)	(1)	(1)	245,483	4.81	4.57
	21	238,000	(1)	(1)	(1)	(1)	251,486	4.94	4.75
Nuveen tax-exempt bond fund: Series 1..... Series 2..... Series 3..... Series 4..... Series 5..... Series 6..... Series 7..... Series 8..... Series 9..... Series 10..... Total or average.....	27	370,000	875,000	550,000	1,800,000	6,775,000	414,672	4.15	4.03
	26	536,000	0	750,000	3,745,000	10,505,000	615,375	4.10	3.94
	26	500,000	0	350,000	3,585,000	7,070,000	331,229	4.09	3.79
	27	444,000	0	0	4,805,000	7,193,000	445,951	4.07	3.73
	29	500,000	0	0	4,510,000	9,745,000	413,215	4.09	3.75
	28	517,000	0	1,750,000	3,975,000	9,275,000	415,372	4.11	3.77
	35	541,000	0	1,750,000	5,500,000	13,000,000	898,458	4.08	3.75
	29	500,000	0	1,500,000	4,180,000	10,570,000	538,458	3.91	3.68
	28	517,000	0	250,000	2,200,000	12,800,000	590,110	3.93	3.77
	29	448,000	0	0	3,470,000	9,530,000	512,970	3.93	3.70
Total or average..... Total or average.....		487,000	875,000	5,900,000	37,765,000	98,460,000	5,784,881	4.05	3.77
		380,000	1,305,000	8,450,000	52,184,000	162,061,000	9,538,790	4.07	3.84

1 Ratings, if any, not reported.

CHAPTER 28

Personal Trusts as Sources of Funds*

INTRODUCTION

Most of the trust business in the United States is conducted by corporate fiduciaries which may be companies engaged in fiduciary activities exclusively but which, for the most part, are commercial banks with trust departments. Hence, in the following discussion when "trust institution" or "corporate fiduciary" would be appropriate terms, "trust department" will be used for the sake of simplicity.

NUMBER AND RELATIVE IMPORTANCE OF TRUST DEPARTMENTS

In the United States in early 1966 there were 3,785 banks with trust powers and of these, 3,503 were actively exercising their trust powers (table 1). The increase in the number of trust departments since 1950 does not seem impressive. However, it should be noted that as trust powers are granted to additional banks each year there is a loss of some separate trust departments through bank mergers. As data given below will clearly indicate, there has been, in addition to an increase in number of bank trust departments, a substantial increase in total assets managed by them.

Added to the banks with trust powers, as of November 1965, there were 49 nondeposit trust companies.¹ These are defined by the Federal Deposit Insurance Corporation as institutions operating under trust company charters which are not regularly engaged in deposit banking but are engaged in fiduciary business other than that incidental to real estate title or investment activities. Some of these nondeposit trust companies, one of which is a member of the Federal Reserve System but is not insured by the FDIC, hold very substantial amounts of trust assets.

TABLE 1.—*Number of commercial bank trust departments in the United States*

	1950	1955	1960	1961	1962	1966
Insured State nonmember banks.....	870	887	1,066	1,100	1,153	1,232
State member banks.....	636	639	598	600	575	522
National banks.....	1,774	1,727	1,738	1,763	¹ 1,786	¹ 1,856
Uninsured State banks.....					² 175	² 175
Total.....	3,280	3,253	3,402	3,463	3,689	3,785

¹ Of these, 236 were inactive at the end of 1962; 282 were inactive at the end of 1964.

² Approximate number, including some with more than \$100,000,000 of trust assets, as well as many very small departments.

Sources: Federal Deposit Insurance Corporation, Board of Governors of the Federal Reserve System, the Comptroller of the Currency.

*Prepared by the Trust Division of the American Bankers Association, with minor editing by committee staff.

¹ Offices of Operating Banks Not Insured by the Federal Deposit Insurance Corporation, Nov. 30, 1965, FDIC.

Despite the growth of trust departments in number and in assets managed, many personal trusts continue to be administered by individual trustees. While virtually no data are available concerning these trusts either as to the assets held or the investment policies followed, there is some evidence as to their relative number in the fiduciary income tax returns filed with Internal Revenue Service in 1963 for the year 1962, the latest data available. In 1962 banks and trust companies administered 60.8 percent of all trusts for which returns were filed, and these bank-administered trusts accounted for 60.1 percent of the total income received by trusts in 1962 as revealed by returns filed.² Since it is apparent that a large part of the trust business is conducted by individual trustees, the data provided in following sections of this study, covering trust departments only, must be considered quite incomplete.

TRUST DEPARTMENT SERVICES

Trust departments provide a wide variety of services. These include the settlement of estates, the administration of guardianships, the performance of agencies for individuals and corporations, serving as trustee under corporate indentures, trustee for community trusts and for endowments, as well as trustee for employee pension and profit-sharing plans. They also act as registrars and transfer agents of corporate securities. A major service, of course, is the administration of personal trusts, our primary concern here.

The relative importance of personal trusts in the overall trust business of the commercial banks may be judged by these figures: The Office of the Comptroller of the Currency has reported that in 1963 trust departments of banks administered \$43 billion in employee benefit accounts and an additional \$101.2 billion in other trust accounts where the banks exercised "some investment responsibility."³ That same year the Trust Division of the American Bankers Association found through a survey that banks were administering \$82.2 billion in "personal trust accounts."⁴ The Comptroller's figure of \$101.2 billion includes certain types of agency accounts which were not reported in the trust division's survey; hence, the trust division figure of \$82.2 billion is more truly representative of strictly personal trust accounts. It is clear that a large percentage of the assets administered by trust departments in their various trust and agency capacities is held in personal trust accounts.

ADMINISTRATION AND INVESTMENT OF PERSONAL TRUSTS

In the administration of these personal trusts, trust departments receive from trustors property which they administer for the benefit of others. The trusts may be created under the terms of a will, by agreement or declaration, or by order of a court. The trustee manages the property for the benefit of designated beneficiaries and ultimately distributes assets covered by the trust to designated remaindermen.

² Fiduciary, Gift, and Estate Tax Returns, Statistics of Income, 1962, U.S. Treasury Department, Internal Revenue Service.

³ Stanley Silverberg, "Bank Trust Investments: Their Size and Significance," the National Banking Review, vol. 1, No. 4, June 1964.

⁴ Report of National Survey of Personal Trust Accounts, Trust Division, the American Bankers Association, New York (released 1964).

While virtually all kinds of property may be placed in trust, the most common are stocks and bonds, notes and mortgages, cash and real property. Trusteed property also may include established businesses, newspapers, mines, factories, patent rights, licenses to manufacture, and art collections. In administering a trust, the trustee must be guided by the applicable State law and the provisions of the trust instrument.

Insofar as investment powers are concerned, there are applicable State trust investment statutes, court decisions, and of course the wishes of the trustor as expressed in the trust instrument. The general effect of investment powers and limitations is to impose on a fiduciary a high degree of responsibility for investment decisions; failure to invest properly can result in a breach of trust and a beneficiary or remainderman's holding the trustee liable for losses.

In recent years there has been a tendency for States to move toward the prudent-man rule as the proper philosophical concept in making trust investments. In those States which have statutes regulating investments by fiduciaries in more detail than under the prudent-man rule, there are two basic types of statutes. Some are mandatory which provide, in effect, that trustees must invest trust funds in accordance with the terms of the statute unless the terms of the trust provide otherwise. Others are permissive, providing, in effect, that trustees may invest in accordance with the statute unless the terms of the trust provide otherwise. In some States the statutes set forth statistical and other requirements which securities must satisfy to qualify as legal investments. In other States the legislature grants power, usually to the State bank supervisory authority, to issue approved lists of securities for trust investment. As a result of all of the foregoing, it can be stated in general that fiduciaries are permitted to invest in corporate bonds and stocks, U.S. Government securities, real estate and real estate mortgages, and the securities of State and local governments. This is to say that, insofar as the securities issued by State and local governments are concerned, they are legal for trusts unless ruled out by the trust instrument. It should be noted that in investing trust assets trust departments may have complete discretion to operate under the terms of the trust or may have to consult a co-trustee or co-trustees or other adviser.

The specific factors which enter into investment decisions by trust departments will be discussed below in the section on portfolio considerations.

VOLUME OF TRUST ASSETS

The amount of assets in personal trusts has never been accurately reported over a period of time. Table 2 indicates the amount and types of assets held in personal trusts in 1963, as revealed by the survey done for the Trust Division of the American Bankers Association, and the amounts and types of trust assets in 1963 and 1964, as shown by the compilation of the Comptroller of the Currency.

TABLE 2.—*Trust division's and Comptroller's reports on trust assets*

[Dollar amounts in millions]

Type of asset	Trust division 1963		Comptroller 1963		Comptroller 1964	
	Amount	Percent	Amount	Percent	Amount	Percent
Common stock.....	\$54,017.1	65.7	\$61,750	61.0	\$67,300	63.8
State and municipal securities.....	11,644.0	14.1	11,250	11.1	12,200	11.6
Participation in common trust funds.....	4,749.3	5.8				
Corporate bonds and debentures.....	3,032.5	3.7	4,000	4.6	4,900	4.7
U.S. Government securities.....	2,772.7	3.4	9,600	9.5	8,800	8.3
Preferred stock.....	1,315.6	1.6	1,900	1.9	1,500	1.4
Mortgages.....	941.7	1.1	2,400	2.4	1,600	1.5
Cash.....	552.0	0.7	1,800	1.8	1,100	1.0
All other assets.....	3,215.9	3.9	7,800	7.7	8,100	7.7
Total.....	82,240.8	100.0	101,200	100.0	105,500	100.0

Sources: Report of National Survey of Personal Trust Accounts, Trust Division, the American Bankers Association, New York. The National Banking Review, the Comptroller of The Currency, June 1964 and June 1965.

As indicated above, the much larger total reported by the Comptroller of the Currency results from the inclusion of assets of some types of agency accounts which were not covered in the trust division survey. The Comptroller's figures represent actual reported data from national banks with estimates for the holdings of trust departments of State chartered banks.

A. SUPPLY OF CAPITAL FUNDS

1. TREND OF MUNICIPAL SECURITY INVESTMENTS

Table 3 indicates the total amounts of State, municipal and territorial securities outstanding in the years 1945 through 1964, the amounts of such securities held by personal trusts, the net change in such holdings from year to year, and the percentage of total outstanding securities held in personal trusts. It will be noted that the percentage of outstanding State and municipal securities held in personal trusts ranged from 19.25 in 1946 to 12.56 in 1959. This in itself is not a very wide range but it is particularly interesting that since 1959 the fluctuation in this percentage has been extremely narrow, as the table indicates.

TABLE 3.—*State and local government securities*

[Dollar amounts in millions]

Year	Total out- standing	Held by personal trusts	Net change	Percentage of total out- standing held by personal trusts
1945.....	\$16,417	\$2,950	-----	17.96
1946.....	15,736	3,030	+\$80	19.25
1947.....	16,580	3,110	+80	18.75
1948.....	18,399	3,190	+80	17.33
1949.....	20,538	3,270	+80	15.92
1950.....	23,804	3,950	+680	16.59
1951.....	26,688	4,610	+660	17.27
1952.....	29,217	5,270	+660	18.03
1953.....	32,268	5,410	+140	16.76
1954.....	37,393	6,130	+720	16.39
1955.....	42,706	6,650	+520	15.57
1956.....	47,524	7,250	+600	15.25
1957.....	51,990	7,830	+580	15.06
1958.....	56,790	7,791	-39	13.71
1959.....	61,985	7,786	-5	12.56
1960.....	66,425	9,098	+1,312	13.69
1961.....	71,730	9,946	+848	13.86
1961.....	80,131	10,794	+848	13.47
1963.....	85,915	11,644	+850	13.55
1964.....	91,300	12,200	+556	13.36

Sources: Total outstanding: Statistical Abstract of the United States, Department of Commerce, Bureau of the Census 1958, table 436; 1965, table 553. Excludes obligations of the Philippines and after 1952 the obligations of Puerto Rico.

Held by personal trusts: For 1958, 1959, 1960, and 1963 Report of National Survey of Personal Trust Accounts, Trust Division, the American Bankers Association, New York (released 1964); for 1962 and 1964, estimated; for other years Goldsmith, Lipsey, and Mendelson, Studies in the National Balance Sheet of the United States, vol. II, Princeton University Press, Princeton, N.J., 1963.

There has been no feasible way to obtain data on the holdings of obligations of nonprofit organizations. However, these are believed to be held by trust departments in very nominal amounts.

In the following sections of this study, there will be statements concerning the investment policies followed by trust departments in acquiring their indicated holdings of State and local government securities. As will be stressed, these decisions are generally made in accordance with the requirements of each individual personal trust account. Many of these accounts are individually invested because the amount of funds is sufficiently large to justify individual investment. In recent years, however, trust departments have found it useful to commingle many trust accounts or portions of trust accounts for collective investment. To do so, they have set up several types of common trust funds, including tax-exempt bond funds.

The following paragraphs, extracted from a bank's annual report on one of these funds, provides an excellent statement of the reasons for their use:

In recent years we have found that the tax brackets of many of our trust account beneficiaries have reached a point where some tax-exempt income would be most welcome. Although we have endeavored, where feasible, to provide relief through individual investments in tax-exempt securities, the limited size of trusts in many cases makes such individual investments both more costly to the trust as well as deficient in a reasonable geographic and maturity diversification of investment assets.

In order to remedy this situation this company, on February 1, 1965, established a discretionary common trust fund—tax-exempt fund. This fund operates under the laws of the District of Columbia, rules and regulations of the Comptroller of the Currency, and in accordance with the provisions of a plan approved by our board of directors. Typical of the operation of common trust funds, our

new fund enables us to pool investment funds in such a manner so that the smallest participant can enjoy the benefit of diversification and the economies that larger scale investment commitments afford.

It should be reemphasized that these tax-exempt bond funds are for the investment of existing trusts being administered by trust departments, and a decision as to whether a particular trust account will be invested in whole or in part in a collective fund is entirely at the discretion of the trustees. Banks report each year on these funds to all participating beneficiaries and co-trustees, revealing the amount of each tax-exempt security held, the changes from year to year through purchase or sales, and the change in unit values. In 1962 there were 24 tax-exempt bond funds operated by trust departments and by the end of 1965 there were 104 such funds.⁵ While the reports of relatively few of these funds have been available to us, those examined reveal the investment policies of the reporting trust departments and have served as the basis for some of the statements of policy herein.

2. COMPOSITION OF SECURITIES PURCHASED

No data are available to indicate the proportion of general obligation bonds held as compared with revenue bonds in all personal trusts. However, there has been a considerable increase in the relative amount of revenue bonds issued by State and local governments. In 1948 revenue or nonguaranteed State and local securities amounted to 12.4 percent of the total State and local issues outstanding.⁶ By 1963 about 39 percent of outstanding issues were revenue bonds.⁷ In 1965 when \$7.2 billion of general obligation bonds were issued, \$3.5 billion of revenue bonds were sold.⁸ Since revenue bonds, therefore, have become a large proportion of total State and municipal bonds available, and in most cases have been of good quality, there has been a tendency for trust departments to add relatively to the holdings of revenue bonds. This has been so particularly because trust departments tend to buy more tax-exempt securities upon original issue than in the secondary market. The following reveals the reasoning on revenue bonds of one trust department which operates a substantial tax-exempt bond fund:

In general, our objective has been to invest the fund's assets in good quality, higher yielding tax-exempt bonds. This philosophy is reflected in our selective use of revenue-secured obligations which now comprise the fund's largest holdings, in terms of both their relative share of total assets and the size of individual issues purchased. Among the more important advantages of investment in these issues are the generally large supply of bonds available for additional purchases and a ready market in the event that sales may be desirable, the potential for capital gains due to the fact that many issues are undervalued in the early stages of a facility's development, and the often substantial yield differential from other tax-exempt issues.

⁵ "Collective Investment Funds Operated Under or in General Conformity with Regulation 9 of the Comptroller of the Currency." Compiled annually by the trust division, the American Bankers Association, New York.

⁶ Roland I. Robinson, "Postwar Market for State and Local Government Securities," Princeton University Press, Princeton, N.J., 1960.

⁷ "Statistical Abstract of the United States 1965," U.S. Department of Commerce, Bureau of the Census, table No. 573.

⁸ Federal Reserve bulletin, June 1966.

Examination of some bank tax-exempt bond funds indicates that revenue bonds can easily amount to between 40 and 50 percent of total portfolios. The following table 4 gives the figures for one \$88.6 million fund.

TABLE 4

Rating	General obligations	Revenue issues
AAA.....	\$9,215,000	\$813,000
AA.....	17,470,000	8,235,000
A.....	14,151,000	18,878,000
BAA.....	5,805,000	5,842,000
BA.....		650,000
Unrated by Moody's.....		7,587,000
Total.....	¹ 46,641,000	² 42,005,000

¹ 52.61 percent of total fund.

² 47.39 percent of total fund.

Special assessment bonds are considered to have primarily local markets and the amount of limited tax bonds in existence has been declining and is relatively small in volume.

Maturity distribution

It is believed that 10- to 20-year maturities are generally favored by trust departments, although substantial amounts of longer issues are used. Revenue bonds usually have a fairly long maturity but, due to the operation of sinking funds, are in effect of a shorter average maturity than the final maturity date indicates. Trust accounts tend to average about 20 years in length and, unless there are unusual requirements in the particular account, fairly long maturities are purchased, especially during periods of relatively high yields, since a major reason for buying the longer maturities is to obtain the higher yield which they normally provide. One large tax-exempt bond fund has an average maturity of 23.58 years.

Following is the maturity schedule of another very large tax-exempt bond fund:

Years:	Percent
5 or less.....	3
6 to 10.....	8
11 to 15.....	14
16 to 20.....	20
More than 20.....	51

3. FACTORS INFLUENCING PURCHASES

Bond ratings

Trust departments with their own investment research staffs are likely to rate available State and local securities after their own analysis. They will of course check ratings assigned to particular issues by the rating agencies but be guided primarily by their own appraisals. Trust departments which do not or cannot have their own investment research departments are likely to be guided more by the bond ratings and by the recommendations of investment advisory services, including those provided by correspondent banks. Local issues are purchased largely by local banks because these banks know the financial strength of the issuers, and are guided by this knowledge rather than ratings assigned to the issues, if any. Unless the obliga-

tions of a community total a certain figure, some of the rating services do not issue ratings. Unrated bonds are, therefore, frequently purchased but these would be concentrated primarily in issues of communities with which the buyer is familiar, except in the case of revenue bonds which are a special case. These, even when issued by well-known entities, are frequently not rated, especially when a fairly lengthy construction period is involved.

Some purchases of issues with ratings below the top four are made. It has been estimated that 5 to 10 percent of the dollar amount purchased each year are rated below the top four categories and another 10 to 15 percent unrated. The amount of unrated issues may be far larger—as high as 40 percent—when banks buy the issues of entities in a given area in which a larger than usual percentage of all issues is unrated. Reference to table 4 above shows that there were about \$7.6 million of unrated bonds in the fund reported. This was 18 percent of the revenue issues in the fund and 8.6 percent of the total fund. Also, it may be noted that \$8.2 million, or about 9.3 percent of the fund, was in bonds rated below the top four grades.

Use of proceeds

The purpose of issue of general obligation bonds has comparatively little influence on whether or not the purchase is made. The first considerations are the financial strength of the issuer and the specific terms of the issue. If the credit of the issuer is weak, bonds issued for unimportant purposes probably will be avoided. However, in the case of revenue bonds, the purpose of issue is very important. In general, bonds issued to finance water, sewer, and electric operations are preferred over auditorium, stadium, resort areas, bridge, tunnel, and toll road issues. Many trust departments do not believe revenue or general obligation bonds should be issued for the purpose of constructing industrial plants; and they have a general policy of not buying them. However, those trust department which do buy them carefully weigh the type of facility to be constructed and the financial strength of the proposed user of the facility.

Geographic location

The geographic location of a borrower per se does not have a great deal to do with the investment decisions of trust departments if the underlying credit is judged to be good. Since diversification is one of the desirable features for a tax-exempt bond fund or any single account investment in State and municipal securities, trustees will tend to seek diversification on a geographic basis as well as in other ways. They will, of course, consider the protection provided by State laws for bondholders, and there are some special geographic considerations:

1. Small local issues are likely to be taken by banks in the local areas because it is difficult for small issues to tap the national market.
2. In some cases, where the income from State and local securities in a given State is exempt from income taxes in that State, the bonds issued by entities within the State are likely to be attractive for trust accounts for residents. The States generally tax the income on each other's securities, but do not tax their own securities.

Table 5 shows the geographic distribution, by States, of securities held in three selected tax-exempt bond funds.

TABLE 5.—*Geographic distribution of investments held in selected tax-exempt bond funds*

[In percent]

State	Fund A	Fund B	Fund C
Alabama.....	4	1.77	11.30
Alaska.....			
Arizona.....	1	1.42	2.11
Arkansas.....	6	4.09	
California.....	9	7.16	15.70
Colorado.....	1	3.13	7.90
Connecticut.....	1	.52	
Delaware.....	2		
District of Columbia.....			
Florida.....	5	2.57	2.05
Georgia.....	3	1.54	
Hawaii.....	1		2.07
Idaho.....			
Illinois.....	4	9.78	15.21
Indiana.....	2	4.08	
Iowa.....	1		
Kansas.....	1	1.83	
Kentucky.....	1	.79	
Louisiana.....			
Maine.....	1		2.06
Maryland.....	1		3.12
Massachusetts.....	5	14.07	2.05
Michigan.....	2	1.46	2.05
Minnesota.....	2	2.27	
Mississippi.....			
Missouri.....	1		
Montana.....	1		2.04
Nebraska.....			
Nevada.....			
New Hampshire.....			
New Jersey.....	1	2.36	
New Mexico.....	1	1.01	
New York.....	11	21.54	13.38
North Carolina.....			7.25
North Dakota.....			
Ohio.....	1	.36	
Oklahoma.....	1	1.02	
Oregon.....	8	1.19	6.22
Pennsylvania.....			
Rhode Island.....			
South Carolina.....			
South Dakota.....			
Tennessee.....	1	1.03	2.04
Texas.....	2	4.03	
Utah.....		2.53	
Vermont.....			
Virginia.....		.51	
Washington.....	9	4.89	
West Virginia.....			
Wisconsin.....	3	.63	
Wyoming.....	1		
Puerto Rico.....	2	2.42	2.99
Cash (net).....	2		.46

4. OBLIGATIONS OF PRIVATE NONPROFIT ORGANIZATIONS

While we have no accurate data available, it is believed that there have been very few purchases of obligations of nonprofit organizations for trust accounts. A leading underwriter of church, school, and hospital securities has estimated that the total volume of such obligation issued is approximately \$335 million per year.⁹ Based on its own underwriting experience, the firm judges that approximately 50 percent of these are now sold to institutions and the other 50 percent to individuals. Of the total volume, probably 21 percent is sold to banks, which would mean sales to banks of approximately \$70 million. The amounts held by the banks for their own accounts and the amounts purchased for trust accounts are unknown. However, it is believed that

⁹ B. C. Ziegler & Co., West Bend, Wis.

fairly substantial amounts of the bank purchases of the obligations of nonprofit organizations are in large blocks for pension funds. Very recently there has been some interest in mortgages on homes for the elderly insured by the Federal Housing Administration under section 231 of title II of the National Housing Act and on nursing homes under section 232 of that title. At the end of 1964 there were \$351.5 million of mortgages out under section 231, of which \$115.5 million were held by commercial banks, and there were \$155.7 million of mortgages out under section 232, with \$36.1 million held by commercial banks.¹⁰ While presumably mortgages under these two sections are for the most part bought by the banks for their own accounts, some unknown amount would be in personal trust accounts. In any event, the aggregate sums involved are very small.

It is believed that ratings on the bonds of nonprofit organizations are few and, in any case, would not carry much weight. Since in most cases the proceeds of the issues of nonprofit organizations are to be used for schools, hospitals, churches, and religious orders, the bonds generally would be considered for worthy purposes and the prime consideration of the potential buyers would be the underlying credit risk. In the investment of personal trusts, it is most unlikely that public relations considerations would be involved.

B. PORTFOLIO CONSIDERATIONS

1. TREND OF ASSET HOLDINGS

Table 6 indicates for the years 1946 through 1964 total assets administered in personal trust accounts by trust departments and shows the percentage of such assets represented by State and municipal securities. This percentage rose between 1946 and 1953 from 10.44 to 15.18. It then declined but had risen by 1957 to 16.94, the highest percentage over the period shown by the table. From 1957 there was a general decline to 1964 when the percentage was 13.61. Despite these variations, it is clear that except for a few years since 1951 the percentage of personal trust assets represented by State and local government securities has remained fairly constant.

¹⁰ "Housing and Home Finance Agency, 1964 Report," p. 96.

TABLE 6.—*Personal trust assets*

[Dollar amounts in billions]

	Total trust assets	State and local government securities			Total trust assets	State and local government securities	
		Amount	Percent of total trust assets			Amount	Percent of total trust assets
1946.....	\$28.74	\$3.0	10.44	1956.....	\$50.84	\$7.3	14.36
1947.....	29.41	3.1	10.59	1957.....	46.04	7.8	16.94
1948.....	30.20	3.2	10.56	1958.....	49.68	7.8	15.70
1949.....	32.44	3.3	10.17	1959.....	57.17	7.8	13.64
1950.....	34.25	3.9	11.39	1960.....	62.34	9.1	14.60
1951.....	35.41	4.6	12.99	1961.....	68.56	9.9	14.44
1952.....	35.92	5.3	14.76	1962.....	75.41	10.8	14.32
1953.....	35.58	5.4	15.18	1963.....	82.24	11.6	14.11
1954.....	43.69	6.1	13.96	1964.....	89.64	12.2	13.61
1955.....	49.87	6.6	13.23	1965.....	96.50	13.2	13.68

Sources: For 1958, 1959, 1960, and 1963 "Report of National Survey of Personal Trust Accounts," Trust Division, the American Bankers Association, New York; for 1964 and 1965 estimated; for other years Goldsmith, Lipsey and Mendelson, "Studies in the National Balance Sheet of the United States," vol. II, Princeton University Press, Princeton, N.J., 1963.

2. PORTFOLIO GUIDES

There are no guidelines established by trust departments regarding the proportion of tax-exempt securities which should be held in relation to other types of investments.

It must be stressed that in investing the funds of personal trust accounts, trust departments consider solely the best interest of the individual account. This means consideration must be given to the needs of the income beneficiaries, as well as those of the remaindermen within the limits which may be set forth in the trust instrument. Therefore, investment decisions must be made after considering at least the following:

- (1) The needs of the income beneficiaries for current income;
- (2) The length of time the trust has to run;
- (3) The age of the income beneficiary and the ages of remaindermen; and
- (4) The income of the beneficiaries from other than the trust assets.

In weighing the above factors, the trust investment officer can decide whether current income should be maximized or whether investments should seek both income and capital gains in equity securities. The problem of maximizing current income will, of course, raise the question as to whether the total income of the beneficiaries from the trust and from other sources would justify seeking tax-exempt income through the purchase of State and local securities. The answer is clear when the beneficiaries are in the higher income tax brackets. In such cases mortgages are not at all competitive with tax-exempt securities because the interest earned on mortgages, being fully taxable, is not high enough to offset the advantage of tax exemption. When beneficiaries are at lower marginal tax rates, mortgages may become attractive.

Table 7 shows clearly why those in higher income tax brackets would benefit by tax-exempt investment income. For example, a taxable yield of 6 percent would be required just to equal a tax-exempt yield of 3 percent for one in the 50 percent income tax bracket.

TABLE 7.—*Tax-exempt yields and equivalent taxable yields*

Tax-exempt yield in percent	Federal income tax brackets		
	30 percent	50 percent	70 percent
1.00.....	1.42	2.00	3.33
1.50.....	2.14	3.00	5.00
2.00.....	2.85	4.00	6.66
2.50.....	3.57	5.00	8.33
3.00.....	4.28	6.00	10.00
3.50.....	5.00	7.00	11.67
4.00.....	5.71	8.00	13.33

Source: Adapted from a table published by Bache & Co., Inc., New York.

3. TAX EXEMPTION AND FEDERAL GUARANTEES

It cannot be stated at what interest rate levels, as compared with the interest rates on taxable loans and investments, municipal securities become attractive as investments. The key factor is the marginal tax rate of the beneficiary. When yields on State and municipal securities are low—for example, at 1.65 percent—and the yields on corporate bonds are at 2.66 percent, those taxpayers with marginal income tax rates above 38 percent would benefit by tax-exempt securities. However, when tax-exempt bonds yield 3.27 percent and corporate bonds yield 4.35 percent, those taxpayers with marginal income tax rates above 24.8 percent would fare better with tax-exempt securities. Obviously, there are more taxpayers with the lower marginal income tax rates than with the higher marginal rates. At almost any given spread between yields on municipals and yields on corporates, there would be some taxpayers who would benefit from tax-exempt income. As the marginal income tax rate that would equalize the yield on municipals with the yield on corporate bonds declines, the number of potential investors who could profit from tax-exempt income will increase. Since 1952 this marginal rate has not been above 30 percent.

Despite the value of the income tax exemption, there are some situations in which State and local government securities are attractive for other reasons. Thus, in Pennsylvania a personal property tax virtually eliminates corporate bonds from a trust account subject to the tax. Such accounts are invested in Pennsylvania tax-exempt securities regardless of the income tax bracket involved.

There doesn't seem to be anything needed at the present time to make municipal securities more attractive for trust account investment, except possibly a subsidence of inflation which would benefit all fixed-income investments in relation to other investments. A Federal Government guarantee of municipal securities would eliminate the discipline of the marketplace. The relatively high credit rated borrowers would be left on about the same basis as the relatively poorer credit risks and there would be the possibility that less desirable local projects, from an economic point of view, would be undertaken. If the tax-exempt feature of municipal securities were removed in exchange for a Federal Government guarantee, municipal securities would thereby lose their chief attraction. Clearly, it is the tax-exempt feature that attracts most investors to State and local government securities, rather than their quality, because those seeking safety pri-

marily can limit their investments to direct obligations of the U.S. Government which entail no credit risk.

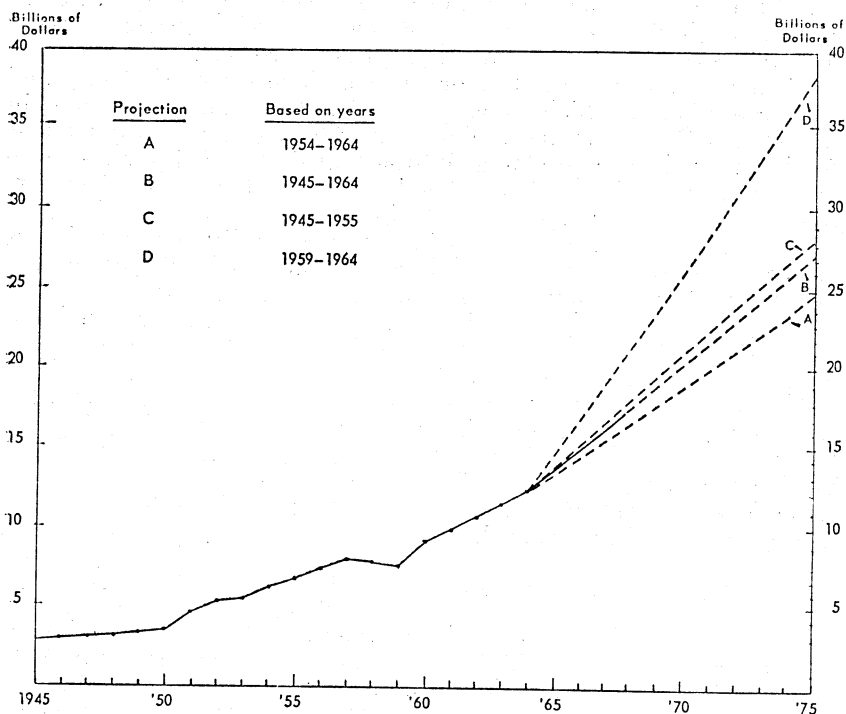
A Federal Government guarantee might be used selectively, for example, to help finance urban transit systems. Such a guarantee seems to have been quite successful in other types of projects.

We have referred above to mortgages on homes for the elderly and on nursing homes which have, in effect, a Government guarantee in the form of FHA insurance. This insurance has undoubtedly made it feasible for private capital to go into such projects. So it has been also in the case of housing authority bonds which are for all practical purposes guaranteed by the Federal Government through the Public Housing Administration. In 1964 there were \$4 billion of such bonds held by private investors.¹¹ It is clear that a substantial but not definitely known amount of these bonds are held by banks for personal trust accounts. Because of the Federal Government guarantee on these bonds they generally yield somewhat less than other local government and agency securities. Strangely, the yields on issues from different parts of the country will vary, despite the guarantee, for probably purely psychological reasons, with investors favoring the better known housing authorities. It would seem reasonable to expect yields on State and local government securities—with no tax exemption and a Federal Government guarantee—to yield about the same as agency issues now guaranteed.

C. PROSPECTIVE LOANS AND INVESTMENTS

The accompanying chart indicates the amount of State and local government securities held by personal trusts for the years 1945 through 1964 and shows various projections to 1975 based on different periods of years between 1945 and 1965 as set forth on the chart. These projections were made assuming continuance of tax exemption and continuance of the present system of financing State and local government needs. If there should be some significant change in State and local financing such as, for example, a direct allocation by Federal Government of tax revenue back to the several States, the volume of tax-exempt securities might change substantially and all projections based on past experience would be in error.

¹¹ "Housing and Home Finance Agency, 1964 report," p. 254.

STATE AND LOCAL GOVERNMENT SECURITIES HELD IN PERSONAL TRUSTS 1945-1964,
AND PROJECTIONS TO 1975

It will be noted that projections A, B, and C are fairly close together. Projection C, the highest of the three, would indicate holdings of State and local government securities by trust accounts of \$28 billion by 1975. It would seem quite likely that this level, at least, will be attained. The trend for the years 1959 to 1964 produces the highest projection; that is, \$38 billion by 1975. We are inclined to think that 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 reasons are as follows. In the chapter of this study on individuals as a source of loan funds for State and local governments, data are set forth showing the rapid increase in recent years in the number of taxpayers in the higher income tax brackets. For example, 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. Further consideration is that banks will very likely continue and ex-

pand their efforts to attract additional trust business and, as we have indicated above, the growing use of tax-exempt bond funds will enable trust departments to invest efficiently trust funds of the size which cannot be handled economically as separate accounts. The investment of accounts in whole or in part in a tax-exempt bond fund will depend, of course, upon the factors set forth in the section above on portfolio considerations.

We have made no projection for the amount of securities issued by nonprofit organizations which personal trusts may be expected to hold because we have no data on which to base a judgment as to trends and, in any case, the amounts of such securities involved are relatively small.

Since we have been dealing solely with trusts, we have not attempted to assess the present holdings and the trends in agency accounts. Many of these, especially the larger ones, hold large amounts of tax-exempt securities. This reflects not only the fact that the principals are in high income brackets but also that the tax-exempt market, largely a new issue one, is unfamiliar to most individual investors.

CHAPTER 29

Investments by Nonfinancial Corporations in State and Local Government Obligations*

Nonfinancial business corporations¹ have in recent years become increasingly significant as suppliers of funds in the short-term money and capital markets. Funds earmarked for expansion of plant and equipment, payment of taxes, acquisition of subsidiaries, etc., which might otherwise remain temporarily idle in companies' bank accounts have been invested in various interest-bearing assets including Federal Government securities, time deposits (including certificates of deposit), commercial and finance company paper and tax-exempt securities of State and local governments ("municipals").

In spite of their tax-exempt status, municipal securities have not been acquired by corporations in substantial amounts in comparison with other liquid investments. However, there has been a general upward trend in corporate holdings of these securities during the post-World War II period from about \$300 million in 1946 to more than \$31½ billion at the end of 1965 (see table I). This upward trend was interrupted in the period from 1960 through 1962 by a decline which appears to be related to changes in the yield structure of the principal money market instruments.

TABLE I.—*Investments by nonfinancial corporations in State and local government obligations (end-of-year estimates, 1946-65)*

[Billions of dollars]

Year	Amount	Year	Amount
1946.....	\$0.3	1956.....	\$1.3
1947.....	.4	1957.....	1.5
1948.....	.4	1958.....	2.0
1949.....	.5	1959.....	2.7
1950.....	.5	1960.....	2.5
1951.....	.6	1961.....	2.4
1952.....	.6	1962.....	2.1
1953.....	.7	1963.....	2.8
1954.....	.9	1964.....	3.1
1955.....	1.2	1965.....	3.6

Source: Securities and Exchange Commission estimates based on Statistics of Income and other data.

The extent to which nonfinancial corporations have used State and local government securities as instruments for investing their short-

*Prepared by John T. Woodward, Chief, Branch of Financial Reports, Office of Policy Research, Securities and Exchange Commission, with minor editing by committee staff.

¹The term, "nonfinancial corporations," as used here refers to corporations other than the principal financial intermediaries: banks, insurance companies, savings and loan associations, and investment companies. It includes all other business corporations, some of which are quasi-financial in nature, such as personal and business loan companies, holding companies, and real estate firms.

term funds can be seen by a comparison of the estimated holdings of municipal securities with their total liquid assets² (see table II). For example, in 1965 holdings of municipals constituted only 4.1 percent of total liquid assets, as shown in table II, whereas Federal Government issues comprised 19 percent of liquid assets.³

TABLE II.—*Relationship of State and local government securities holdings to total liquid assets of nonfinancial corporations (1956-65)*

[Dollar amounts in billions]

Year	Total liquid assets	Investment in State and local government securities	
		Amount	Percent of liquid assets
1956.....	\$59.7	\$1.3	2.3
1957.....	60.2	1.5	2.5
1958.....	63.6	2.0	3.2
1959.....	68.2	2.7	4.0
1960.....	69.0	2.5	3.6
1961.....	72.5	2.4	3.4
1962.....	77.9	2.1	2.7
1963.....	84.4	2.8	3.3
1964.....	84.6	3.1	3.7
1965.....	88.0	3.6	4.1

Source: Quarterly series on Net Working Capital of U.S. Corporations published by the Securities and Exchange Commission. Total liquid assets is the sum of cash, U.S. Government securities, and "other current assets" as presented in the statistical releases for that series.

The rather minor role which State and local government securities have in the liquid investment programs of nonfinancial corporations could be due in part to the maturity structure of municipal obligations. Only about 5 percent of the \$100 billion total of outstanding State and local government debt in 1965 consisted of short-term obligations. The desire of corporate treasurers to maintain liquidity of their investments undoubtedly prompts them to purchase short-term issues or long-term issues which are approaching maturity. Actually, relatively little detailed data are available publicly concerning the types of municipal securities purchased or the companies investing in these securities.

A survey conducted in the summer of 1966 by the Securities and Exchange Commission provides a limited amount of data on municipal holdings for 203 large manufacturing corporations for the period from 1961 to 1965. The results are summarized in table III. For most of the 5-year period, about two-thirds of the State and local government securities held by the 203 corporations had original maturities of less than 1 year.

² Figures for total liquid assets used here consist of cash and deposits. Government obligations, and miscellaneous current assets; the latter category includes all other types of marketable investments as well as prepaid items and supplies. The amount representing prepaid items, etc., is not considered to be large enough to affect the conclusions of this study.

³ Net Working Capital of U.S. Corporations, Securities and Exchange Commission Statistical Release No. 2156.

TABLE III.—*Investments in State and local government securities by selected large manufacturing corporations*¹ (1961-65)

[Amounts in thousands of dollars]

Year	Total		Short term ²		Long term	
	Amount	Per-cent	Amount	Per-cent	Amount	Per-cent
1961.....	746,795	100	525,892	70.4	220,903	29.6
1962.....	580,969	100	365,414	62.9	215,555	37.1
1963.....	1,100,548	100	757,213	68.8	343,335	31.2
1964.....	1,365,816	100	801,628	58.7	564,188	41.3
1965.....	1,780,215	100	1,141,793	64.1	638,422	35.9

¹ Data are compiled from reports submitted to the Securities and Exchange Commission by 203 manufacturing companies having total assets of \$250 million or more at the end of 1965.

² Original maturities less than 1 year.

The survey revealed a rapid growth in corporate holdings of State and local government securities during the 5-year period. Except for the drop in holdings in 1962, investments in municipals by these large manufacturers rose sharply during the period, more than doubling in the 5 years from December 1961 to the end of 1965.

The survey requested data on holdings of State and local government securities at the close of the calendar years from 1961 through 1965. Approximately one-half of the corporations surveyed reported no holdings of municipals on any of these dates. Of course, it is possible that a respondent reporting no holdings of municipals in the survey could have purchased and sold such securities during the same calendar year.

The 102 companies which reported holdings of municipal securities on one or more of the dates specified in the survey were classified into groups based on the proportion of their liquid assets invested in municipals. This distribution is shown in table IV. Among the companies surveyed, the number holding State and local government obligations increased from 70 at the end of 1961 to 85 in December 1965. It is also apparent from these data that a number of companies increased the proportion of their liquid assets which were invested in municipals. In 1961, 17 of the corporations held municipal securities amounting to 10 percent or more of their total liquid assets, whereas in 1965 this number had increased to 32 corporations.

TABLE IV.—*Distribution of 102 manufacturing corporations reporting investments in State and local government securities, by percentage of these investments to total liquid assets (1961-65)*

Year	Total number of corporations ¹	Holdings of State and local government securities as percent of total liquid assets ²					
		None	0.1-1.9	2.0-4.9	5.0-9.9	10.0-24.9	25.0 and over
1961.....	102	32	14	20			7
1962.....	102	35	28	10	19	10	
1963.....	102	20	22	15	12	13	4
1964.....	102	18	27	14	22	17	6
1965.....	102	17	19	17	12	21	10
					17	19	13

¹ Covers the 102 corporations—from the survey group of 203 large manufacturing corporations—which reported holdings of State and local government securities at yearend for 1 or more of the years in the period from 1961 to 1965.

² "Total liquid assets" represents cash, U.S. Government securities, and miscellaneous current assets (including State and local government securities) at end of year.

The 102 corporations reporting holdings of municipal securities were generally larger companies with a greater volume of liquid assets than the 101 companies holding no municipals. The median asset size of the 102 "municipal investors" was \$650 million—based on total assets at the end of 1965—compared with a median of \$465 million for the companies not holding municipal obligations. The aggregate liquid assets of the corporations investing in municipal securities were almost double those of the other group.

The comparison of liquid assets for the two groups of corporations, shown in table V, also reveals basic differences in the composition of their liquid assets. The firms not holding State and local government securities place a substantially higher proportion of their liquid assets in cash and deposits and U.S. Government obligations and a lower proportion in miscellaneous current assets. This suggests that the firms which purchase municipal securities also are more likely to be investors in commercial and finance company paper, types of assets which are included in the category, "miscellaneous current assets." It should also be noted that the 102 corporations holding municipal securities not only increased the absolute amount of such investments but significantly increased the proportion of their municipals to their total liquid assets—from 6.3 percent in 1961 to 11.4 percent in 1965.

TABLE V.—*Liquid assets held by selected large manufacturing corporations,¹ by type of asset (1961-65)*

[Dollar amounts in millions]										
Year	Total		Cash and deposits		U.S. Government securities		Miscellaneous current assets other than State and local government securities		State and local government securities	
	Amount	Per cent	Amount	Per cent	Amount	Per cent	Amount	Per cent	Amount	Per cent
A. CORPORATIONS INVESTING IN STATE AND LOCAL GOVERNMENT SECURITIES										
1961-----	\$11,786	100.0	\$4,084	34.7	\$4,955	42.0	\$2,000	17.0	\$747	6.3
1962-----	12,773	100.0	4,642	36.3	4,874	38.2	2,677	21.0	581	4.5
1963-----	14,419	100.0	5,415	37.6	4,946	34.3	2,957	20.5	1,101	7.6
1964-----	13,800	100.0	5,293	38.4	4,554	33.0	2,588	18.8	1,366	9.9
1965-----	15,555	100.0	5,629	36.2	3,925	25.2	4,220	27.1	1,780	11.4
B. CORPORATIONS WITHOUT INVESTMENTS IN STATE AND LOCAL GOVERNMENT SECURITIES										
1961-----	6,480	100.0	2,811	43.4	2,997	46.2	671	10.4	-----	-----
1962-----	7,472	100.0	3,242	43.4	3,584	48.0	646	8.6	-----	-----
1963-----	8,275	100.0	3,880	46.9	3,800	45.9	595	7.2	-----	-----
1964-----	7,651	100.0	3,841	50.2	2,982	39.0	828	10.8	-----	-----
1965-----	8,700	100.0	4,527	52.0	2,746	31.6	1,426	16.4	-----	-----
C. ALL SELECTED CORPORATIONS										
1961-----	18,265	100.0	6,895	37.7	7,952	43.5	2,671	14.6	747	4.1
1962-----	20,245	100.0	7,884	38.9	8,458	41.8	3,323	16.4	581	2.9
1963-----	22,694	100.0	9,295	41.0	8,746	38.5	3,552	15.7	1,101	4.9
1964-----	21,452	100.0	8,684	40.2	8,036	37.5	3,416	15.9	1,366	6.4
1965-----	24,254	100.0	10,157	41.9	6,671	27.5	5,647	23.3	1,780	7.3

¹ Data are for 203 companies reporting to the Securities and Exchange Commission on investments in State and local government securities at the end of each year shown above. Each of the selected companies had total assets of \$250,000,000 or more at the end of 1965. Of the companies reporting in the survey, 102 reported investments in State and local government securities at 1 or more of the yearend dates. Data for these 102 companies are shown in part A above. Figures for the remaining companies are shown in part B.

The compilation of holdings of State and local government obligations by the 102 "municipal investors" suggests some degree of concentration in these investments by a limited group of companies; further examination reveals that this concentration is even more pronounced than is indicated by the foregoing tables. The 13 companies which reported holdings of municipals equal to 25 percent or more of total liquid assets in 1965 actually held nearly \$1.2 billion of municipals—almost two-thirds of the total reported by the companies surveyed. However, these 13 corporations were not necessarily the largest investors in dollar amounts of holdings. The 10 corporations having the largest amounts of State and local government obligations in 1965 reported a total of \$1.25 billion of such investments.

Data from "Statistics of Income," published by the Internal Revenue Service, provide some indication of the holdings of State and local government obligations by various industry groups. The latest data available are for 1961.⁴ These figures somewhat understate the actual amount of investments in municipal securities, since balance sheets submitted with tax forms filed by corporations do not always contain a distinction between Federal Government issues and State and local government obligations. The investments which cannot be allocated to a specific category are included in the "Statistics of Income" publications in the category described as "Government obligations, not stated."

The data from "Statistics of Income" for various industry groupings of nonfinancial corporations are shown in table VI for the years 1958 through 1961. Among nonfinancial corporations, manufacturing firms are clearly the dominant group of investors in State and local government obligations, generally holding more than half of the total. Real estate and holding companies constitute the other principal types of corporations holding substantial amounts of such investments.

⁴ These compilations are based on data representing fiscal periods ending between July of one year and June of the following year, with figures weighted most heavily by companies having fiscal periods ending in December.

TABLE VI.—*Investments in State and local government securities by nonfinancial corporations, by industry (1958-61)*

Industry	1958	1959	1960	1961
A. Dollar amounts (in millions)				
All industries.....	\$1, 916	\$2, 606	\$2, 264	\$2, 204
Agriculture, forestry and fisheries.....	16	17	6	7
Mining.....	97	90	141	79
Construction.....	55	47	51	46
Manufacturing.....	951	1, 596	1, 280	1, 217
Transportation, communication and utilities.....	57	81	48	78
Wholesale and retail trade.....	148	161	167	138
Services.....	45	75	69	76
Real estate and other ¹	546	540	502	562
B. Percentages for each industry				
All industries.....	100. 0	100. 0	100. 0	100. 0
Agriculture, forestry and fisheries.....	. 9	. 6	. 3	. 3
Mining.....	5. 1	3. 4	6. 2	3. 6
Construction.....	2. 9	1. 8	2. 2	2. 1
Manufacturing.....	49. 6	61. 3	56. 5	55. 2
Transportation, communication and utilities.....	3. 0	3. 1	2. 1	3. 6
Wholesale and retail trade.....	7. 7	6. 2	7. 4	6. 3
Services.....	2. 4	2. 9	3. 0	3. 5
Real estate and other ¹	28. 5	24. 5	22. 8	25. 5

¹ Excludes the principal financial intermediaries (banks, insurance companies, savings and loan associations and investment companies) but includes, among other groups, business and personal finance companies and "holding companies."

Source: Statistics of Income, Corporation Income Tax Returns, Internal Revenue Service.

CHAPTER 30

Individuals as a Source of Loan Funds*

INTRODUCTION

Most of the financial savings in the United States are owned by households either in the form of claims on financial institutions or in the form of securities and mortgages issued by businesses, governments, and other households. Savings by households that are deposited with financial institutions give rise to a demand for financial assets by these institutions, a process which is called financial intermediation. Individuals thus contribute to State and local debt financing both by direct ownership of State and local securities and as holders of claims on financial institutions which, in turn, may be investors in State and local obligations. Individuals also supply funds to State and local obligations as owners of personal trust funds.

As of the end of 1965, individuals—including personal trust funds and nonprofit institutions—are estimated to have held directly \$40.5 billion of State and local obligations representing 40 percent of the total amount of this type of debt. This compares to other marketable bond holdings by individuals amounting to \$31.1 billion; these consisted of marketable U.S. Government securities and corporate and foreign bonds. At the same time, however, individuals' holdings of corporate stocks were much larger, amounting to about \$670 billion at current market prices, and their holdings of cash, time deposits, and savings bonds totaled \$421 billion. Individuals' direct holdings of mortgages were relatively small, but the exact amount is difficult to estimate. When all these categories of financial assets are taken together as a measure of the individuals' portfolio of financial assets, it appears that State and local obligations accounted for 3.5 percent of the total portfolio.

The above data are taken from the Federal Reserve flow-of-funds accounts where individuals' financial assets are estimated as residuals by deducting institutional holdings from debt and asset aggregates. Direct information on the type of household that owned State and local debt is available from the 1962 Federal Reserve Survey of Financial Characteristics of Consumers. Estimates from this survey do not include the holdings by personal trust funds and by nonprofit institutions. Of the 57.9 million families or unrelated individuals in the United States at the end of 1962, it appears that only 3 percent had direct holdings of marketable bonds of any type and less than 1 percent were holders of State and local obligations. The combination of a relatively low yield and tax-exempt status of income from State and local debt, makes this type of investment attractive to consumer units in high income tax brackets, but not to those in lower brackets.

*By Helmut Wendel, Division of Research and Statistics, Board of Governors of the Federal Reserve System, with minor editing by committee staff.

About 88 percent of consumers' direct holdings of State and local securities at the end of 1962 was accounted for by consumer units with total income of \$25,000 and above. Consumer units in that top income bracket made up 1.2 percent of the total number of families and unrelated individuals.

THE SUPPLY OF FUNDS FROM INDIVIDUALS

At the end of 1962, 79 percent of consumer units held some kind of liquid financial asset, excluding currency; 14 percent had holdings of common stocks; 3 percent reported holdings of marketable bonds; but less than 1 percent had holdings of State and local bonds, a subcategory of marketable bonds. The frequency of State and local bond holdings was 2 percent or below for all consumer income groups up to \$25,000. The frequency of State and local bond investments increased rapidly for the top income groups, with 7 percent in the \$25,000 to \$50,000 income bracket reporting such holdings, 24 percent in the \$50,000 to \$100,000 income bracket, and 67 percent in the income bracket for \$100,000 and over. These and related data are shown in table 1.

Table 2 compares 1962 mean holdings of State and local bonds by consumer units in various income classes with mean holdings of other financial portfolio assets, such as liquid assets, common stock, mutual funds, mortgage assets, and other marketable bonds. For all consumer units taken together, State and local government bonds amounted to 3.1 percent of total financial portfolio assets. For consumer units with incomes below \$15,000, such bond holdings amounted to 0.5 percent of total portfolios. The importance of State and local bonds as a component of the total financial portfolio rose with increasing income up to 12.8 percent for the \$50,000 to \$100,000 income class. For the income group with income above \$100,000, however, the share of State and local obligations declined to 8.0 percent. This top income class invested a much larger percentage of their total portfolios in common stocks than any other income group, and it showed decidedly less preference for all types of fixed income financial assets.

TABLE 1.—Percent of consumer units holding specified assets at end of 1962

	Liquid assets	Common stock	All marketable bonds	State and local bonds
All units.....	79	14	3	(1)
1962 income:				
0 to \$2,999.....	56	6	1	(1)
\$3,000 to \$4,999.....	74	7	1	(1)
\$5,000 to \$7,499.....	86	13	1	(1)
\$7,500 to \$9,999.....	96	15	3	
\$10,000 to \$14,999.....	96	25	6	(1)
\$15,000 to \$24,999.....	100	46	9	
\$25,000 to \$49,999.....	99	78	23	
\$50,000 to \$99,999.....	100	87	35	
\$100,000 and over.....	99	96	75	

¹ Less than 1 percent.

Source: Federal Reserve Survey of Financial Characteristics of Consumers.

TABLE 2A.—Average portfolio of financial assets by consumers in various income classes, year-end, 1962

	Number of units (in millions)	Financial portfolio assets (mean amount (in dollars) for all units in group)					
		Total	Liquid assets ¹	Common stock	Mutual funds	Mortgage assets	Marketable securities other than stocks
							State and local Other ²
All units.....	57.93	7, 097	2, 675	3, 160	424	496	219 213
1962 income:							
Under \$15,000.....	55.17	3, 994	2, 131	1, 200	276	291	18 78
\$15,000 to \$24,999.....	2.02	21, 826	8, 824	8, 830	1, 297	1, 877	262 736
\$25,000 to \$49,999.....	.53	94, 961	20, 404	61, 239	5, 098	1, 558	3, 701 2, 961
\$50,000 to \$99,999.....	.16	270, 270	37, 298	149, 615	7, 862	14, 128	34, 722 26, 645
\$100,000 and over.....	.04	1, 104, 971	59, 382	862, 712	65, 252	12, 258	87, 997 17, 370

¹ Includes demand deposits, time deposits and savings accounts, and U.S. savings bonds.

² Consists of marketable securities other than stocks issued by the U.S. Government, corporations, and foreign governments.

Source: Federal Reserve Survey of Financial Characteristics of Consumers.

TABLE 2B.—*State and local obligations, share of total financial portfolio and distribution by income classes*

	State and local obligations		
	Mean amount	Share of total financial portfolio	Share of total consumer holdings
All units.....	219	3.1	100.0
1962 income:			
Under \$15,000.....	18	.5	7.6
\$15,000 to \$24,999.....	262	1.2	4.2
\$25,000 to \$49,999.....	3,701	3.9	15.5
\$50,000 to \$99,999.....	34,722	12.8	43.5
\$100,000 and over.....	87,997	8.0	29.2

Source: Table 2A.

The survey results suggest that investments in State and local securities have generally not been attractive to families earning less than \$25,000 a year. Data on tax rates and interest returns confirm that such families tended to have only moderate incentive, or no incentive at all, in terms of after-tax yield comparisons to purchase State and local obligations. Individual taxpayers reporting adjusted gross income between \$20,000 and \$25,000 in 1962,¹ most commonly were subject to a marginal Federal income tax rate of 34 percent (see table 3). More specifically, 80 percent of such taxpayers were subject to either a 34 percent or a 30 percent marginal income tax rate. During 1962, the yield on State and local AAA bonds was 3.03 percent and the yield on AAA corporate bonds averaged 4.33 percent. For a person with a marginal tax rate of 30 percent, this State and local yield would be equivalent to a yield of 4.33 percent in taxable income, while for a marginal tax rate of 34 percent, the comparable taxable yield amounted to 4.59 percent. Individuals in these tax brackets thus received either a moderately higher or the same tax adjusted yield from an investment in State and local obligations as from a corporate bond investment.

¹ Adjusted gross income differs in a number of respects from income before taxes as tabulated in the Survey of Financial Characteristics of Consumers. Realized income from capital gains is not included in the survey income data here, but it is partially included in adjusted gross income with long-term capital gains measured at 50 percent of their dollar amount. Various forms of nontaxable incomes are included in the survey concept, but are excluded from adjusted gross income: these are the tax-exempt income from State and local bonds, a \$50 dividend credit for tax computations, and various types of social security benefits.

TABLE 3.—*Individual taxpayers by adjusted gross income classes and marginal Federal income tax rates, 1962*

[Percent paying marginal rate]

	Adjusted gross income			
	\$20,000 to \$24,999	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 and over
Marginal Federal income tax rate:				
34 percent and less.....	84.3	14.1	2.3	6.4
35 to 50 percent.....	11.8	69.8	10.2	9.1
52 to 59 percent.....	3.8	12.4	45.0	7.1
62 to 69 percent.....		3.3	37.3	23.6
71 to 91 percent.....			4.4	53.4
Unclassified.....	.1	.4	.8	.4
All.....	100.0	100.0	100.0	100.0

Source: U.S. Treasury Department, Internal Revenue Service, "Statistics of Income," 1962, table 20.

Table 3 shows that the tax incentive for holding State and local securities was quite different for taxpayers with adjusted gross income in excess of \$25,000. Thus, 70 percent of taxpayers with adjusted gross incomes between \$25,000 and \$50,000 paid marginal tax rates ranging from 36 to 50 percent. About 82 percent of taxpayers with adjusted gross incomes between \$50,000 and \$100,000 paid marginal Federal tax rates ranging from 52 to 69 percent. And 53 percent of taxpayers with adjusted gross incomes exceeding \$100,000 paid marginal tax rates between 71 and 91 percent.

The prevalence of these high marginal tax rates for income earners above \$25,000 under the individual income tax rate schedules that existed from 1954 to 1963 suggests that there was a sizable potential market for State and local bonds among individuals which may not have been fully tapped due to the diversity of State and local securities and the resulting specialization that is required for expert investment choices. Another factor that limits the demand for State and local bonds by individuals is a desire for assets with potential capital appreciation such as common stocks. Capital appreciation postpones or reduces tax bills and may be desired as a hedge against inflation.

In appraising the financial portfolio composition by high-income recipients, the variability of a family's income from year to year also should be considered. During any 1 year, reported income may be high by previous standards or in terms of expected future income. To the extent that high tax rates are not experienced continuously, the demand for State and local obligations will be reduced.

Individuals' tax rates were reduced by the Internal Revenue Act of 1964, and income to which a marginal tax rate of 50 percent applied earlier would now be subject to a 42-percent marginal tax rate. Income with a 72-percent marginal tax rate earlier would now be subject to a 60-percent rate, and the top rate of 91 percent has now been reduced to a top marginal rate of 70 percent. Despite this reduction in tax rates, the comparative after-tax yield advantage of State and local bonds continues to be strong for top-income earners. In 1965, Aaa State and local bonds on average had a yield of 3.16 percent, and for investors that paid a 60-percent marginal tax rate this would be equivalent in after-tax income to a yield of 7.90 percent on an instrument earning taxable income. During 1965, the yield on corporate

Aaa bonds was 4.49 percent and on U.S. Government long-term bonds 4.21 percent. (See table 4.)

The judgment is sometimes expressed that State and local government bond investments are especially attractive to affluent individuals in the upper age brackets, since they might want to reduce their investment in a personal business venture and since long-term capital appreciation prospects on growth stocks might be beyond their planning horizons. The 1962 Survey of Financial Characteristics of Consumers provides some evidence in favor of this hypothesis. When consumer units are grouped by wealth brackets and age groups, units headed by a person of 65 years or above reported holdings of State and local obligations more frequently than consumer units headed by a person younger than 65 years. More frequent holdings of State and local bonds for older investors were found among consumer units with wealth holdings between \$200,000 and \$500,000 and also for units with wealth exceeding \$500,000.² Units reporting wealth holdings of less than \$200,000 reported small frequencies of holdings of State and local obligations in all age brackets.

TABLE 4.—Average annual yield on selected types of financial investments and tax advantage of State and local bonds

	Yields					Marginal income tax rate that equalizes yield, State and local bonds and—	
	AAA State and local bonds	AAA corporate bonds	U.S. Gov- ernment long-term bonds	Time and savings accounts			
				Commer- cial banks	Savings and loan associations	Corporate bonds	Savings and loan shares
1946	1.10	2.53	2.19	0.84	2.4	56.5	54.2
1947	1.45	2.61	2.25	.87	2.3	44.4	37.0
1948	1.87	2.82	2.44	.90	2.3	33.7	18.7
1949	1.65	2.66	2.31	.91	2.3	38.0	28.3
1950	1.56	2.62	2.32	.94	2.5	40.5	37.6
1951	1.61	2.86	2.57	1.03	2.6	43.7	38.1
1952	1.80	2.96	2.68	1.15	2.7	39.2	33.3
1953	2.31	3.20	2.94	1.24	2.8	27.8	17.5
1954	2.04	2.90	2.55	1.32	2.9	29.7	29.7
1955	2.18	3.06	2.84	1.38	2.9	28.8	24.8
1956	2.51	3.36	3.08	1.58	3.0	25.3	16.3
1957	3.10	3.89	3.47	2.08	3.3	20.3	6.1
1958	2.92	3.79	3.43	2.21	3.38	23.0	13.6
1959	3.35	4.38	4.07	2.36	3.53	23.5	5.1
1960	3.26	4.41	4.01	2.56	3.86	26.1	15.5
1961	3.27	4.35	3.90	2.76	3.90	24.8	16.2
1962	3.03	4.33	3.95	3.14	4.08	30.0	25.7
1963	3.06	4.26	4.00	3.33	4.17	28.2	26.6
1964	3.09	4.40	4.15	3.47	4.19	29.8	26.3
1965	3.16	4.49	4.21	(1)	(1)	29.6	(1)

¹ Not available.

Source: Board of Governors of the Federal Reserve System and "Savings and Loan Fact Book."

Information on the annual savings flow of individuals into State and local obligations is available only from estimates which start out with total net issues of State and local securities and deduct the takings by various institutional groups. The residual takings are attributed to a sector that includes households, personal trust funds and nonprofit

² Units with more than \$500,000 of wealth, however, reported about the same amount of mean holdings of State and local bonds whether they were headed by a person of 65 years or above or by a person in the 55- to 64-year age group. Mean holdings dropped sharply for units headed by a person younger than 55 years.

institutions. Table 5 shows the annual net acquisitions of State and local obligations by this household and nonprofit sector from 1946 to 1965, and these net acquisitions are compared with other net investments in financial portfolio assets by the sector.

Table 6 presents a summary of the average annual household investment flow into various types of financial assets, classified by three time spans: 1946-51, 1952-61, 1962-65. The first period would appear to have been the least favorable to investments in State and local obligations by individuals, since individual income tax rates were somewhat lower than in the 1954-63 period and considerably lower than in the 1952-53 period.³ Also, State and local bond yields tended to be lower relative to yields on corporate bonds and savings shares in the early post-war years than they were later in the 1950's. In addition, fear of inflation may have restrained the investment by individuals in all types of fixed income yielding financial assets.

During the 1946-51 period, the average annual investment in State and local bonds by individuals amounted to \$0.5 billion, which represented 0.2 percent of personal income and 6 percent of the total financial portfolio investment by the household and nonprofit sector.

TABLE 5.—*Estimated net financial portfolio investments by the household and nonprofit sector, 1946-65*

[In billions of dollars]

	Total ¹	State and local obligations	Corporate and foreign bonds	Corporate stock	Marketable Federal securities	U.S. Savings bonds	Time deposits and savings accounts	Demand deposits and currency
1946.....	10.0	-0.2	-0.9	1.1	-2.5	1.2	6.3	4.2
1947.....	6.1	.4	-.4	1.1	-.3	2.1	3.4	-.8
1948.....	3.2	1.0	.3	1.0	-1.5	1.6	2.3	-2.0
1949.....	3.8	.5	.5	.8	-.5	1.5	2.6	-1.9
1950.....	6.1	.3	.4	.7	-.6	.3	2.5	2.1
1951.....	10.5	.4	1.6	1.5	-.5	-.5	4.5	3.3
1952.....	12.1	1.1	.1	1.5	-.6	.1	7.7	2.0
1953.....	12.3	1.6	(²)	1.0	-1.8	2.0	8.3	.7
1954.....	10.6	.8	-.4	.7	-2.0	.6	9.2	1.4
1955.....	15.7	1.7	1.0	1.1	2.1	.3	8.8	.5
1956.....	16.6	1.6	.9	2.0	1.3	-.1	9.5	1.0
1957.....	16.4	2.0	1.1	1.5	1.8	-1.9	12.1	-1.2
1958.....	17.2	.9	.7	1.5	-1.8	-.5	14.0	1.7
1959.....	20.5	1.7	.1	.8	6.6	-1.8	11.4	1.8
1960.....	12.6	1.8	-.1	-.3	-.2	-.3	12.4	-.9
1961.....	18.9	1.1	-.2	.4	-1.3	.8	17.4	.8
1962.....	25.8	.4	-.9	-1.6	(²)	.4	23.4	4.1
1963.....	29.5	1.6	-.5	-2.9	2.5	1.2	23.0	5.3
1964.....	34.8	2.6	-.7	-.6	1.2	.9	23.9	7.4
1965.....	38.9	3.7	-.8	-2.1	2.4	.6	24.6	10.7

¹ Includes investments in mortgages, not shown separately.

² Less than \$50 million.

Source: Federal Reserve flow-of-fund accounts as of November 1965 (except 1965 data)

³ Richard Goode, "The Individual Income Tax," Washington, D.C., Brookings Institution, 1964, p. 325.

TABLE 6.—*Net financial portfolio investments by household and nonprofit sector, 1946-65, by selected periods*

	Total ¹	State and local obligations	Corporate and foreign bonds	Corporate stocks	Marketable Federal securities	Liquid assets ²	Share of State and local investment (percent of total)
Average annual amounts (in billions of dollars)							
1946 to 1951.....	8.0	.5	.3	1.2	-1.2	6.5	6
1952 to 1961.....	15.3	1.4	.3	1.0	.4	11.8	9
1962 to 1965.....	32.2	2.1	-.7	-1.8	1.5	31.4	7
As percentages of personal income during period							
1946 to 1951.....	3.1	.2	.1	.5	-.5	2.6	-----
1952 to 1961.....	4.5	.4	.1	.3	.1	3.5	-----
1962 to 1965.....	6.7	.4	-.2	-.4	.3	6.5	-----

¹ Includes investments in mortgages, not shown separately.² Consists of time deposits and savings accounts, U.S. savings bonds and demand deposits and currency.

Source: Table 5.

During the 10-year span from 1952 to 1961, the average annual net investment in State and local obligations by individuals rose to \$1.4 billion, representing 0.4 percent of personal income. During these years, yields on State and local government obligations rose relative to corporate bond yields and yields on savings and loan accounts. Higher personal income tax rates, improved after-tax equivalent yields on State and local obligations relative to alternative investments, and the larger share of personal income that was used for net investments in financial portfolio assets by individuals, all can be cited as factors contributing to the larger takings of State and local obligations. During this period State and local investments captured 9 percent of the total portfolio investments by individuals.

The investment flow varied considerably from year to year. The years during which cyclical troughs in economic activity occurred, 1954, 1958, and 1961 all showed below-average investments. In 1954 and 1958, yields on State and local AAA bonds declined, and they declined somewhat more than corporate AAA bond yields. This was not the case in 1961, however. During all of the 3 trough years, yields on savings shares and time deposits continued to trend upward. It would seem that individuals reduced their takings of State and local obligations during the recession years, expecting more favorable yields at a later time. It is known that financial institutions which experienced an increased availability of funds during these years, supplied larger amounts of investments to the State and local securities market. The annual investment pattern into State and local obligations by individuals may also have reflected cyclical changes in income flows to individuals in the upper tax brackets.

In the 1962-65 period, individuals on average invested \$2.1 billion annually in State and local obligations, which represented again 0.4 percent of personal income but only 7 percent of the total net investment in financial portfolio assets. In 1962, when rate ceilings on time deposits were lifted commercial banks experienced a large inflow of

such deposits and they increased their holdings of State and local obligations considerably. As a result State and local yields declined in 1962 and direct individuals' investments in State and local obligations amounted to only \$0.4 billion. Again it seems that declining yields caused individuals to reduce their investments in these obligations. Individuals also experienced net losses in stock market trading during 1962; but it is not known whether this affected their taking of State and local obligations. With yields on State and local bonds rising moderately in the subsequent 3 years, individuals increased their net acquisitions of State and local obligations considerably during each year. The 1964 and 1965 estimates on individuals' net acquisitions of State and local obligations amount to \$2.6 and \$3.7 billion, respectively. This does not indicate any lessened demand for State and local security holdings as a result of the individuals' income tax reduction in 1964.

Investments in State and local obligations accounted for 6 to 9 percent of total financial portfolio investments by individuals during the three postwar subperiods shown in table 6, but the share of State and local obligations in the total market value of individuals' financial portfolios was a much smaller percentage. Capital appreciation on corporate stockholdings was an important factor in increasing the total market value of individuals' financial portfolios. State and local obligations appear to have accounted for 4.9 percent of total financial portfolio holdings at the end of 1945 and for 3.5 percent at the end of 1965.

PROSPECTIVE INVESTMENTS

The investment behavior of individuals during the postwar period indicates that investment flows respond to changes in yields among alternative financial assets. This sensitivity can be detected in year-to-year changes in the allocation of individual saving and it probably would be magnified if yield advantages among different investment outlets were to alter over a prolonged period of time. The volume of demand for State and local obligations among individuals over the next 10 years thus is subject to considerable flexibility depending on absolute and relative yield levels, individual income tax rates, and the extent of fear of inflation among investors. Demand conditions by individuals for State and local bonds, in turn, will continue to have an important bearing on the behavior of market yields for State and local securities.

If the following assumptions remain applicable, the demand for State and local security holdings by individuals is likely to expand considerably; but it would be quite hazardous to project specific quantitative estimates:

- (1) State and local securities maintain the relative position in the yield structure for financial instruments which they have had in recent years, and their income remains tax exempt.
- (2) Individual income tax rates are not significantly reduced.
- (3) Inflation psychology does not pervade the capital markets.

Under these assumptions, the demand for net purchases of State and local securities by individuals would be sustained by the large annual flow of individuals' savings into financial investments and by the rapid increase that can be expected in the number of taxpayers

in high income brackets as the general level of per capita income rises.

From 1955 to 1963, the latest year for which Statistics of Income by the U.S. Internal Revenue Service are available, the number of taxpayers with adjusted gross income in excess of \$100,000 rose by 35 percent, the number in the \$50,000-to-\$100,000 bracket rose by 71 percent, and the number reported in the \$25,000-to-\$50,000 bracket rose by 91 percent. As is shown in table 7, two of these rates of growth are substantially higher than the increase in total personal income during this timespan, which amounted to 50 percent. Future growth in personal income is again likely to be accompanied by large increases in the number of families in these high income brackets. If other factors remain constant, this should enlarge considerably the market for State and local government obligations among individuals.

TABLE 7.—*Number of tax returns in top adjusted gross income brackets, 1955 and 1963*

Adjusted gross income classes	Number of Federal tax returns		Percent change 1955-63
	1955	1963	
	<i>Thousands</i>	<i>Thousands</i>	
\$25,000 to \$49,999.....	311.3	504.6	91
\$50,000 to \$99,999.....	77.6	132.4	71
\$100,000 and over.....	21.8	29.5	35
Memo:	<i>Billions</i>	<i>Billions</i>	
Personal income.....	310.9	464.8	50
Yearend holdings of State and local securities of household and nonprofit sector.....	23.0	34.0	48

Source: Statistics of Income, 1963.



