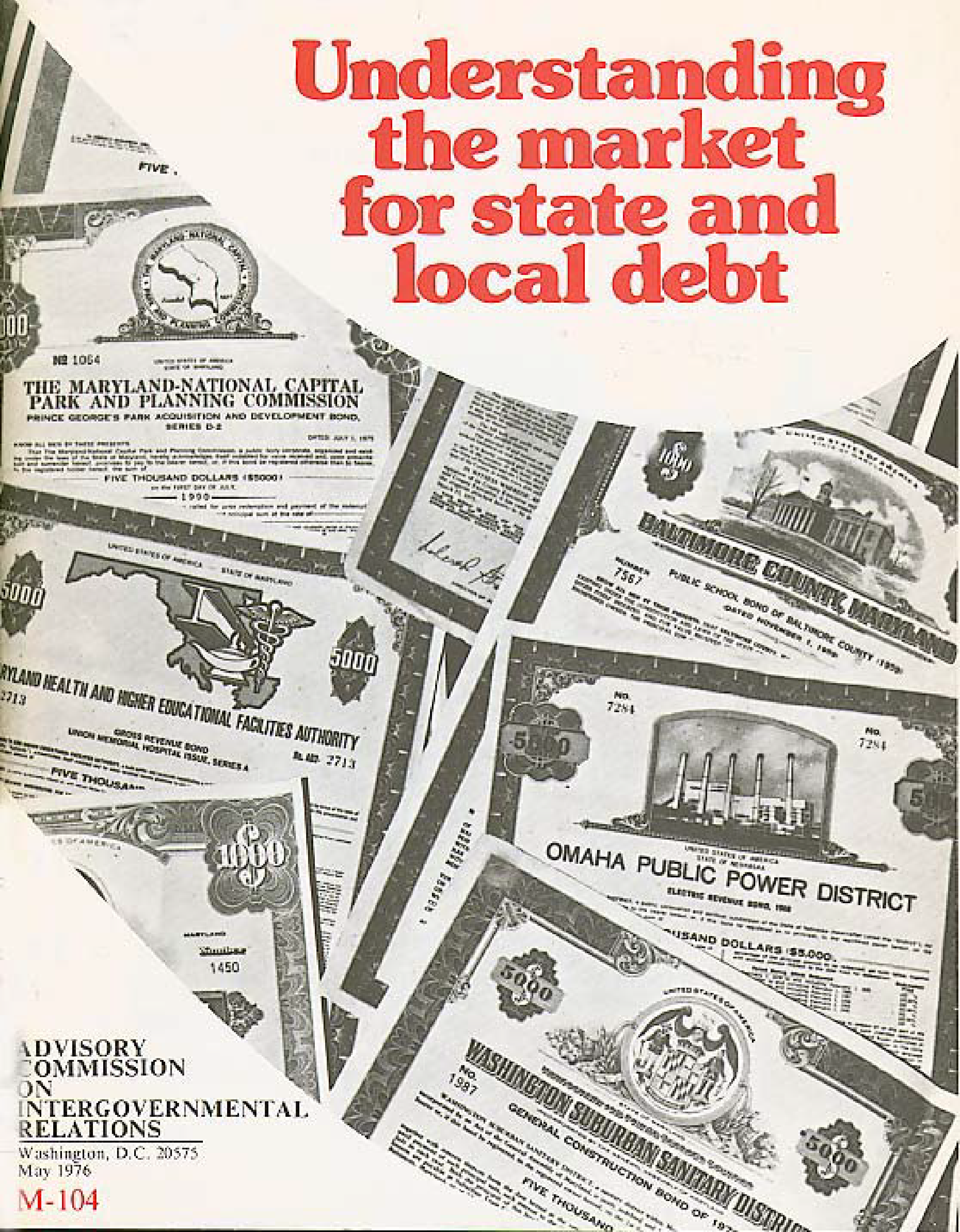
Understanding the market for state and local debt



ADVISORY
COMMISSION
ON
INTERGOVERNMENTAL
RELATIONS

Washington, D.C. 20575
May 1976
M-104

COMMISSION MEMBERS

(MARCH 1976)

PRIVATE CITIZENS
Robert E. Merriam, Chairman, Chicago, Illinois
John H. Altorfer, Peoria, Illinois
F. Clifton White, Greenwich, Connecticut

MEMBERS OF THE UNITED STATES SENATE
Ernest F. Hollings, South Carolina
Edmund S. Muskie, Maine
William V. Roth, Delaware

MEMBERS OF THE U.S. HOUSE OF REPRESENTATIVES
Clarence J. Brown, Jr., Ohio
L. H. Fountain, North Carolina
Richard Vander Veen, Michigan

OFFICERS OF THE EXECUTIVE BRANCH, FEDERAL GOVERNMENT
James T. Lynn, Director, Office of Management and Budget
James M. Cannon, Assistant to the President for Domestic Affairs
Carla A. Hills, Secretary, Department of Housing and Urban Development

GOVERNORS
Daniel J. Evans, Washington
Richard F. Kneip, South Dakota
Philip W. Noel, Rhode Island
Vacancy

MAYORS
Harry E. Kinney, Albuquerque, New Mexico
Jack D. Maltester, San Leandro, California
John H. Poelker, St. Louis, Missouri
Vacancy

MEMBERS OF STATE LEGISLATIVE BODIES
John H. Briscoe, Speaker, Maryland House of Delegates
Robert P. Knowles, Senator, Wisconsin
Charles F. Kurfess, Minority Leader, Ohio House of Representatives

ELECTED COUNTY OFFICIALS
John H. Brewer, Kent County, Michigan
William E. Dunn, Commissioner, Salt Lake County, Utah
Conrad M. Fowler, Shelby County, Alabama

Understanding the market for state and local debt

ADVISORY COMMISSION ON
INTERGOVERNMENTAL RELATIONS

Washington, D.C. 20575

May 1976

M-104

Blank Page

Preface

The New York fiscal crisis has stimulated considerable interest in urban finance problems in general and the market for state and local debt in particular. This information report outlines the essential characteristics of this market through which an annual volume of nearly $60 billion in short and long-term obligations is sold.

This Information Report was co-authored by James N. Patton, Assistant Professor of Business Administration, University of Pittsburgh, and George H. Hempel, Professor of Finance, Washington University. The report was prepared under the general supervision of John Shannon, Assistant Director, Advisory Commission on Intergovernmental Relations.

Robert E. Merriam
Chairman

Wayne F. Anderson
Executive Director

Contents

Exhibits

Blank Page

Appendices

Blank Page

UNDERSTANDING THE MARKET FOR STATE AND LOCAL DEBT

Summary

During 1975, state and local governments marketed \$58.2 billion of new debt in about 8,000 separate issues. That is about ten times the dollar volume of 1950 and more than double the volume of 1968.

State governments account for nearly one-third of state and local debt outstanding. Incorporated municipalities account for roughly 29 percent, while school and special districts account for about 13 percent and 16 percent of such debt, respectively. The remaining state and local debt is the obligation of counties and unincorporated areas.

Short-term debt is usually issued in anticipation of revenue or other receipts or to cope with expenditure requirements that are not covered by operating revenues. The financing of current operating expenditures with debt that is not retired by the end of the fiscal year may be a signal of potential future financial difficulties. Prior to 1975, short-term state and local debt had been increasing more rapidly than long-term debt and in most recent years exceeded the annual dollar volume of long-term debt issued. This phenomenon has led to some refinancing problems and may lead to more in the future.

Long-term borrowing is usually used to finance large state and local outlays that cannot be covered by current revenues. As a rule, the full faith and credit of the government stands as the guarantee that the debt will be repaid, but some debt does not have this type of backing. Non-guaranteed or limited liability debt has increased as a proportion of total long-term state and local debt. Furthermore, the debate over the precise meaning of full faith and credit backing has intensified because of the well-publicized financial problems of New York City and the State of New York.

The profile of state and local bond ownership has changed over time. The most important factor

influencing ownership has been the Federal tax position of potential owners. Commercial banks currently own about 50 percent of all state and local securities outstanding.

Their purchase of such securities is influenced by many factors that make this demand fairly erratic. There is reason to question whether commercial banks will continue to absorb the majority of state and local debt issues in the latter 1970s.

In recent years, state and local borrowing costs have increased. One common indicator, the 20-bond *Bond Buyer* index, went above the 7.5 percent mark for the first time ever in 1975. The longer the maturity and the lower the quality of a municipal issue the higher the interest rate cost.

A comparison of market yields on U.S. Treasury versus municipal securities shows that state and local debt is perceived as relatively more risky in periods of recession and less risky in more prosperous periods.

A recent study concluded that the introduction of Federal general revenue sharing cut the relative cost of state and local borrowing.

The recent financial problem of New York City and New York State may have affected the interest costs of other state and local governmental units.

The distribution of bond ratings assigned to long-term municipal debt issues since 1945 shows that the overall quality of municipal debt increased in the early 1950s and deteriorated in the late 1950s and 1960s.

Municipal defaults have occurred in periods of good and bad economic conditions, reaching significant magnitudes only during periods of major economic depression. Only a small percentage of municipal defaults have been resolved through the bankruptcy process. Only 18 municipal bankruptcy cases have been filed under Title IX of the Federal bankruptcy laws since 1954.

Most long-term municipal issues must, by law, be offered through competitive bidding. The winning underwriter (syndicate of investment bankers and commercial banks offering the lowest net interest cost) reoffers the bonds to the public at prices that cover the underwriter's expenses and compensate him for his risks. Many short-term municipal issues are negotiated with local banks or other institutions, the interest rate paid being determined through negotiations.

After they are issued, state and local issues are traded in the over-the-counter market. An active secondary market is important for a state and local issue because investors are more likely to be willing to purchase securities when initially issued if they believe they can liquidate their holdings when they want to. Most short-term and smaller municipal issues do not have well developed secondary markets.

The *1975 Securities Act Amendments* have already caused substantial changes in the operation of the market for state and local debt instruments. Recent proposals could cause this market to undergo even further fundamental changes.

Introduction

Americans have come to assume that borrowing at a reasonable cost would be an available method of financing for nearly all state and local governmental units. This assumption has been challenged in recent years. The higher level of all interest rates and increased borrowing by many state and local units have meant that some units have been unable to borrow because of statutory ceilings on interest rates they can pay or on the amount they can borrow. By the late 1960s, the rising cost of municipal services coupled with slower increases in tax bases began placing stress on many municipal budgets. In 1971, President Nixon raised the question of the health of the state and local sectors to national prominence with his statement ". . . if we do not have it [revenue sharing], we are going to have states, cities, and counties going bankrupt over the next two or three years."[1] The passage of Federal general revenue sharing in 1972 helped to alleviate some of the pressures in the state and local debt market.

By the 1970s, the stress had further intensified and the recent severe financial problems of New York City and state raised serious questions about the ability of state and local governments to obtain the debt financing they may need in coming years. Legislation that has been proposed to alleviate these concerns includes: (a) having a Federal agency (similar to the Federal Deposit Insurance Corporation) insure state and local issues; (b) authorizing, as an option to the tax-exempt municipal bond, a "taxable, subsidized bond" on which the U.S. Treasury would pay a portion of the interest; (c) having the Federal government guarantee state and local debt; (d) requiring state and local borrowers to register new issues with the Securities and Exchange Commission and meet prescribed full disclosure reporting requirements; and (e) revising the current municipal bankruptcy laws.

This summary study is designed to assist the reader in understanding various aspects of the market for state and local debt (also called the municipal bond market). The presentation is organized around eight topics: (1) Size of the Market, (2) Who Borrows, (3) Short-Term State and Local Borrowing, (4) Long-Term State and Local Borrowing, (5) Who Owns State and Local Debt, (6) Cost of Borrowing for State and Local Units, (7) The Quality of State and Local Debt, and (8) Operation of the Market for State and Local Debt Instruments. It is hoped that the factual material presented on these eight topics will enable the reader to place into context the current problems in the municipal debt market and will be useful in considering legislation proposed to deal with these problems.

Size of the Market

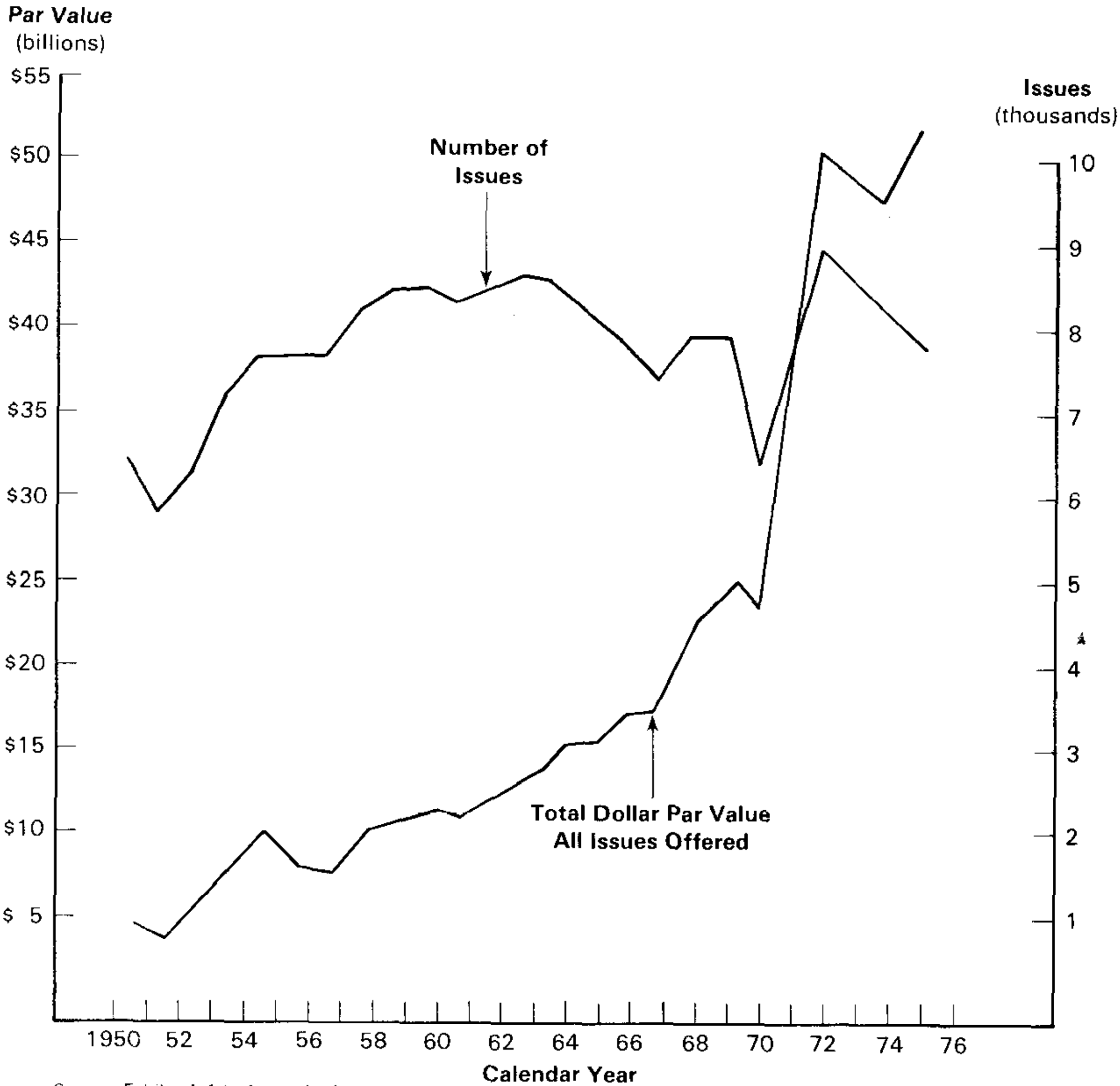
One important characteristic of the municipal debt market is the substantial increase in its size over the last 25 years. *Exhibit 1* documents the rise in annual volume as measured by the dollar value and the number of state and local debt issues. The annual dollar amount of debt issued by state and local governmental units in the early 1970s is more than double the amount issued in the late 1960s, and about ten times greater than in the early 1950s. However, the growth in the annual volume of state and local debt financing has been irregular. Because of various market conditions (high interest rates, low investor demand, etc.), there have been several periods in which the annual amount issued has fallen or risen only moderately.[2] Finally, the average dollar amount per issue has increased $6.74 million in 1974, $4.69 million in 1970, $2.21 million in 1965, and $1.11 million in 1955.

The increased annual volume of new state and local debt issues is also reflected in the total amount of state and local debt outstanding. *Exhibit 2* reveals the increases in the state and local components of the total municipal debt outstanding. This exhibit shows that both components have risen dramatically in the last 20 years. However, state governments have increased their relative share of the municipal debt outstanding; state debt now comprises nearly one-third of all state and local debt.

Another way of describing the growth of state and local debt is to compare it with the growth of other forms of debt. *Exhibit 3* shows that state and local debt has remained between 7 and 8 percent of total public and private indebtedness since the early 1960s. During the same period, state and local debt has been a growing proportion of total public debt. Immense Federal deficits in fiscal 1976 and 1977 may, however, change this trend.

Exhibit 1

ANNUAL VOLUME OF NEW STATE AND LOCAL BORROWING



Source: Exhibit A-1 in Appendix A

Exhibit 2

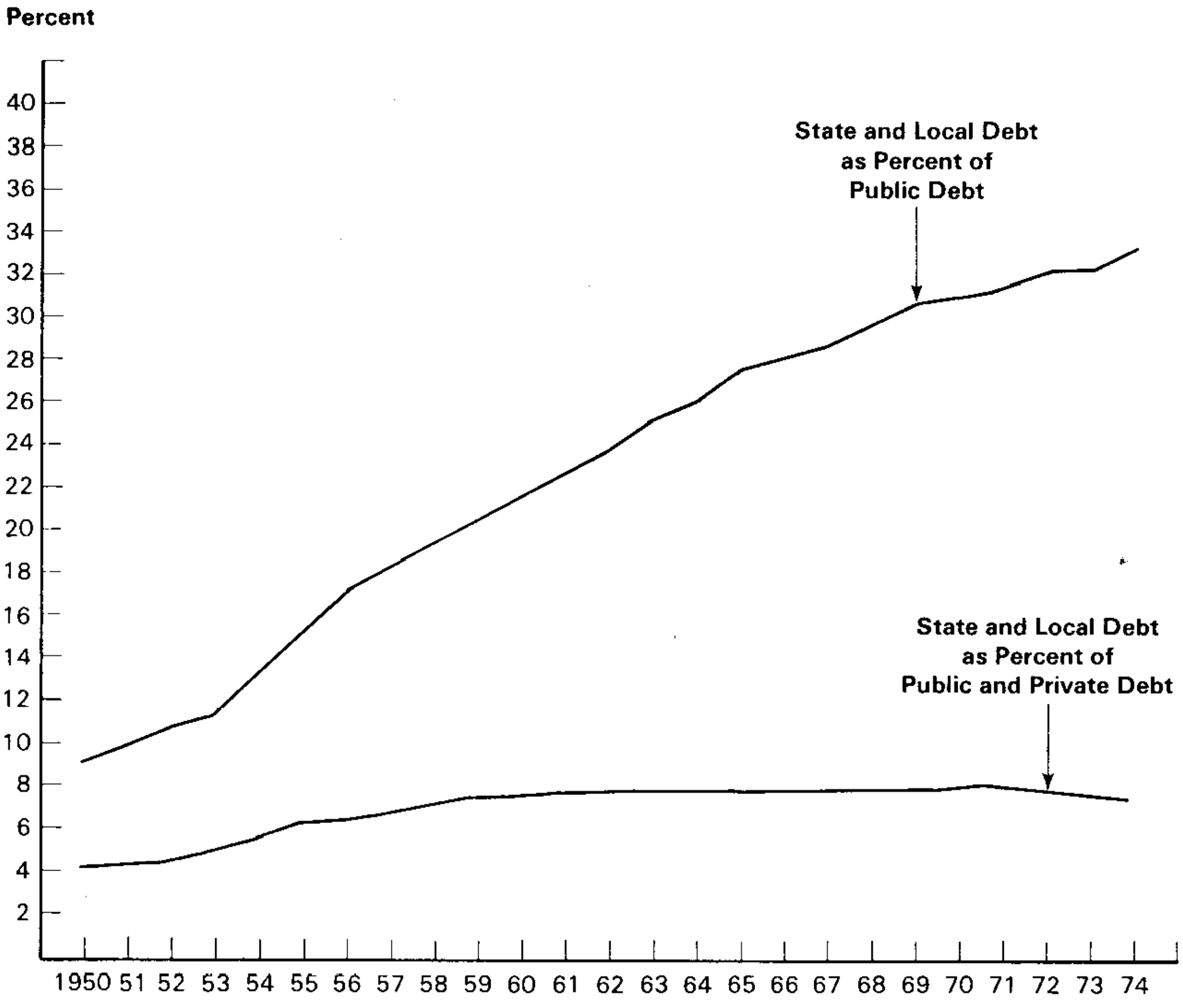
TOTAL STATE AND LOCAL DEBT OUTSTANDING

	Total		State		Local	
Year	Billions of Dollars	Percent of Total	Billions of Dollars	Percent of Total	Billions of Dollars	Percent of Total
1952	$ 30.1	100%	$ 6.9	23%	$ 23.2	77%
1957	52.7	100	13.7	26	39.0	74
1962	81.3	100	22.0	27	59.3	73
1967	114.6	100	32.5	28	82.1	72
1968	121.2	100	35.7	29	85.5	71
1969	133.5	100	39.6	30	93.9	70
1970	143.6	100	42.0	29	101.6	71
1971	158.8	100	47.8	30	111.0	70
1972	174.6	100	54.5	31	120.1	69
1973	188.5	100	59.4	32	129.0	68
1974	206.6	100	65.3	32	141.3	68

Source: Adapted from *Municipal Finance Statistics*, p. 8, and *Governmental Finances* (Washington: U.S. Government Printing Office, Census Bureau).

Exhibit 3

STATE AND LOCAL DEBT AS PERCENTAGE OF NET TOTAL DEBT AND NET PUBLIC DEBT



Source: Exhibit A-2 in Appendix A.

Who Borrows

Another perspective on state and local debt comes from examining the basic types of governmental units which borrow in this market. *Exhibit 4* presents the Census Bureau's classification of the types of governmental units for various years. The most obvious trend revealed in this exhibit is that the total number of local units has decreased significantly in the past 25 years. In particular, the number of school districts has declined dramatically over time as a result of consolidation and reorganization of districts. The number of special districts has increased. Most of these are single-purpose entities — over 50 percent of them are concerned with fire protection, natural resources, or water supplies.[3]

Exhibit 5 shows a percentage distribution of state and local debt outstanding classified by type of governmental unit. The most obvious change is that state debt increased gradually throughout the two decades. Several other gradual shifts have occurred over the last 20 years. Debt of *general-purpose* local governmental units (counties, municipalities and townships) constituted a slightly lower percentage of total state and local debt outstanding in 1974 than it did in 1955. This is the net result of a gradual increase in the percentage of debt originated by counties and a larger decrease by municipalities. The trend reflects the assumption of urban-type functions by some counties. An examination of the debt of *single-purpose* governmental units shows that school districts' percentage decreased, while special districts increased. Thus, both the number of units (*Exhibit 4*) and the relative amount of indebtedness of special districts have been increasing. Some special districts owe their existence to borrowing limits that were placed on many general-purpose local governments during the 1930s.

Exhibit 4

NUMBER OF STATE AND LOCAL GOVERNMENTAL UNITS BY TYPE

Type of Unit	1952*	1957*	1962	1967	1972
State	50	50	50	50	50
County	3,052	3,050	3,043	3,049	3,044
Municipality	16,807	17,215	18,000	18,048	18,517
Township	17,202	17,198	17,142	17,105	16,991
School District	67,355	50,454	34,678	21,782	15,781
Special District	12,340	14,424	18,323	21,264	23,885
Total	116,806	102,391	91,236	81,298	78,268

*Adjusted to include Alaska and Hawaii.

Source: *Moody's Municipal and Government Manual, 1975.*

Exhibit 5

STATE AND LOCAL DEBT OUTSTANDING BY TYPE OF GOVERNMENTAL UNIT

(expressed as percent of state and local debt outstanding)

Year	State	County	Municipality	Township	School District	Special District	Total
1955	25%	7%	36%	2%	17%	13%	100%
1962	27	7	33	2	17	14	100
1967	28	7	32	2	16	15	100
1968	29	7	31	2	16	15	100
1969	30	7	30	2	16	15	100
1970	29	8	30	2	16	15	100
1971	30	8	30	2	15	15	100
1972	31	8	30	2	14	15	100
1973	32	8	30	2	13	15	100
1974	32	8	29	2	13	16	100

Source: Adapted from *Municipal Finance Statistics*, p. 33, and *Governmental Finances*, published annually by the Governments Division, U.S. Bureau of the Census (Washington, D.C.: U.S. Government Printing Office, 1955-74).

Short-Term State and Local Borrowing

Short-term state and local borrowing (defined as debt having an average maturity of less than one year) is generally used for one of four purposes. First, over one-third of short term state and local borrowing is for public housing or urban renewal projects.[4] A second common use of short-term municipal borrowing is as an aid in synchronizing the flows of current disbursements with current tax receipts. Many municipal units use tax anticipation notes (TANS) – short-term debt issued to meet current expenditure needs and repaid as current taxes are collected – to smooth out seasonal expenditure and revenue imbalances.

Another use of short-term municipal debt is for the purpose of reducing the financing costs associated with capital projects. Bond anticipation notes (BANS) are issued in order to avoid borrowing the amount required to finance an entire capital project before all of the funds are needed and/or in hopes of financing the project at lower long-term interest rates than are available when the project is being constructed. In many states there are laws which require the issuer to refinance BANS with long-term debt within a period of one or two years of the date of issue.

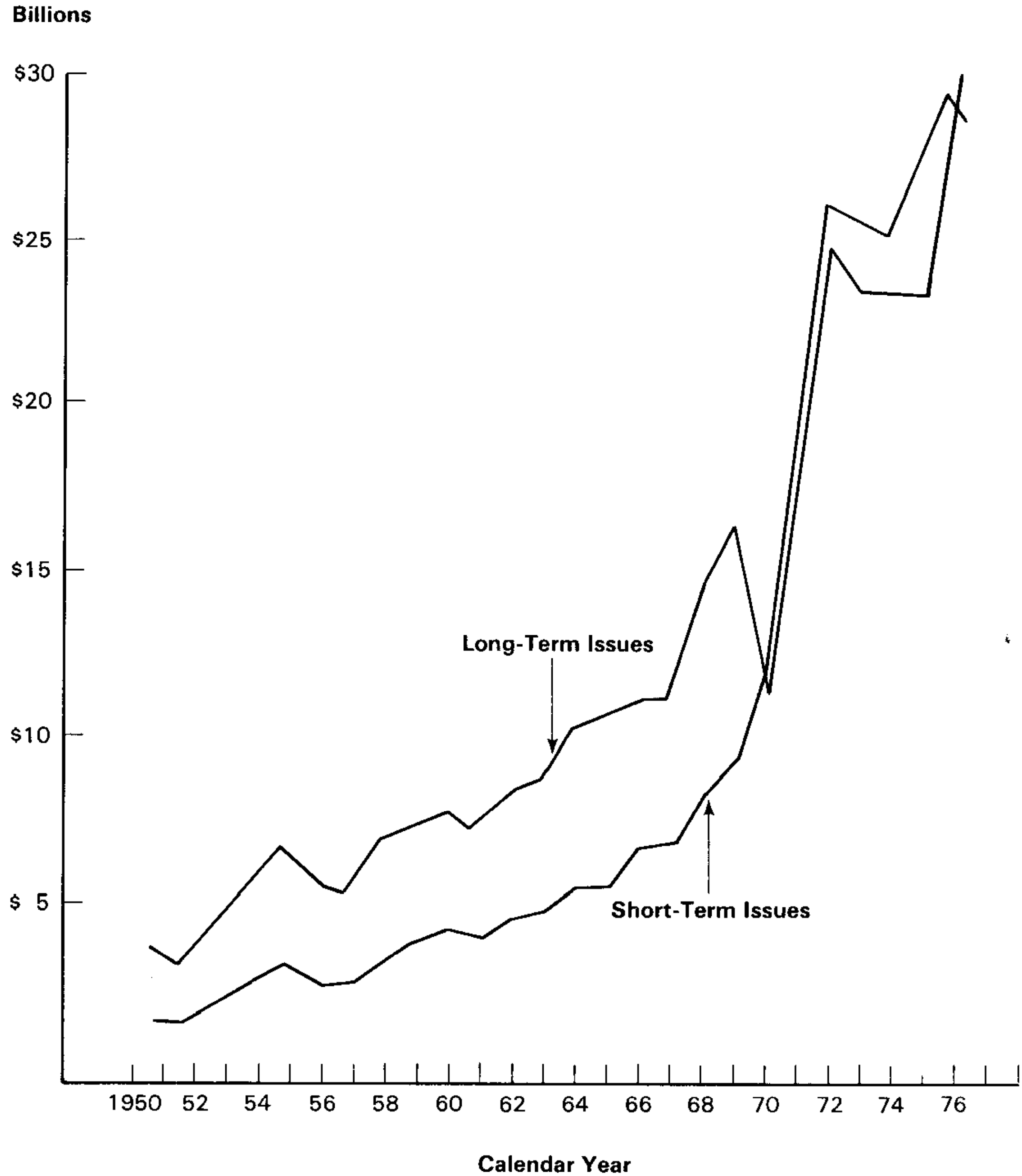
State and local units have also used short-term borrowing to finance expected and unexpected current operating deficits — current operating expenditures in excess of current revenues. If continued over several years, this type of financial strategy may cause severe financial strains as the governmental unit attempts to refinance its rising short-term indebtedness by issuing new debt to replace maturing obligations. The dangers of this form of short-term borrowing were pointed out in an ACIR report, *City Financial Emergencies: The Intergovernmental Dimension.* This report concluded that borrowing to refinance operating deficits is an early warning signal of potential future financial difficulties.[5]

Short-term state and local debt has been increasing very rapidly recently, as *Exhibit 6* shows. The annual dollar amount of short-term municipal debt issued, which was about half the amount of long-term state and local debt in the 1950s, has exceeded or equalled the amount of such long-term debt issued in each of the last five years. This is important because, as the New York crisis has painfully demonstrated, unforeseen negative market conditions can make the refinancing of short-term debt difficult and costly for even financially strong state or local governmental units.[6]

The growth in short-term debt outstanding is less noticeable because short-term debt is retired or turned-over (a maturing issue repaid by a new one) so frequently. *Exhibit 7* demonstrates that short-term debt has increased as a percentage of total outstanding indebtedness. It also shows that local governmental units have a higher proportion of their total debt outstanding in the form of short-term obligations (9%) than do states and state agencies (6%).

Exhibit 6

ANNUAL DOLLAR VOLUME OF STATE AND LOCAL BORROWING — LONG-TERM VERSUS SHORT-TERM



Source: Exhibit A-3 in Appendix A.

Exhibit 7

STATE AND LOCAL DEBT OUTSTANDING BY CHARACTER

	Total		Long-Term				Short-Term	
			General Obligations		Limited Liability Obligations			
Year	Billions of Dollars	Percent of Total	Billions of Dollars	Percent of Total	Billions of Dollars	Percent of Total	Billions of Dollars	Percent of Total
1952	$ 30.1	100%	$ 23.4	78%	$ 5.3	18%	$ 1.4	4%
1957	52.7	100	32.7	62	17.8	34	2.2	4
1962	81.3	100	48.3	59	29.2	36	3.8	5
1967	114.6	100	62.8	55	44.8	39	7.0	6
1968	121.2	100	65.1	54	47.6	39	8.5	7
1969	133.5	100	70.9	53	52.6	39	10.1	8
1970	143.6	100	75.3	52	56.0	39	12.3	9
1971	158.8	100	84.0	53	59.6	38	15.2	9
1972	174.6	100	95.9	55	63.0	36	15.7	9
1973	188.5	100	102.9	55	69.7	37	15.9	8
1974	206.6	100	111.0	54	79.0	38	16.7	8

STATE DEBT OUTSTANDING BY CHARACTER

Year	Billions of Dollars	Percent of Total	Billions of Dollars	Percent of Total	Billions of Dollars	Percent of Total	Billions of Dollars	Percent of Total
1952	$ 6.9	100%	$ 4.9	71%	$ 1.7	25%	$ .3	4%
1957	13.7	100	6.5	47	7.0	51	.2	2
1962	22.0	100	10.3	47	11.3	51	.4	2
1967	32.5	100	13.6	42	17.6	54	1.3	4
1968	35.7	100	14.7	41	18.9	53	2.1	6
1969	39.6	100	16.2	41	20.7	52	2.7	7
1970	42.0	100	17.7	42	21.1	50	3.2	8
1971	47.8	100	21.5	45	22.8	48	3.5	7
1972	54.5	100	25.3	46	25.3	46	3.9	8
1973	59.4	100	28.4	48	27.3	46	3.7	6
1974	65.3	100	30.9	47	30.8	47	3.6	6

LOCAL DEBT OUTSTANDING BY CHARACTER

Year	Billions of Dollars	Percent of Total	Billions of Dollars	Percent of Total	Billions of Dollars	Percent of Total	Billions of Dollars	Percent of Total
1952	$ 23.2	100%	$18.5	79%	$ 3.6	16%	$ 1.1	5%
1957	39.0	100	26.2	67	10.8	28	2.0	5
1962	59.3	100	38.0	64	17.9	30	3.4	6
1967	82.1	100	49.2	60	27.2	33	5.7	7
1968	85.5	100	50.4	59	28.7	34	6.4	7
1969	94.0	100	54.7	58	31.9	34	7.4	8
1970	101.6	100	57.6	57	34.9	34	9.1	9
1971	111.0	100	62.5	56	36.8	33	11.7	11
1972	120.1	100	70.6	59	37.7	31	11.8	10
1973	129.1	100	74.5	58	42.4	33	12.2	9
1974	141.3	100	80.1	57	48.2	34	13.1	9

Source: Adapted from *Municipal Finance Statistics*, p. 8, and *Governmental Finances*, published annually by the Governments Division, U.S. Bureau of the Census (Washington, D.C.: U.S. Government Printing Office, 1952-75).

Long-Term State and Local Borrowing

In their book, *Concepts and Practices in Local Government Finance*, Moak and Hillhouse suggest that the primary purpose of municipal borrowing is to permit governments to achieve timely financing of needed expenditures without causing unsettling fluctuations in tax rates and charges.[7] Long-term state and local borrowing (average maturity exceeding one year) most often serves this objective by financing capital projects or refunding maturing debt.

The purposes for which state and local units issued long-term debt in various years is shown in *Exhibit 8*. There has been a drop in the percentage of long-term state and local issues devoted to education and transportation. Pollution control, a new category, has become an important reason for state and local borrowing. Recent environmental legislation permits companies to borrow through state and local agencies (allowing them to enjoy lower interest rates because of the tax-exempt status of interest on state and local debt) for pollution control purposes.

Exhibit 7 classifies long-term state and local debt by the extent of the backing or commitment supporting the debt service payments. The two major classifications are general and limited liability obligations. General obligation debt is secured by the full faith, credit, and taxing power of the issuing governmental unit. As the name implies, a limited liability obligation does not pledge the full resources of the government to pay the interest and principal requirements of the debt. The debt service payments are generally secured by a specific tax, a specific fee, or some other specified source of revenue.

While both categories of state and local long-term debt have increased in absolute terms over the last 20 years, *Exhibit 7* shows that the relative growth has been significantly different. In the early 1950s, limited liability obligations were approximately one-fourth of total state and one-sixth of total local debt outstanding. By the latter 1950s, non-guaranteed debt had risen to roughly half of total state debt and one-third of local debt. These percentages have remained relatively steady since that time. Moak and Hillhouse note that one of the primary reasons for the increased use of limited liability obligation debt is to circumvent restrictions on general obligation borrowing.[8]

Since limited liability debt is backed by fewer resources, most issues of this kind are considered to be more risky than general obligations and, therefore, require a higher return (net interest yield) to the holder.

The priority of holders of general obligations (full faith or credit) has itself been a subject of considerable controversy in the last year or so. Previously, it was assumed that debt service charges would be paid before any other obligation was met. At the present time, it is not completely clear what rights and obligations are possessed by the holders of such debt, the municipal employees, and the citizens of the defaulting municipality.

The priority of holders is even less clear with respect to "moral obligation" debt issued by an authority or agency of a state or local unit. The state or local unit is morally (but *not* legally) obligated to appropriate funds if the authority's or agency's revenues are not sufficient to cover its debt service requirements. The extent of the backing or commitment required by such "moral obligation" has not been clearly defined.[9]

Long-term state and local debt issues can also be classified by the repayment pattern of the debt. Most long-term state and local debt is in the form of serial maturity, *i.e.*, portions of the principal come due periodically. Many limited liability municipal bonds are term bonds, *i.e.*, the entire principal is liquidated in a single payment at the maturity of the debt. Serial bonds have the advantages of (1) attracting investors with different preferences concerning the maturity date of their investments and (2) avoiding the need for a large (balloon) payment at maturity. Term bonds can be used in a manner similar to serial issues by retiring portions of the principal as funds become available. The retirements can be accomplished by purchasing the debt in the market place or by inserting a call provision in the bond indenture.

Exhibit 8

STATE AND LOCAL LONG-TERM DEBT CLASSIFIED BY PURPOSE

(percents)

Year	Schools	Utilities	Transportation	Public Housing	Industrial Aid	Pollution Control	Other	Total
1959	30%	15%	12%	4%	—%	—%	39%	100%
1962	35	15	14	4	1	—	31	100
1967	31	14	8	3	9	—	35	100
1968	29	12	10	3	10	—	36	100
1969	28	12	14	3	0[a]	—	44	100
1970	28	13	8	1	0[a]	—	50	100
1971	24	15	11	4	1	—	45	100
1972	23	13	9	4	2	—	49	100
1973	21	15	6	5	1	9	43	100
1974	22	14	4	2	2	10	46	100

[a]Less than .5 percent.

Source: Adapted from *Municipal Finance Statistics*, p. 8.

Who Owns State and Local Debt

Because of the tax-exempt status for Federal income tax purposes of interest income from state and local securities, they are most attractive to firms or individuals subject to high Federal income tax rates. *Exhibit 9* shows the increase (decrease) in ownership of state and local debt securities, classified by type of purchaser, for various years. This exhibit demonstrates that annual net purchases have varied greatly among the primary owners of state and local debt. For example, commercial banks had a net increase of less than $1 billion in 1969 and over $10 billion in the next two years. The cumulative effect of the purchasing patterns revealed in *Exhibit 9* is reflected in the data in *Exhibit 10* which show the proportion of total outstanding debt owned by each group type at the end of selected years from 1950 through 1975.

Exhibits 9 and 10 show that commercial banks were the major purchasers of state and local debt in the 1960s, increasing their proportion of ownership from 25 percent to 49 percent. Liquidity considerations and loan demand significantly influence commercial bank demand for such investments, therefore, their pattern of purchasing municipal debt issues is fairly erratic. The exhibits also show commercial bank holdings of municipals declining as a percentage of the total in the last three years. Loan losses of banks have reduced their tax liability making municipals less attractive investments. The availability of other low or no-tax investment alternatives such as leasing operations have attracted bank investments. There is reason to question whether commercial banks will be able or willing to continue absorbing the majority of state and local issues in the future, especially if there are other strong demands on their resources.

Changes in exposure to high income tax rates have influenced the demand of casualty insurance companies and households for municipal debt securities. Individuals' taxable incomes have risen (due, in part, to inflation) and the average effective tax rate for casualty insurance companies has also increased. Therefore, both of these groups have shown greater interest in the municipal debt market in the 1960s and early 1970s. Large insurance losses reduced demands by fire and casualty insurance companies in 1974 and 1975, while the increased holdings in the "other" category in 1975 reflected purchases of New York related issues by some state and local retirement funds. Recent increases in the effective income tax rates paid by life insurance companies should make the tax exemption feature of state and local debt more attractive to these institutions. Nevertheless, some of our fastest growing financial intermediaries, *e.g.*, pension funds and savings and loan associ..tions, pay little or no income taxes and generally find the lower rates on state and local debt less attractive than alternative taxable securities.

Exhibit 9

NET PURCHASES OF STATE AND LOCAL DEBT
(billions)

Year	Households	Commercial Banks	Fire and Casualty Insurance Companies	Other*
1963	.8	5.2	.8	(.7)
1964	2.3	3.6	.4	(.5)
1965	2.1	5.1	.4	(.2)
1966	2.7	1.9	.7	.4
1967	(1.6)	8.9	1.5	.2
1968	1.0	8.5	.9	(.1)
1969	4.3	.2	1.1	1.5
1970	3.7	10.5	1.5	(1.0)
1971	4.3	12.8	3.4	1.2
1972	0.0	7.1	4.4	1.3
1973	7.1	3.9	3.6	(.5)
1974	6.4	5.7	2.2	.2
1975e	3.2	5.1	2.4	2.7

*Corporations, life insurance companies, mutual savings banks, and state and local retirement funds.

( ) = decrease.

e = estimated.

Source: *Supply and Demand for Credit in 1970, 1976* (New York: Salomon Brothers).

Exhibit 10

HOLDERS OF OUTSTANDING STATE AND LOCAL DEBT
(percent)

Year	Households	Commercial Banks	Fire and Casualty Insurance Companies	Other*	Total
1950	40%	33%	4%	23%	100%
1960	44	25	11	20	100
1965	36	39	11	14	100
1966	38	39	12	11	100
1967	33	44	12	11	100
1968	30	48	12	10	100
1969	35	45	12	8	100
1970	31	49	12	8	100
1971	28	51	13	8	100
1972	26	53	14	7	100
1973	27	51	15	7	100
1974	31	48	15	6	100
1975	34	45	15	6	100

*Mainly corporations and life insurance companies.

Source: Adapted from *Municipal Finance Statistics*, p. 17.

Cost of Borrowing for State and Local Units

The important elements of the municipal debt market are the cost (from the issuer's standpoint) and the return (from the holder's standpoint) required for the issuing unit to obtain funds from investors. The most important factors influencing the state and local interest rates are: (1) the level of interest rates in general, (2) the perceived general quality of municipal debt issues relative to alternative investments, (3) the tax-exempt status of interest income received from state and local debt securities, (4) the maturity of the debt issue, and (5) the quality of the individual issue.

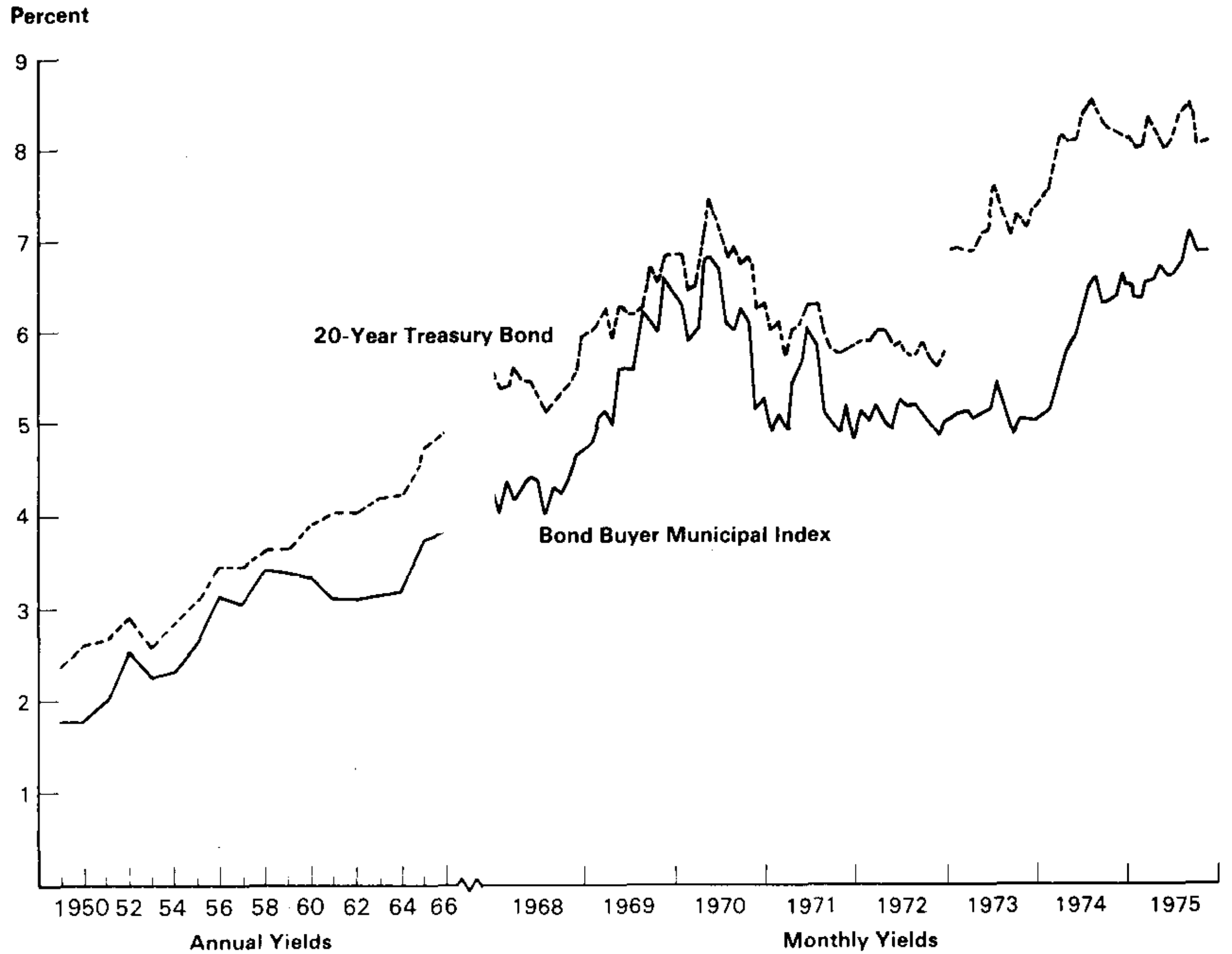
Exhibit 11 compares average market yields for 20-year municipal bonds with those on U.S. Treasury bonds of the same maturity. The basic reasons for the differences between the yields are quality differences (probability of default, liquidity, etc.) and the value of the Federal income tax exemption of the interest income from state and local debt issues. This spread is also affected by changes in business conditions, tax rates, and other factors. Finally, while these two yield indexes have moved in similar general patterns, the yields on state and local debt have fluctuated more than the yields on Federal debt. This phenomenon is partially caused by changes in commercial banks' demand for new state and local issues.

Exhibit 12 demonstrates the effect of the maturity of an issue on the interest yield in the municipal debt market. The longer the maturity, the higher the yield tends to be. Yields on short-term municipals are more volatile than those for longer-term municipals, although the prices of short-term issues are less volatile because the principal will be repaid in a shorter time. These characteristics are also common to most other types of debt instruments.

Exhibit 13 shows the average yield on 20-year municipal bonds in three rating categories — prime, good, and medium quality. The data in this exhibit will support the conclusion that the municipal market distinguishes among municipal debt issues on the basis of their relative quality. The market yields for issues with high quality bond ratings are less than those for lower rated issues. Also, the yield differential between lower and higher quality municipal debt appears to widen in times of great fiscal pressure and narrow when such pressure eases.

Exhibit 11

YIELDS ON 20-YEAR TREASURY BONDS AND BOND BUYER "11-BOND" INDEX

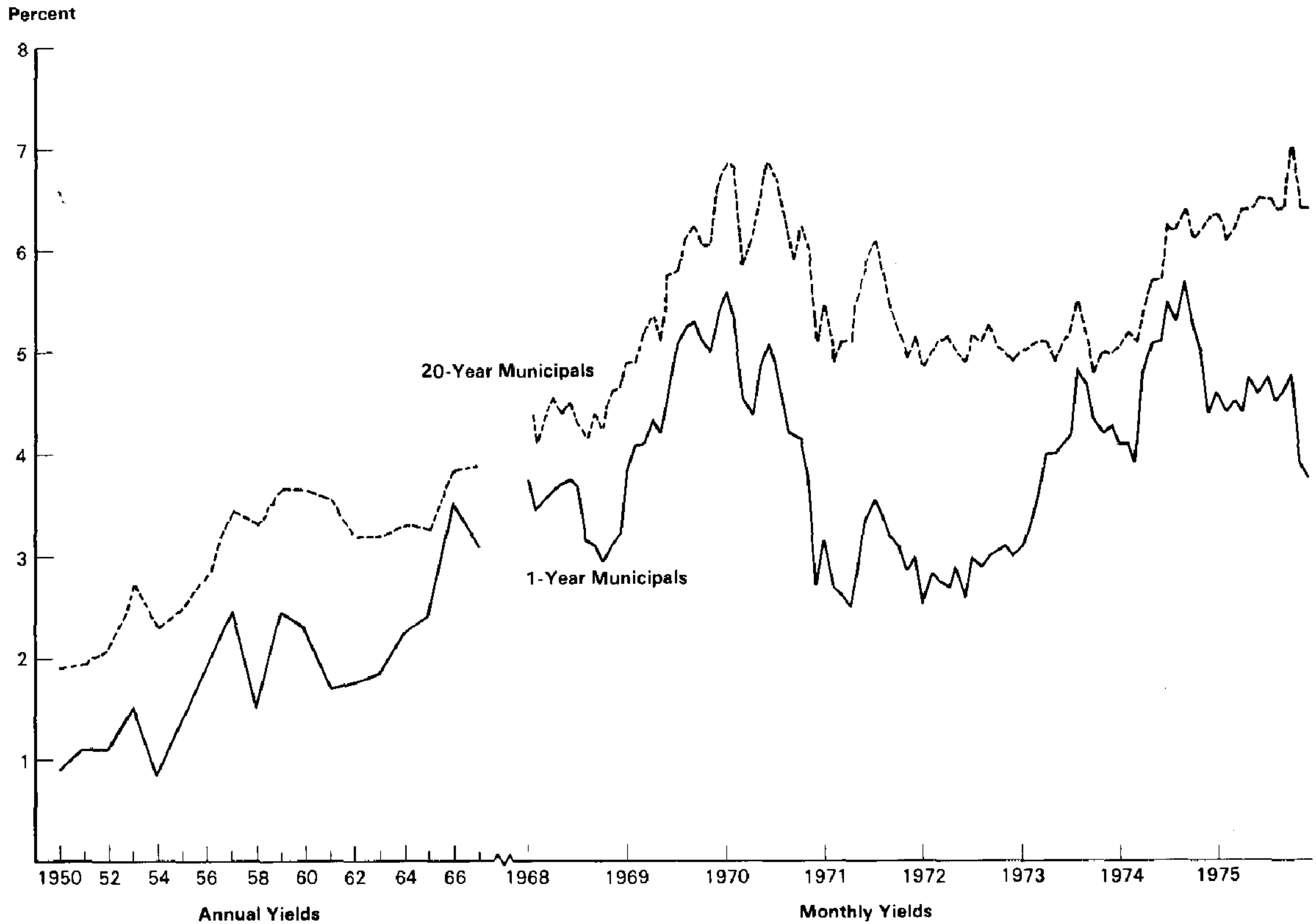


*The Treasury yield index was changed in February, 1973 to be based on issues with coupons of 6-3/4 percent and higher rather than 3-1/2 to 4-1/4 percent.

Source: *An Analytical Record of Yields and Yield Spreads* (New York: Salomon Brothers, 1976).

Exhibit 12

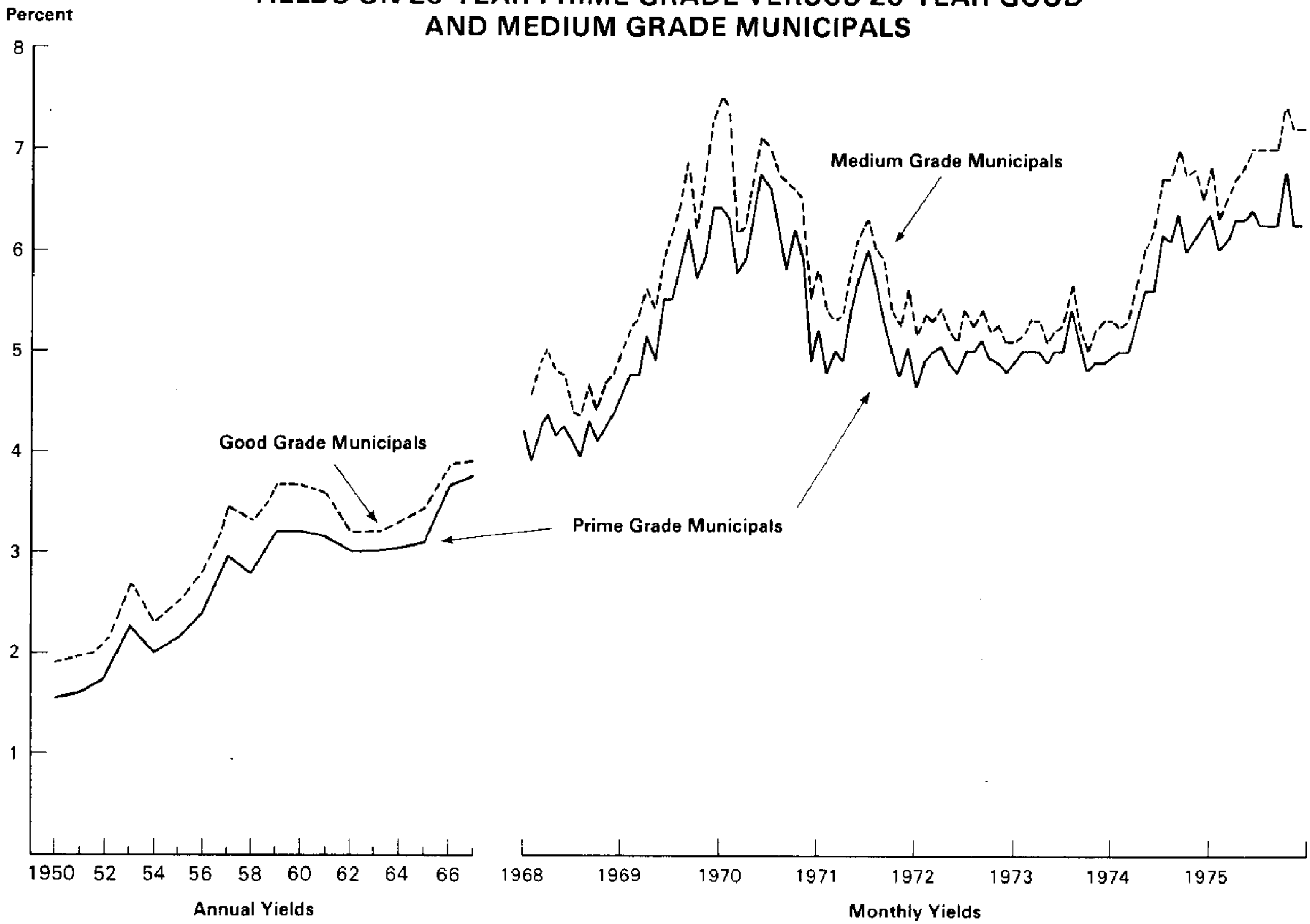
YIELD ON 1-YEAR AND 20-YEAR GOOD GRADE MUNICIPALS



Source: *An Analytical Record of Yields and Yield Spreads* (New York: Salomon Brothers, 1976).

Exhibit 13

YIELDS ON 20-YEAR PRIME GRADE VERSUS 20-YEAR GOOD AND MEDIUM GRADE MUNICIPALS



*Note: Good grade municipals were used for annual data, 1950-67; medium grade were used for monthly data, 1968-75.

Source: *An Analytical Record of Yields and Yield Spreads* (New York: Salomon Brothers, 1976).

The Quality of State and Local Debt

One of the primary problems in understanding the quality of state and local debt is determining exactly what is meant by "credit quality" or simply "quality." Two distinct approaches to measuring quality are examined in this summary study — prospective and tested quality. Prospective (or *ex ante*) quality is concerned with the likelihood of payment of principal and interest when they come due. Because prospective quality purports to measure the likelihood of future events, it is a less certain measure than tested quality. Tested (or *ex post*) quality involves a comparison of the actual incidence of payment of interest and principal with that promised by the state and local debt being studied. Therefore, tested quality can be measured only after interest and principal payments are due. Two measures of prospective quality — yield differentials and bond ratings — as well as two measures of tested quality — estimated defaults on interest and principal and results of municipal bankruptcies filed — are examined in this study.

One potential approach to measuring the prospective quality of municipal debt was introduced in the section on the cost of borrowing, where comparisons were made between the market yield on U.S. Treasury and municipal securities of similar maturity. Although factors other than basic credit quality also affect these yield comparisons, the risk factors associated with municipal debt appear to become less of a consideration in intervals of prosperity than in recession periods. If generally high interest rates accompany prosperity, however, the burden of the added debt service costs may lead to higher municipal default risks and relatively greater state and local interest costs, especially for cities whose debt issues receive fairly low bond ratings.

Other factors can also have an impact on the relationship between the quality of Federal and municipal debt issues as measured by their relative interest costs. One recent influence was the introduction of the Federal general revenue sharing program. Recent empirical work[10] has found that a structural change in the relationship between risk premiums on Federal *versus* state and local debt issues occurred in the early 1970s. While interest rates rose generally in the early 1970s, the relative rise in state and local rates since the introduction of general revenue sharing was less than might have been expected. This change in the relationship between the interest rates may be traced to improvements in the overall revenue-expenditure situation of state and local governmental units because of the receipt of general revenue sharing funds. The availability of these funds appeared to have changed investors' subjective perceptions of state and local governments' ability to pay debt service requirements. By decreasing the estimated probability of municipal financial problems, general revenue sharing lowered (relatively) the cost of state and local borrowing. Unfortunately, recent uncertainties about the permanence of general revenue sharing now appear to have negated much of its earlier positive effect on interest costs.

Another special factor has influenced the relationship between U.S. Treasury and municipal yields in the last year or so. The scope of the financial problems of New York City began to emerge in late 1974, when it was revealed that New York's financial position was worse than previously anticipated and that the city might not be able to raise the additional external financing it needed. For the 15 months preceding November 1974, the differential between Treasury and the *Bond Buyer* 11-bond municipal yield index averaged about 210 basis points (2.10%). In November 1974, the differential fell significantly (about 70 basis points). This lower level of yield differential has since persisted through December 1975. This narrowing of the average yield gap indicates that the market perceived a change in the relative quality of the two types of securities. While many other factors may be involved, the bad fiscal news from New York City and, more recently, New York State during this period appears to have had a significant negative effect on the relative financing costs of other state and local governments. However, testing the validity of this assertion will require further observations and investigation of the events and relative yields from late 1974 through early 1976.

A second potential way of investigating the prospective quality of municipal debt focuses on the ratings that such debt issues receive from the two major rating agencies, Moody Investors Services and Standard and Poor, Inc. Although there is some debate over the reliability and validity of ratings as a measure of credit risk (quality), they are often cited as a standard for comparison among quality levels in municipal debt issues (being rated). *Exhibit 14* presents the distribution of ratings from Aaa (smallest degree of investment risk) to Ba (greatest risk of non-payment) among those issues having a rating which have been assigned by Moody's to long-term municipal debt issues in various years since 1945. The data represent the percentage of the total dollar volume of rated municipal bonds which received a given rating in that year. The data in *Exhibit 14* show that the quality of municipal debt, as measured by rating agency classifications, increased in the early 1950s, and deteriorated somewhat in the late 1950s and 1960s. The fact that the major rating agencies began charging governmental units for assigning ratings to their debt in the late 1960s may make comparisons between current ratings distributions and those of earlier periods less valid.[11]

One method of measuring tested quality, an examination of recorded municipal defaults, is presented in *Exhibit 15*. Three general conclusions may be made from the data in this exhibit. First, defaults have occurred under both good and bad economic conditions. Second, it was only in major depression periods (1837-43, 1873-79, 1893-99, and 1929-37) that the defaults on state and local indebtedness reached significant magnitude. Third, defaults occurred in every major type of governmental unit and in every geographical region.

Annual data on the amount of municipal debt in default and permanent losses of principal and interest are not available. However, it has been estimated that 7.2 percent of the total amount of municipal indebtedness outstanding was in default at the height of the 1929 depression period, but that only 0.4 percent of the total municipal indebtedness in the early 1970s was in default.[12]

Another approach to measuring tested quality involves an examination of municipal bankruptcy data. *Exhibit 16* presents a summary of the governmental units which have filed under Chapter IX of the Federal bankruptcy laws from fiscal 1938 through 1975. The data in *Exhibit 16* show that admitted losses constitute about one-third of the $223 million of total admitted debt in the bankruptcy cases filed. However, it is particularly noteworthy that only 18 new cases have been filed since 1954, and that most recent cases have been concluded with little or no permanent losses to creditors. Finally, a comparison of the figures in *Exhibits 15 and 16* shows that only a small proportion of municipal defaults have been resolved through the bankruptcy process. Other alternatives, such as no action, direct agreement between a defaulting unit and its creditors, and agreements reviewed, approved, and supervised by other courts (*e.g.*, state courts) or administrative bodies appeared to be more popular methods for settling defaults.[13]

Exhibit 14

PERCENTAGE DISTRIBUTION OF RATED LONG-TERM STATE AND LOCAL BONDS ISSUED, BY DOLLAR VALUE IN YEAR OF ISSUE

(percent in rating category)

Year	Aaa	AA	A	Baa	Ba and Below
1945	4.2%	16.2%	46.1%	27.0%	6.4%
1946	7.6	22.7	47.6	19.2	2.8
1947	16.4	50.2	20.2	11.6	1.4
1948	33.9	23.2	31.2	10.5	1.1
1949	9.4	30.2	38.3	20.1	2.0
1950	12.6	41.2	32.6	12.0	1.5
1951	27.0	31.4	28.6	11.6	1.5
1952	23.5	21.2	42.5	10.6	2.1
1953	24.4	31.9	32.1	11.0	.6
1954	22.4	27.0	38.1	11.0	1.5
1955	22.2	29.6	35.0	12.2	1.0
1956	11.7	32.5	42.0	12.3	1.5
1957	11.3	38.2	38.9	11.0	.5
1958	16.4	36.1	35.0	10.8	1.7
1959	15.3	29.9	41.0	13.0	.9
1960	14.6	30.0	39.6	14.4	1.3
1961	12.5	36.4	37.4	12.8	.9
1962	17.3	22.6	45.6	13.2	1.3
1963	17.5	21.2	42.5	16.7	2.1
1964	13.2	28.2	41.6	15.5	1.5
1965	12.3	29.7	37.9	18.8	1.3
1966	10.0	32.5	32.2	24.1	1.3
1967	12.5	32.7	30.3	22.8	1.6
1968	8.7	27.9	40.3	22.1	.9
1969	13.3	31.1	37.0	18.0	.6
1970	9.5	29.2	41.1	19.8	.4
1971	12.5	29.9	38.1	18.9	.6
1972	14.4	26.8	40.9	17.7	.2
1973	13.3	22.3	51.8	12.5	.1
1974	15.7	23.2	51.6	9.4	.1
1975	16.2	23.7	54.5	5.6	.0

Due to rounding, may not add to 100%.

Source: *Postwar Quality of State and Local Debt*, p. 118. *Municipal Market Developments* (New York: Security Industry Association), various issues.

Exhibit 15

RECORDED DEFAULTS FROM 1839 THROUGH 1969, BY TYPE OF GOVERNMENTAL UNIT AND GEOGRAPHICAL REGION

	1839 -49	1850 -59	1860 -69	1870 -79	1880 -89	1890 -99	1900 -09	1910 -19	1920 -29	1930 -39	1940 -49	1950 -59	1960 -69	Total Defaults	Number of State and Local Governments in 1972[a]
By Type of Unit:															
States	9	2	1	9					1					22	50
Counties and parishes		7	15	57	30	94	43	7	15	417	6	12	24	727	3,044
Incorporated municipalities	4	4	13	50	30	93	51	17	39	1434	31	31	114	1911	18,517
Unincorporated municipalities		4	9	46	31	50	33	5	10	88	7	4	26	313	16,991
School districts				4	5	9	11		14	1241	5	23	60	1372	15,781
Other districts				2	1	12	11	7	107	1590	30	42	70	1872	23,885
By Geographical Region:															
New England States[b]	1		1	1	1	2		1	1	7			4	19	3.102
Middle Atlantic States[c]	2	5	6	19	11	13	13	4	4	251	9	4	10	351	10.262
Southern States[d]	6		2	40	29	36	25	9	51	1863	16	33	76	2186	10,203
Midwestern States[e]	4	10	28	84	46	89	68	6	18	1152	18	34	76	1633	33,624
Southwestern States[f]			1	20	7	79	27	5	25	707	25	36	112	1044	9,742
Mountain States[g]				2		17	2	8	17	270	6	4	3	329	4,244
Pacific States[h]		2		2	3	22	14	3	70	520	5	1	13	655	7,091
Totals	13	17	38	168	97	258	149	36	186	4770	79	112	294	6217	78,268

[a] The number of government units has changed rapidly. For example, in 1932 there were 127,108 school districts, 8,580 other districts, and 175,369 state and local governmental units.

[b] Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

[c] Delaware, District of Columbia, Maryland, New Jersey, New York, and Pennsylvania.

[d] Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia and West Virginia.

[e] Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin.

[f] Arizona, Kansas, New Mexico, Oklahoma, and Texas.

[g] Colorado, Idaho, Montana, Nevada, Utah, and Wyoming.

[h] Alaska, California, Hawaii, Oregon, and Washington.

Sources: Default information in *The Daily Bond Buyer, The Commercial and Financial Chronicle*, and *The Investment Bankers' Associations Bulletin*: default lists from Federal Deposit Insurance Corporation, Life Insurance Commission, and U.S. Courts; and Albert M. Hillhouse, *Defaulted Municipal Bonds* (Chicago: Municipal Finance Officers Association, 1935). Number of local government units from: U.S. Department of Commerce, Bureau of Census, *Census of Governments, 1969, Vol. 1*, Governmental Organization (Government Printing Office, 1974).

Exhibit 16

SUMMARY OF RESULTS OF CASES FILED UNDER CHAPTER IX OF THE FEDERAL BANKRUPTCY LAWS

Fiscal Year	Cases Filed	Cases Concluded	Cases Dismissed	Statistics for Cases Concluded: Admitted Debts	Amount Paid or to be Paid as Extended	Admitted Losses
1938	35	2	0	$ 67,675	$ 67,675	$ —
1939	71	17	0	6,587,012	3,924,149	2,662,863
1940	104	22	7	15,500,000	6,674,000	8,826,000
1941	19	37	8	28,466,000	16,332,000	12,134,000
1942	43	46	3	33,704,000	24,458,000	9,246,000
1943	13	40	23	26,633,000	16,032,000	10,601,000
1944	5	18	2	18,014,000	11,457,000	6,557,000
1945	8	14	3	39,816,000	27,185,000	12,631,000
1946	7	8	1	13,086,555	9,594,984	3,491,571
1947	7	8	4	4,651,168	2,715,234	1,935,934
1948	7	12	1	2,464,215	1,632,987	831,228
1949	2	2	0	224,361	136,525	87,836
1950	4	5	5	1,253,183	464,094	789,089
1951	3	3	0	1,308,687	582,868	725,819
1952	15	17	1	10,043,648	8,424,662	1,618,986
1953	0	2	2	2,183,413	1,163,615	1,019,798
1954	2	4	14	934,733	353,562	581,171
1955	1	0	0	—	—	—
1956	1	1	1	639,095	211,300	427,795
1957	0	2	0	2,171,448	1,629,448	542,000
1958	2	1	0	16,124	16,124	—
1959	3	3	0	2,077,382	544,668	1,532,714
1960	0	2	0	306,500	148,500	158,000
1961	0	0	0	—	—	—
1962	1	3	1	972,642	891,701	80,941
1963	0	0	0	—	—	—
1964	0	0	2	—	—	—
1965	2	0	0	—	—	—
1966	2	0	0	—	—	—
1967	1	1	0	2,599,700	2,599,700	—
1968	2[a]	1[a]	0	-0-[a]	-0-[a]	—
1969	0	0	1	—	—	—
1970	0	0	0	—	—	—
1971	2	2[b]	0	3,714,500[b]	3,714,500[b]	—
1972	0	1	0	230,000	95,000	135,000
1973	0	0	0	—	—	—
1974	1	1	1	5,450,000	5,450,000	—
1975[c]	0	0	0	—	—	—

[a] Reopened case (final decree same year) to clear up outstanding issue; no additional adjustment (debt amounts included in 1942 figures).

[b] Includes a reopened case (final decree same year) to clear up an outstanding issue.

[c] Eight cases were still open in 1976 (five of these are cases opened prior to 1953).

Source: Authors' investigation of cases given to them by Administrative Office of the U.S. Courts.

Operation of the Market for State and Local Debt Instruments

The most important distinction to make in describing the operation of the state and local debt market is the difference between the primary and secondary markets.

The *primary market* for state and local debt refers to the process of initial issuance of such debt. The first step for the state or local governmental units is to receive authorization (voter referendum, existing statute, etc.) to issue debt. A summary of the results of recent state and local bond elections is presented in *Exhibit 17.* Although the results vary from year to year, since the mid-1960s there appears to be relatively less voter support for bond issues than existed previously. The shock waves from the severe financial problems of New York City and state were felt in the voting booths across the nation during 1975, as voters approved only 29.3 percent of the $11,575,599,210 submitted in 1,835 bond financing programs by 1,539 state and local governmental units. This is the lowest approval percentage ever recorded since *The Bond Buyer* began compiling this data in 1926.[14]

After the state or local debt issue receives the appropriate authorization, the issuer determines the details (*e.g.*, dollar amounts, maturities, coupon rates) of the issue. For some short-term issues and most long-term issues, the next step is competitive bidding for the issue. The basic description of the issue is normally placed in *The Bond Buyer* and other financial publications. This advertisement sets in motion the underwriting process and frequently (nearly always for larger, long-term issues) the debt rating process. The rating agencies contract with the issuer to rate the debt issue and publish the ratings. The rating agency collects the information it requires for the analysis and then publishes the rating a week before the sale of the debt issue. Instead of requiring formal competitive bidding, many short-term municipal issues (Federally guaranteed issues being a notable exception) and some long-term issues are privately placed with local commercial banks or other institutions, the interest rate paid being determined through negotiations.

Nearly all long-term state and local debt issues are sold initially to underwriters (usually investment bankers or commercial banks), who generally form syndicates or groups to purchase the issue and then re-offer it to investors. The syndicate submits a bid stating net interest cost to the municipality and if it is successful (accepted because it has the lowest net interest cost to the governmental unit), the syndicate then owns the securities.

The underwriters then try to sell the securities to institutional and individual investors at prices that cover their underwriting expenses and provide them with an adequate profit for their risk. The margin between the issuer's proceeds and the amount received by the underwriter has averaged around 1 percent.[15] Thus, in the primary market, the municipality sells its issue to underwriters who act as wholesalers by re-offering the debt issue securities to the public or sometimes hold the securities in their own inventory. If the underwriters have misjudged the yield that the market will require on such issues, or if the market deteriorates before the issue is sold out, they may have to sell them at a loss to avoid the costs of carrying the securities in their own inventories.

The *secondary market* refers to all transactions in an issue that occur after the original underwriting and sale. A good secondary market is important for a debt issue. Investors are more likely to be willing to purchase state and local securities if they believe they can easily liquidate their holdings when they want to. Liquidity is a more important factor for long-term than short-term municipal debt since most short-term debt seems to be purchased and held to maturity. Data on the size of the secondary market for state and local debt are scarce since the market is conducted over-the-counter, *i.e.*, the securities are not listed or traded on a formal exchange. This means that participants dealing in the secondary market are not required to report on their transactions. Thus, little is known about the size of the market or the characteristics of the participants in the market. However, since a round lot in this market is generally $50,000, one might infer that the participants are concentrated in those categories of investors who can marshal fairly large amounts of money. There is continuing concern for the fact that the market does not always function well for holders of small blocks of municipal issues.

Recent Changes

In late June 1975, as New York City was floundering, Congress enacted the *Securities Act Amendments of 1975*. These amendments brought municipal bond dealers under Federal regulation. At the same time, there was increasing concern over possible legal exposure resulting from the fact that municipal bonds are subject to the anti-fraud provisions of the *Securities and Exchange Act*. This act makes it "unlawful . . . to make any untrue statement of a material fact or to omit to state material fact" in public sale of securities. The amendments, while not reducing the obligations of issuers under the anti-fraud provisions, continued to exempt state and local units from the registration and reporting requirements of the securities laws.[16]

Underwriters of municipal issues warned that few bids would be submitted for issues on which full disclosure was even a potential problem, that marketing such issues would become a lengthy and costly procedure, and that some potential borrowers might even lose access to the market. In late 1975, underwriting syndicates decided not to bid for $9.5 million of New York State bonds; furthermore, Richmond failed to sell $25 million of bonds and Suffolk County (New York) was stymied from selling a $54 million issue reportedly because of disclosure problems. As 1976 progresses, it seems likely that the operation of the market for state and local debt instruments will continue undergoing fundamental change as a result of both recent and possible future laws and pressures on the market.[17]

Exhibit 17

RESULTS OF STATE AND LOCAL BOND ISSUE ELECTIONS

Year	Approved Amount	Percent	Defeated Amount	Percent
1950	$1,537,517,326	76%	$ 497,983,399	24%
1951	2,249,602,957	88	301,174,640	12
1952	2,383,970,390	84	458,278,500	16
1953	1,851,594,537	83	388,769,450	17
1954	2,781,901,503	84	544,154,550	16
1955	2,885,666,121	65	1,524,453,871	35
1956	4,642,488,809	87	665,689,492	13
1957	2,733,435,486	77	806,795,602	23
1958	3,728,455,966	75	1,263,754,101	25
1959	2,752,942,464	72	1,087,633,605	28
1960	5,916,951,404	85	1,007,889,410	15
1961	2,544,327,858	67	1,263,606,943	33
1962	4,263,609,903	70	1,850,443,358	30
1963	3,626,886,529	63	2,156,807,833	37
1964	5,715,400,806	78	1,582,926,248	22
1965	5,611,653,628	73	2,095,491,659	27
1966	6,515,833,687	77	1,944,831,423	23
1967	7,365,194,080	74	2,549,704,766	26
1968	8,686,075,169	54	7,459,875,274	46
1969	4,286,542,050	40	6,534,047,453	60
1970	5,366,441,359	63	3,194,042,145	37
1971	3,142,846,335	35	5,862,362,912	65
1972	7,875,500,983	64	4,445,857,080	36
1973	6,306,039,592	52	5,800,848,114	48
1974	8,021,389,589	62	4,865,370,237	38
1975	3,392,270,729	29	8,184,238,481	71

Source: *Municipal Finance Statistics*, p. 22.

Footnotes

[1]*Weekly Compilation of Presidential Documents*, VII-w, January 1971, p. 41.

[2]Paul F. McGouldrick and John E. Petersen, "Monetary Restraint and Borrowing and Capital Spending by Large State and Local Governments in 1966," Federal Reserve *Bulletin*, July 1968, pp. 552-554; Wayne E. Etter and Donald R. Fraser, "Broadening the Municipal Market: A Neglected Issue," *MFOA Special Bulletin*, September 1974, pp. 3-4.

[3]U.S. Bureau of the Census, Census of Governments, 1972, Vol. I, *Governmental Organization* (Washington, D.C.: U.S. Government Printing Office, 1973).

[4]*Municipal Finance Statistics*, p. 5. In 1974, 38 percent of state and local short-term borrowing was in the form of Public Housing Authority Issues or Urban Renewal Preliminary Loan Notes, both of which are backed by a Federal guarantee of payment.

[5]Advisory Commission on Intergovernmental Relations, *City Financial Emergencies: The Intergovernmental Dimension*, Commission Report A-42 (Washington, D.C.: U.S. Government Printing Office, 1973).

[6]*Ibid.*, pp. 5-6.

[7]Lennox Moak and Albert Hillhouse, *Concepts and Practices in Local Government Finance* (Chicago: Municipal Finance Officers Association, 1975), pp. 249-50.

[8]*Ibid.*, p. 316.

[9]According to data reported in *Business Week* (November 17, 1975, p. 116), there are about $9.5 billion of such moral obligations bonds outstanding, three-fourths of which have been issued by agencies or authorities associated with the State of New York.

[10]Jess B. Yawitz, "Risk Premiums on Municipal Bonds," unpublished working paper, Graduate School of Business, Washington University, St. Louis.

[11]From 20 to 25 percent of the annual amount of debt issued in the mid-1960s was not rated, when as a matter of policy the two primary municipal rating agencies refused to rate issues under a certain size. The proportion of issues not rated fell to under 10 percent of the annual amount of debt issued by the mid-1970s, apparently because most cities of any size which felt they would be in the top three or four rating categories were willing to pay the price to have their issue rated.

[12]*City Financial Emergencies, op. cit.*, p. 16.

[13]These alternatives are discussed in George H. Hempel, "An Evaluation of Municipal Bankruptcy Laws," *Journal of Finance*, XXVIII, No. 5, December, 1973, pp. 1339-51.

[14]"With Default Imprinted on the Voters' Minds, Only 29.3% of Bond Issues are Approved in 1975," *The Money Manager*, January 12, 1976, p. 41.

[15]Herbert E. Dougall and Jack E. Gaumnitz, *Capital Markets and Institutions*, 3rd ed. (Englewood Cliffs: Prentice-Hall, Inc., 1975), p. 156.

[16]See John E. Petersen and Robert W. Doty, "Regulation of the Municipal Securities Market and its Relationship to the Governmental Issuer," *Analysis*, Municipal Finance Officers Association, December 5, 1975.

[17]*Ibid.* For an interesting survey of municipal financial officers' opinions about municipal financial reporting see James M. Patton, *Usefulness of Municipal Financial Reporting*, a dissertation at the Washington University Graduate School of Business, 1975.

Appendix A

Graphic Source Tables

Exhibit A-1

ANNUAL VOLUME OF NEW STATE AND LOCAL BORROWING

(basis for Exhibit 1 in text)

Year	Amount (in millions)	Number of Issues
1950	$ 5,304.7	6,533
1951	4,914.9	5,885
1952	6,450.5	6,410
1953	8,314.5	7,263
1954	10,318.9	7,747
1955	8,569.4	7,732
1956	8,152.7	7,689
1957	10,231.7	8,242
1958	11,359.3	8,523
1959	11,859.7	8,568
1960	11,235.7	8,397
1961	12,873.7	8,490
1962	13,321.7	8,689
1963	15,587.5	8,574
1964	15,967.4	8,138
1965	17,621.6	7,977
1966	17,612.5	7,430
1967	22,313.3	7,964
1968	25,032.9	7,887
1969	23,243.4	6,395
1970	35,641.6	7,604
1971	50,651.0	8,811
1972	48,162.6	8,420
1973	47,620.0	8,147
1974	51,864.6	7,701
1975	58,197.1	8,080

Source: *Bond Buyers' Municipal Finance Statistics*, Vol. 13, June 1975, p. 7. 1975 figures from *The Bond Buyer*.

Exhibit A-2

STATE AND LOCAL DEBT AS A PERCENTAGE OF NET TOTAL DEBT AND NET PUBLIC DEBT

(in billions)
(basis for Exhibit 3 in text)

Year	Total Private and Public	Total Public	Total State and Local	Total Private	State and Local Percent Total	State and Local Percent Total Public
1950	$ 490.3	$239.4	$ 20.7	$ 250.9	4.2%	8.6%
1951	524.0	241.8	23.3	282.2	4.4	9.6
1952	555.2	248.7	25.8	306.5	4.6	10.4
1953	586.4	256.7	28.6	329.7	4.9	11.1
1954	612.0	263.6	33.4	348.4	5.5	12.7
1955	665.8	273.6	41.1	392.2	6.2	15.0
1956	698.4	271.2	44.5	427.2	6.4	16.4
1957	728.3	274.0	48.6	454.3	6.7	17.7
1958	769.6	287.2	53.7	482.4	7.0	18.7
1959	833.0	304.7	59.6	528.3	7.2	19.6
1960	874.2	308.1	64.9	566.1	7.4	21.1
1961	930.3	321.2	70.5	609.1	7.6	21.9
1962	966.0	335.9	77.0	660.1	7.7	22.9
1963	1,070.9	348.6	83.9	722.3	7.8	24.1
1964	1,151.6	361.9	90.4	789.7	7.9	24.9
1965	1,244.1	373.7	98.3	870.4	7.9	26.3
1966	1,341.4	387.9	104.8	953.5	7.8	27.0
1967	1,435.5	408.3	112.8	1,027.2	7.9	27.6
1968	1,582.5	437.1	123.9	1,145.4	7.8	28.3
1969	1,736.0	453.2	133.3	1,282.9	7.7	29.4
1970	1,868.9	484.9	145.0	1,384.0	7.8	29.9
1971	2,045.8	528.2	162.4	1,517.6	7.9	30.7
1972	2,270.2	557.6	175.0	1,712.7	7.7	31.4
1973	2,525.8	593.4	184.5	1,932.4	7.3	31.1
1974	2,777.3	642.9	205.6	2,134.4	7.4	32.0

Source: *Survey of Current Business*, various issues.

Exhibit A-3

ANNUAL DOLLAR VOLUME OF STATE AND LOCAL BORROWING

(basis for Exhibit 6 in text)

Year	Long-Term Amount	Short-Term Amount
1950	$ 3,963.6	$ 1,611.1
1951	3,278.1	1,636.8
1952	4,401.3	2,049.2
1953	5,557.9	2,756.6
1954	6,968.6	3,350.2
1955	5,976.5	2,592.9
1956	5,446.4	2,706.3
1957	6,958.2	3,273.5
1958	7,448.8	3,910.5
1959	7,681.0	4,178.6
1960	7,229.5	4,006.2
1961	8,359.5	4,514.2
1962	8,558.2	4,763.5
1963	10,106.7	5,480.8
1964	10,544.1	5,423.3
1965	11,084.2	6,537.4
1966	11,088.9	6,523.5
1967	14,287.9	8,025.3
1968	16,374.3	8,658.6
1969	11,460.2	11,783.1
1970	17,761.6	17,879.9
1971	24,369.5	26,281.5
1972	22,940.8	25,221.8
1973	22,952.6	24,667.4
1974	22,824.0	29,040.7
1975	29,224.3	28,972.8

Source: *Municipal Finance Statistics*, p. 7. 1975 figures from *The Bond Buyer*.

Exhibit A-4

SELECTED YIELD INDEXES

(basis for Exhibits 11, 12, 13 in text)

Year	20-Year Treasury Bonds	Bond Buyer's 20-Bond Index	Municipals 1-Year Good Grade	Municipals 20-Year Good Grade	Municipals 20-Year Prime Grade	Municipals 20-Year Medium Grade	Bond Buyer's 11-Bond Index
1950	2.39%	1.76%	.90%	1.90%	1.55%	n.a.	1.75%
1951	2.60	1.94	1.10	1.95	1.60	n.a.	1.77
1952	2.68	2.18	1.10	2.10	1.75	n.a.	1.99
1953	2.92	2.73	1.50	2.70	2.25	n.a.	2.54
1954	2.57	2.40	.85	2.30	2.00	n.a.	2.25
1955	2.83	2.47	1.35	2.50	2.15	n.a.	2.33
1956	3.07	2.75	1.90	2.80	2.40	n.a.	2.62
1957	3.45	3.29	2.45	3.45	2.95	n.a.	3.16
1958	3.45	3.16	1.50	3.30	2.80	n.a.	3.04
1959	4.12	3.55	2.45	3.65	3.20	n.a.	3.42
1960	4.13	3.54	2.30	3.65	3.20	n.a.	3.40
1961	3.90	3.45	1.70	3.55	3.15	n.a.	3.34
1962	4.02	3.17	1.75	3.20	3.00	n.a.	3.10
1963	4.04	3.16	1.85	3.20	3.00	n.a.	3.10
1964	4.18	3.22	2.25	3.30	3.05	n.a.	3.15
1965	4.23	3.25	2.40	3.25	3.10	3.45%	3.19
1966	4.72	3.81	3.50	3.85	3.65	4.05	3.72
1967	4.93	3.92	3.10	3.90	3.75	4.25	3.83
Month/Year							
Jan. 1968	5.57	4.38	3.75	4.45	4.20	4.85	4.27
Feb.	5.37	4.16	3.45	4.10	3.90	4.55	4.04
Mar.	5.39	4.49	3.55	4.40	4.20	4.85	4.38
April	5.59	4.31	3.65	4.55	4.35	5.00	4.19
May	5.47	4.44	3.70	4.40	4.15	4.80	4.32
June	5.47	4.51	3.75	4.50	4.25	4.75	4.40
July	5.31	4.48	3.70	4.25	4.10	4.40	4.36
Aug.	5.12	4.11	3.15	4.15	3.95	4.35	4.00
Sept.	5.20	4.44	3.10	4.40	4.30	4.65	4.32
Oct.	5.29	4.36	2.95	4.25	4.10	4.40	4.25
Nov.	5.40	4.56	3.10	4.60	4.25	4.65	4.44
Dec.	5.55	4.76	3.20	4.65	4.35	4.75	4.65
Jan. 1969	5.92	4.85	3.85	4.90	4.60	5.00	4.72
Feb.	6.00	4.96	4.10	4.90	4.75	5.20	4.77
Mar.	6.08	5.19	4.10	5.20	4.75	5.30	5.05
April	6.20	5.25	4.35	5.35	5.15	5.60	5.12
May	5.92	5.10	4.20	5.10	4.90	5.40	4.99
June	6.29	5.73	4.60	5.75	5.50	5.90	5.61
July	6.17	5.68	5.05	5.80	5.50	6.10	5.57
Aug.	6.17	5.80	5.25	6.10	5.80	6.40	5.69
Sept.	6.21	6.37	5.30	6.25	6.20	6.85	6.27
Oct.	6.70	6.19	5.10	6.05	5.70	6.20	6.08
Nov.	6.52	6.11	5.00	6.05	5.90	6.70	5.98
Dec.	6.80	6.72	5.40	6.60	6.40	7.25	6.56

Exhibit A-4 (Cont.)

Month/Year		20-Year Treasury Bonds	Bond Buyer's 20-Bond Index	Municipals 1-Year Good Grade	20-Year Good Grade	20-Year Prime Grade	20-Year Medium Grade	Bond Buyer's 11-Bond Index
Jan.	1970	6.81	6.61	5.60	6.85	6.40	7.50	6.42
Feb.		6.84	6.54	5.30	6.80	6.30	7.40	6.30
Mar.		6.41	6.00	4.55	5.85	5.75	6.15	5.88
April		6.48	6.11	4.40	6.10	5.90	6.20	5.99
May		6.90	6.89	4.85	6.60	6.45	6.70	6.76
June		7.42	6.92	5.10	6.85	6.75	7.10	6.80
July		7.15	6.79	4.90	6.70	6.60	7.00	6.66
Aug.		6.75	6.25	4.50	6.30	6.30	6.75	6.08
Sept.		6.90	6.16	4.20	5.90	5.80	6.30	5.99
Oct.		6.74	6.39	4.15	6.25	6.20	6.60	6.23
Nov.		6.80	6.28	3.75	6.00	5.90	6.50	6.08
Dec.		6.22	5.41	2.70	5.10	4.90	5.50	5.14
Jan.	1971	6.30	5.58	3.15	5.45	5.20	5.80	5.29
Feb.		5.97	5.16	2.70	4.90	4.80	5.40	4.88
Mar.		6.11	5.34	2.60	5.10	5.00	5.30	5.11
April		5.73	5.15	2.50	5.10	4.90	5.35	4.93
May		5.98	5.69	2.90	5.50	5.40	5.75	5.46
June		6.13	5.86	3.35	5.80	5.70	6.10	5.65
July		6.30	6.23	3.55	6.10	6.00	6.30	6.04
Aug.		6.30	6.05	3.40	5.80	5.70	6.00	5.84
Sept.		5.94	5.39	3.20	5.40	5.30	5.90	5.14
Oct.		5.80	5.24	3.10	5.20	5.00	5.40	4.98
Nov.		5.75	5.11	2.85	4.95	4.75	5.25	4.90
Dec.		5.79	5.44	3.00	5.15	5.00	5.60	5.21
Jan.	1972	5.81	5.02	2.55	4.85	4.65	5.15	4.82
Feb.		5.90	5.35	2.85	5.00	4.90	5.35	5.14
Mar.		5.85	5.29	2.75	5.10	5.00	5.30	5.00
April		5.98	5.40	2.70	5.15	5.05	5.40	5.20
May		5.98	5.20	2.90	5.00	4.90	5.20	5.00
June		5.81	5.10	2.60	4.90	4.80	5.10	4.92
July		5.86	5.43	3.00	5.15	5.00	5.40	5.25
Aug.		5.73	5.43	2.90	5.10	5.00	5.25	5.17
Sept.		5.70	5.38	3.00	5.20	5.10	5.40	5.21
Oct.		5.85	5.30	3.05	5.05	4.95	5.20	5.12
Nov.		5.73	5.13	3.10	5.00	4.90	5.25	4.99
Dec.		5.59	4.99	3.00	4.90	4.80	5.10	4.86
Jan.	1973	5.83	5.11	3.10	5.00	4.90	5.10	5.01
Feb.		6.85*	5.16	3.30	5.05	5.00	5.15	5.06
Mar.		6.88	5.22	3.60	5.10	5.00	5.30	5.11
April		6.85	5.26	4.00	5.10	5.00	5.30	5.15
May		6.88	5.14	4.00	4.90	4.90	5.10	5.03
June		7.03	5.22	4.10	5.10	5.00	5.20	5.10
July		7.09	5.25	4.20	5.20	5.00	5.25	5.14
Aug.		7.57	5.59	4.85	5.50	5.40	5.65	5.45
Sept.		7.31	5.34	4.70	5.15	5.10	5.20	5.19
Oct.		7.02	5.00	4.30	4.80	4.80	5.00	4.07
Nov.		7.27	5.17	4.20	5.00	4.90	5.20	5.05
Dec.		7.11	5.15	4.30	5.00	4.90	5.30	5.03

Exhibit A-4 (Cont.)

Month/Year		20-Year Treasury Bonds	Bond Buyer's 20-Bond Index	Municipals 1-Year Good Grade	20-Year Good Grade	20-Year Prime Grade	20-Year Medium Grade	Bond Buyer's 11-Bond Index
Jan.	**1974**	7.30	5.16	4.10	5.05	4.95	5.30	5.03
Feb.		7.38	5.20	4.10	5.20	5.00	5.25	5.08
Mar.		7.49	5.26	3.90	5.10	5.00	5.30	5.15
April		7.80	5.57	4.80	5.45	5.30	5.60	5.45
May		8.14	5.91	5.10	5.70	5.60	6.00	5.78
June		8.06	6.08	5.10	5.70	5.60	6.20	5.89
July		8.06	6.33	5.50	6.25	6.15	6.70	6.13
Aug.		8.32	6.70	5.30	6.20	6.10	6.70	6.44
Sept.		8.51	6.91	5.70	6.40	6.35	7.00	6.59
Oct.		8.39	6.62	5.30	6.10	6.00	6.75	6.27
Nov.		7.72	6.65	5.00	6.20	6.10	6.80	6.31
Dec.		7.70	6.71	4.40	6.30	6.25	6.50	6.36
Jan.	**1975**	7.65	7.08	4.60	6.35	6.35	6.80	6.62
Feb.		7.64	6.54	3.90	6.10	6.00	6.30	6.17
Mar.		7.60	6.55	4.00	6.20	6.10	6.50	6.24
April		8.01	6.95	3.90	6.40	6.30	6.70	6.54
May		8.35	6.95	4.25	6.40	6.30	6.80	6.55
June		8.17	7.09	4.10	6.50	6.40	7.00	6.71
July		7.97	7.00	4.25	6.50	6.25	7.00	6.58
Aug.		8.09	7.09	4.00	6.40	6.25	7.00	6.65
Sept.		8.36	7.18	4.10	6.40	6.25	7.00	6.72
Oct.		8.48	7.54	4.25	7.00	6.75	7.40	7.09
Nov.		8.02	7.36	3.80	6.40	6.25	7.20	6.77
Dec.		8.12	7.39	3.50	6.40	6.25	7.20	6.78

n.a. = not available.

*The Treasury yield index was changed in February, 973 to be based on issues with coupons of 6-3/4 percent and higher rather than 3-1/2 to 4-1/4 percent.

Source: *An Analytical Record of Yields and Yield Spreads* (New York: Salomon Brothers, 1976).

Appendix B
Other Related Tables

Exhibit B-1

NEW MUNICIPAL DEBT BY MONTH (1966-1975)

A Decade Of Municipal Financing

This table, compiled from data collected by "The Daily Bond Buyer," shows at a glance the sales by months of both bonds and short-term notes of states and municipalities in the United States and insular possessions and municipalities therein during the past ten years

LONG-TERM LOANS

	1966	1967	1968	1969
January	$ 1,176,494,299	$ 1,450,438,673	$ 1,161,547,499	$ 1,244,252,741
February	845,458,533	1,158,979,873	1,133,597,200	974,215,589
March	847,592,788	1,436,791,214	1,362,883,810	519,622,041
April	1,181,137,970	1,128,798,663	1,276,549,376	1,627,198,334
May	877,421,169	1,209,392,144	1,133,687,149	1,088,346,723
June	1,118,458,628	1,460,664,740	1,360,353,654	710,286,404
July	677,805,556	924,697,876	1,422,027,497	1,052,032,575
August	764,097,306	840,495,663	1,665,848,629	793,656,034
September	991,851,334	1,273,202,380	1,423,173,273	530,760,278
October	735,998,837	991,329,320	2,260,216,412	1,254,172,626
November	949,619,420	1,320,176,808	1,036,770,929	853,339, 233
December	923,002,509	1,092,981,992	1,137,677,532	812,368,525
Total	$11,088,938,349	$14,287,949,346	$16,374,332,960	$11,460,251,103
Number of Issues	5,594	5,829	5,714	4,052
Negotiated			—	—
*Revenue (Incorporated Refunding)	$ 4,076,022,500	$ 5,096,087,618	$ 6,762,806,850	$ 3,413,416,400
*Refunding Total	$ 220,573,500	$ 173,608,200	$ 137,997,900	$ 51,314,600
General Obligation	$ 43,375,500	$ 60,343,200	$ 74,889,000	$ 31,932,600
Revenue	$ 177,198,000	$ 113,265,000	$ 63,108,900	$ 19,382,000

*Included in yearly totals

SHORT-TERM LOANS (12 months or less)

	1966	1967	1968	1969
January	$ 354,701,600	$ 453,640,000	$ 569,264,000	$ 640,229,500
February	382,495,750	756,461,225	563,093,000	837,340,000
March	607,672,100	634,103,000	1,090,057,000	783,416,000
April	1,060,846,000	1,197,193,000	669,019,323	1,291,510,487
May	864,674,000	951,138,000	971,871,000	904,557,500
June	383,544,000	530,617,000	422,157,600	1,072,432,500
July	173,809,000	286,107,000	673,461,000	626,657,600
August	620,474,900	751,662,800	835,218,727	1,139,724,527
September	361,837,000	602,974,000	458,553,000	1,023,320,625
October	266,381,000	763,866,046	855,751,000	795,095,585
November	988,717,000	767,158,000	974,516,000	1,438,962,300
December	458,382,195	330,411,000	575,595,000	1,229,880,500
Total	$ 6,523,534,545	$ 8,025,331,071	$ 8,658,556,650	$11,783,127,124
Number of Issues	1,836	2,135	2,173	2,343
Grand Total	$17,612,472,894	$22,313,280,417	$25,032,889,610	$23,243,378,227
Total Number of All Issues	7,430	7,964	7,887	6,395

PUBLIC HOUSING AUTHORITY ISSUES. Included in this table are Public Housing Authority bond and note issues, which in effect are backed by Federal guarantee of payment. Amounts included in the above table are as follows: 1966—Bonds: $439,705,000; Notes: $1,740,229,000; 1967—Bonds: $477,510,000; Notes: $1,779,678,000; 1968—Bonds: $524,810,000; Notes: $2,061,681,000; 1969—Bonds: $397,885,000; Notes: $2,675,184,000; 1970—Bonds: $130,790,000; Notes: $4,563,243,000; 1971—Bonds: $1,000,435,000; Notes: $5,960,964,000; 1972—Bonds: $958,960,000; Notes: $6,482,926,000; 1973—Bonds: $1,029,240,000; Notes: $6,638,023,000; 1974—Bonds: $460,985,000; Notes: $6,808,186,000; 1975—Notes: $5,367,632,000.

LONG-TERM LOANS

1970	1971	1972	1973	1974	1975
$ 1,314,286,835	$ 2,613,800,300	$ 1,737,200,373	$ 1,887,144,456	$ 2,288,309,191	$ 2,158,546,904
1,198,316,047	1,822,913,919	1,942,359,360	1,445,342,221	1,970,423,036	2,328,830,657
1,504,144,844	2,103,516,087	2,185,040,732	2,296,817,220	2,091,451,394	2,037,839,364
1,624,504,944	1,858,566,804	1,962,524,835	1,687,660,121	2,321,869,205	2,263,123,526
973,907,768	2,114,198,837	1,923,925,001	1,870,018,032	2,176,946,282	2,532,416,759
1,057,960,924	1,988,122,574	2,222,403,920	2,030,899,127	1,941,610,160	3,001,048,087
1,309,688,559	1,950,531,857	1,783,604,609	1,991,596,623	1,380,732,870	3,434,120,352
1,318,022,457	1,849,841,632	1,897,964,807	1,474,455,168	1,055,926,295	2,692,088,390
1,649,862,884	2,044,463,963	1,701,046,242	1,629,554,255	1,625,716,737	2,067,956,151
1,882,158,414	1,679,251,863	1,969,681,285	2,232,243,798	2,318,666,796	—
1,683,724,385	2,286,253,301	1,814,154,500	2,223,783,079	2,245,085,770	—
2,245,067,772	2,058,074,968	1,800,937,720	2,183,132,666	1,407,230,458	-
$17,761,645,833	$24,369,536,105	$22,940,843,384	$22,952,646,766	$22,823,968,194	$22,515,970,190
4,701	5,461	5,103	4,741	4,287	3,499
—	—	—	$ 5,915,882,698	$ 6,265,568,382	$ 7,845,214,883
$ 5,958,564,402	$ 8,129,060,950	$ 8,820,051,343	$10,126,053,500	$ 9,792,845,100	$10,507,750,500
$ 56,220,500	$ 452,583,000	$ 1,568,537,000	$ 1,234,808,000	$ 581,466,500	$ 713,260,996
$ 29,376,000	$ 155,086,000	$ 237,645,000	$ 371,460,000	$ 296,764,000	$ 521,381,596
$ 26,844,500	$ 297,497,000	$ 1,330,892,000	$ 863,348,000	$ 284,702,500	$ 191,879,400

SHORT-TERM LOANS (12 months or less)

1970	1971	1972	1973	1974	1975
$ 877,685,500	$ 1,551,894,000	$ 1,593,523,925	$ 1,621,659,692	$ 1,859,600,563	$ 2,265,877,509
1,444,149,676	1,885,735,920	1,751,944,000	1,130,498,000	2,116,795,053	2,269,843,763
1,210,938,442	2,452,530,500	3,406,870,590	1,637,715,115	1,785,548,545	2,832,491,198
1,045,608,200	2,482,262,481	1,516,354,774	2,061,855,460	2,155,433,685	3,093,592,683
1,387,480,000	1,839,598,447	2,726,161,645	2,491,843,610	2,797,099,895	3,801,201,072
2,034,653,300	2,932,420,000	2,704,795,635	2,517,150,840	3,803,778,140	2,698,509,589
1,113,290,000	1,353,139,000	1,215,198,481	1,923,295,617	2,058,878,949	1,690,683,152
1,226,187,350	1,882,224,582	1,839,885,577	1,740,221,613	1,496,818,390	1,376,665,945
2,048,857,000	2,781,406,034	2,475,025,500	2,750,340,600	3,525,697,176	2,422,560,502
1,215,606,325	1,843,287,800	1,587,478,258	2,500,967,122	2,364,952,759	—
2,021,772,000	2,784,702,700	2,764,055,950	1,784,590,231	2,540,401,664	—
2,253,725,000	2,492,266,075	1,640,474,000	2,507,219,390	2,535,676,707	—
$17,879,952,793	$26,281,467,539	$25,221,768,335	$24,667,357,290	$29,040,681,526	$22,451,425,413
2,903	3,350	3,317	3,406	3,414	2,612
$35,641,598,626	$50,651,003,644	$48,162,611,719	$47,620,004,056	$51,864,649,720	$44,967,395,603
7,604	8,811	8,420	8,147	7,701	6,111

PRELIMINARY LOAN NOTES: Also included in this table are Preliminary Loan Notes Issued by Local Public Agencies to finance Urban Renewal projects. These are secured by the full faith and credit of the United States Government. Amounts included as short-term loans in the above table are: 1966—$1,806,432,000; 1967—$2,431,768,000; 1968—$2,812,014,000; 1969—$3,229,758,000; 1970—$3,832,950,000; 1971—$4,014,348,000; 1972—$4,237,040,000; 1973—$4,406,302,000; 1974—$4,621,853,000; 1975—$3,234,613,000.

Exhibit B-2

TAX RATES AND 20-BOND INDEX (1912-1974)

Federal Income Tax Rates and 20-Bond Index Since 1912

The table below compares individual and corporate Federal income tax rates with The Bond Buyer's 20-Bond Index since 1912

	Income Tax Rates				Income Tax Rates		
Year	Individual Top Normal and Surtax Rate	Top Corporate Tax Rate	The Bond Buyer's 20 Bond Index*	Year	Individual Top Normal and Surtax Rate	Top Corporate Tax Rate	The Bond Buyer's 20 Bond Index*
1975	70%	48%	7.08%	1942	88%	40%	2.24%
1974	70	48	5.18	1941	81	31	2.14
1973	70	48	5.08	1940	79†	24	2.59
1972	70	48	5.03	1939	79	19	2.78
1971	70	48	5.74	1938	79	19	3.16
1970	71.75	49.2	6.61	1937	79	15	2.62
1969	75.25	52.8	4.85	1936	79	15	3.25
1968	75.25	52.8	4.38	1935	63	15	3.81
1967	70	48	3.76	1934	63	13.75	5.48
1966	70	48	3.53	1933	63	13.75	4.61
1965	70	48	3.07	1932	63	13.75	4.87
1964	77	50	3.26	1931	25	13.75	4.12
1963	91	52	3.05	1930	25	12	4.23
1962	91	52	3.37	1929	24	12	4.17
1961	91	52	3.39	1928	25	11	3.87
1960	91	52	3.78	1927	25	12	4.13
1959	91	52	3.40	1926	25	13.50	4.23
1958	91	52	2.97	1925	25	13.50	4.16
1957	91	52	3.23	1924	46	13	4.37
1956	91	52	2.56	1923	58	12.50	4.16
1955	91	52	2.38	1922	58	12.50	4.38
1954	91	52	2.54	1921	73	12.50	5.06
1953	92	52	2.40	1920	73	10	4.56
1952	92	52	2.11	1919	73	10	4.44
1951	85.63	50.75	1.66	1918	67	4	4.62
1950	84.357	42	2.07	1917	77	12	3.92
1949	82.1275	38	2.19	1916	15	2	4.08
1948	82.1275	38	2.36	1915	7	1	4.26
1947	86.45	38	1.85	1914	7	1	4.16
1946	86.45	38	1.42	1913	7	1	4.45
1945	94	40	1.62	1912	—	1‡	4.01
1944	94	40	1.77				
1943	93	40	2.17				

*Figure is as of the first Thursday in January from 1946 to date. For the years 1915 through 1945, the yield is as of the first trading day in January and for the years 1912 through 1914 the yield is the average for the year.

†Does not include 10 percent Defense Tax.

‡This was an excise tax on the privilege of doing business, but tax was measured by income.

Exhibit B-3

ISSUES, RETIREMENTS, AND OWNERSHIP OF STATE AND LOCAL DEBT (1969-1975)

	Annual Net Increases in Amounts Outstanding							
	1969	**1970**	**1971**	**1972**	**1973**	**1974**	**1975[e]**	**1976[p]**
Gross New Bond Issues	11.5	17.8	24.4	22.9	23.0	22.8	27.8	26.5
Refundings[1]	0.0	0.1	0.2	0.3	0.3	0.2	0.3	0.4
Maturities (est.)	6.7	7.1	7.6	8.3	9.2	10.4	11.6	13.0
Net Sinking Fund Purchases (est.)	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
Net Increases in Bonds	4.6	10.4	16.4	14.1	13.3	11.9	15.6	12.8
Gross New Note Issues	11.8	17.9	26.3	25.2	24.7	29.0	28.0	22.0
Maturities (est.)	9.3	13.6	21.0	26.5	23.9	26.4	30.2	25.1
Net Increase in Notes	2.5	4.3	5.3	-1.3	0.8	2.6	-2.2	-3.1
Total Net Increase	7.1	14.7	21.7	12.8	14.1	14.5	13.4	9.7
Ownership:								
Mutual Savings Banks	0.0	0.0	0.2	0.5	0.0	0.0	0.6	0.5
Life Insurance Companies	0.1	0.1	0.1	0.0	0.0	0.2	0.4	0.5
Fire and Casualty Companies	1.1	1.5	3.4	4.4	3.6	2.2	2.4	2.7
State and Local Retirement Funds	-0.1	-0.3	-0.1	-0.2	-0.4	-0.6	1.1	1.0
Total Non-Bank Investing Institutions	1.1	1.3	3.6	4.7	3.2	1.8	4.5	4.7
Commercial Banks	0.2	10.5	12.8	7.1	3.9	5.7	5.1	4.5
Business Corporations	1.5	-0.8	1.0	1.0	-0.1	0.6	0.6	0.8
Residual: Individuals and Miscellaneous	4.3	3.7	4.3	0.0	7.1	6.4	3.2	-0.3
Total Ownership	7.1	14.7	21.7	12.8	14.1	14.5	13.4	9.7

[1]Omits advanced refundings.
[e]Estimated.
[p]Predicted.

Source: *Supply and Demand for Credit in 1976* (New York: Salomon Brothers, 1975) p. 16.

Exhibit B-4

STATUTORY INTEREST RATE CEILINGS ON STATE AND LOCAL BONDS

	State GO (%)	State Revenue (%)	State Agency (%)	State Notes (%)	Local GO (%)	Local Revenue (%)	Local Agency (%)	Local Notes (%)	Urban Renewal Notes (%)	Low-Rent Housing Notes (%)
Alabama[1]	V	U	V	U	V	V	V	V	0	0
Alaska[2]	7	8	V	V	V	V	V	V	0	7
Arizona[3]	0	0	0	0	0	0	0	0	8	8
Arkansas[4]	U	U	V	V	6	V	V	V	8	8
California[5]	8	V	8	8	7	V	7	0	7	7
Colorado[6]	0	0	0	0	0	0	V	0	0	0
Connecticut	0	0	0	0	0	0	U	0	0	0
Delaware	0	0	0	0	V	V	V	V	6	0
Florida[7]	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
Georgia	0	0	0	0	0	9	9	0	8	8
Hawaii[8]	8	0	N	8	7	7	N	7	6	8
Idaho	7	U	0	6	0	U	0	6	0	0
Illinois[9]	0	0	V	N	V	V	V	V	7	7
Indiana[10]	N	N	0	N	0	0	0	0	0	0
Iowa	7	7	U	U	7	7	7	7	7	7
Kansas[11]	N	5.5	8	U	7	8	8	U	8	8
Kentucky	0	0	0	0	0	0	0	N	0	0
Louisiana[12]	0	0	8	0	6	6	6	0	8	8
Maine	0	0	V	0	0	0	V	0	6	8
Maryland	0	V	0	0	V	V	V	V	6	8
Massachusetts	0	0	0	0	0	0	0	0	0	0
Michigan[13]	6	8	8	0	8	8	8	8	8	8
Minnesota[14]	0	U	U	0	7	0	0	0	7	7
Mississippi[15]	6	6	6	U	6	6	6	U	8	8
Missouri[16]	8	8	8	U	8	8	8	U	8	8
Montana	0	0	6	U	7	9	7	U	0	0
Nebraska[17]	0	0	0	0	0	0	0	0	0	0
Nevada	8	8	N	8	8	8	0	8	8	8
New Hampshire	0	0	0	0	0	0	0	0	8	8
New Jersey[18]	6	6	0	N	0	0	U	0	0	0
New Mexico	8	8	8	U	8	8	8	U	8	8
New York[19]	0	N	8	0	0	N	8	0	0	0
North Carolina	0	0	8	0	0	0	0	0	0	0
North Dakota[20]	0	0	0	0	0	0	0	0	0	0
Ohio[21]	0	0	0	0	8	0	8	8	0	0
Oklahoma[22]	6	8	V	U	7.5	N	0	N	0	8
Oregon	8	U	U	N	8	U	U	N	7	7
Pennsylvania[23]	0	0	6	5	6	0	6	6	0	6
Rhode Island	0	0	0	0	0	U	0	0	0	0
South Carolina	7	7	7	7	7	7	7	7	7	7
South Dakota	0	U	6	U	8	U	6	U	8	8
Tennessee[24]	10	10	10	10	10	10	V	10	8	8
Texas[25]	10	10	10	U	10	10	10	U	0	8
Utah	7	7	7	7	8	8	8	8	8	8
Vermont	0	U	0	0	0	0	U	0	0	0
Virginia[26]	0	0	0	0	0	0	0	0	0	0
Washington	0	0	0	U	0	0	0	U	6	6
West Virginia	0	7	7	0	8	7	7	0	0	0
Wisconsin[27]	0	U	0	0	0	0	0	0	0	0
Wyoming	0	0	0	0	0	0	0	0	10	0

O = none; U = none issued; N = none authorized; V = various.

[1]Alabama: Sec. 60 of Title 9 of Alabama code sets 8% statutory ceiling, but respective statutes authorizing particular bonds set various limits, *i.e.*, 2% on sinking fund bonds and rates up to 15% on loans of $100,000 or more by nonprofit corporations, the state board of education and trustees of state educational institutions. While bonds of local agencies are subject to 8% statutory usury limitation, bonds of local industrial development boards and medical clinic boards are exempt and may bear unlimited rates.

[2]Alaska: Ceiling on state bond anticipation notes is 7% that on state revenue anticipation notes is 5%. No municipal bond or note may bear interest exceeding the legal usury rate which is used at four percentage points above the discount rate of the 12th Federal Reserve District. A contract or loan commitment in which the principal amount exceeds $100,000 is exempt from this limitation.

[3]Arizona: Maximum interest rate must be specified on ballot. If political subdivision has authority to issue bonds without an election, there is 9% ceiling. There is $300,000 ceiling on amount of bonded indebtedness state may incur.

[4]Arkansas: School district bonds have 7% ceiling. About 20 types of bonds for street and parking facilities, public building corporations formed to construct municipal facilities, municipally sponsored bonds for waterworks, sewer, parks, recreation agencies, convention centers, and construction and refunding bonds for eight state-sponsored colleges and universities, and county and municipal bonds for hospitals, nursing and rest homes may be issued for 8%. County and municipal industrial development revenue bonds, airport revenue bonds for cities, metropolitan (multijurisdictional) port revenue bonds may be issued at 10%. Municipal improvement districts may issue bonds for among other purposes, drainage with a ceiling of 8%.

[5]California: Any rate permitted on specific issue approved by two-thirds vote of each house of legislature and by governor. Municipalities' GOs have 8% limit in some instances.

[6]Colorado: Maximum interest rate must be part of proposal submitted to voters along with amount of authorization.

[7]Florida: Some local, county, municipal authority bond authorizations have an interest rate above 7½% or no interest ceiling. Upon request of issuing unit, state board of administration may authorize a rate of interest in excess of maximum rate set by law.

[8]Hawaii: 8% limitation for state bonds effective until April 1, 1975 at which time it will revert to 6%.

[9]Illinois: Municipal school and district bonds, except for isolated instances, have 7% limit. When bonds are voted, ballot is permitted to set maximum rate within the 7% rate. Home rule units may establish own maximum, but may not exceed 8% usury rate—not to be confused with 9.5% home mortgage ceiling.

[10]Indiana: Certain town bonds, Barret Law assessment bonds and grade separation taxing district bonds have 6% ceiling, airport authorities except Indianapolis have 7% ceiling: school bus notes and security agreements have 5% ceiling.

[11]Kansas: Interest on universities and colleges limited to best competitive bid rate in lieu of statutory rate.

[12]Louisiana: Most local bond issues have constitutional ceilings of 6%, although statutory ceiling is 8%.

[13]Michigan: 8% maximum on municipal bonds. On state bonds the ceiling is set at the time voters approve the individual authorizations. Currently there is no ceiling on state GO bonds or operating notes with the exception of authorized and unissued water resources and recreation bonds voted with a 6% ceiling. State housing finance agency and state college and university bonds have no rate ceiling.

[14]Minnesota: Highway bonds have constitutionally fixed ceiling of 5%.

[15]Mississippi: Local GOs issued for industrial purposes have 6% ceiling. Local industrial revenue bonds have 8% limit. Under 1973 statute, public school building bonds have 7% ceiling.

[16]Missouri: Bonds cannot be sold less than 95% of par. Negotiated sales cannot exceed 6%, except industrial aid bonds which have 8% ceiling.

[17]Nebraska: No state public debt.

[18]New Jersey: 6% ceiling suspended through June 30, 1975 for counties, municipalities, school districts, state agencies and other public authorities and agencies.

[19]New York: 5% ceilings suspended for state and local bonds and notes until July 1, 1975. Public authority obligation ceiling is 8% until July 1, 1975, except housing authority obligations on which there is no ceiling until July 1, 1975.

[20]North Dakota: Obligations sold privately are subject to 8% ceiling.

[21]Ohio: Some state agencies, such as the Ohio Turnpike Commission and state underground parking commission have 8% limit. Urban renewal project notes, if GO, have 8% limit. Low rent housing notes have 8% limit.

[22]Oklahoma: Some state agencies such as public trusts have no interest ceiling. Ceiling on turnpike bonds is 6%. Local industrial development bonds have 6% ceiling and state industrial development bonds have 6.5% ceiling.

[23]Pennsylvania: 6% ceiling on obligations of state and local governments, or their authorities, suspended until June 30, 1976. Philadelphia does not come under Municipal Borrowing Act and thus has no ceiling on interest costs, except for 6% limitation on port, transit and street bonds.

[24]Tennessee: Local utility districts are limited to 8%. All others have 10% ceiling.

[25]Texas: Bonds sold by Water Development Board, Veterans Land Development, Park Development and Wildlife bonds have 4.5% ceiling on NIC.

[26]Virginia: Ceiling reverts to 6% after June 30, 1976.

[27]Wisconsin: Local notes can run for ten years.

Source: Advisory Commission on Intergovernmental Relations, *Significant Features of Fiscal Federalism* (Washington, D.C.: ACIR, 1975).

Exhibit B-5

STATE CONSTITUTIONAL AND STATUTORY LIMITATIONS ON LOCAL GOVERNMENT POWER TO ISSUE GENERAL OBLIGATION LONG-TERM DEBT, 1971

State and Types of Local Government	Citation[1]	Rate Limit: Percent	Rate Limit: Applied Against[2]	Provisions for Exceeding Limit[3]	Remarks
Alabama:					
Counties	C-S	3.5 to 5	LAV	None	[a] Many exceptions are provided by constitutional amendments and statutes applicable to individual local governments.
Municipalities	C-S	20 [a]	LAV	None	
Alaska		No limitations	No limitations		
Arizona:					
Counties	C	4	EAV	M [a]	[a] But in no case to exceed 10 percent of equalized assessed valuation.
Municipalities	C	4	EAV	M [b]	[b] Up to 15 percent additional for water supply, sewers, and lighting.
School districts	C	4	EAV	M [a]	
Arkansas:					
Counties		No limitations [a]	No limitations [a]		[a] Limited only as to the maximum allowable property tax rate for debt service.
Municipalities		No limitations [a]	No limitations [a]		[b] By permission of state board of education limit may be raised to not exceed 13 percent of total assessed valuation.
School districts	S	15	LAV	(b)	
California:					
Counties	S	5 [a]	LAV	None	[a] May go to 15 percent for water and road purposes.
Municipalities [b]	S	15	LAV	None	[b] Chartered municipalities may establish their own limits. [c] 5 percent for elementary, high school, and community college districts; 10 percent for unified districts not maintaining a community college; 10 percent for high school districts that maintain a community college; 15 percent for unified districts with community college.
School districts	S	5 to 15 [c]	LAV	None	
Colorado:					
Counties	C-S [a]	0.6-1.2 [b]	EAV	None	[a] Constitutional limits repealed, effective Jan. 1, 1972. [b] 0.6 percent for counties having over $5,000,000 assessed valuation; 1.2 percent for counties with less than $5,000,000 assessed valuation.
Municipalities [c]	C [a]	3 [d]	EAV	None	[c] Chartered and home rule muncipalities may establish their own limits.
School districts	S	No limitations	No limitations		[d] Water boards are excluded from limit.

Exhibit B-5 (Cont.)

STATE CONSTITUTIONAL AND STATUTORY LIMITATIONS ON LOCAL GOVERNMENT POWER TO ISSUE GENERAL OBLIGATION LONG-TERM DEBT, 1971 (Cont'd)

State and Types of Local Government	Citation[1]	Rate Limit Percent	Rate Limit Applied Against[2]	Provisions for Exceeding Limit[3]	Remarks
Connecticut		No rate limitations[a]	No rate limitations[a]		[a] Debt restricted to 2-1/4 times the latest tax receipts. This limit can be increased for certain purposes (*e.g.*, sewers, school building projects and urban renewal projects). Certain kinds of debt (*e.g.*, for water supply, gas, electric, and transit) are excluded from this limit.
Delaware:					
New Castle County[a]	S	3	LAV	None	[a] Requires 75% approval of county council.
Sussex County[b]	S	12	LAV	None	[b] Requires 80% approval of county council.
Kent County		No limitations			
Florida:					
Counties		No limitations	No limitations		
Municipalities	S	10[a]	LAV	None	[a] May be modified by individual charters.
School districts		No limitations	No limitations		
Georgia:					
Counties	C	7	LAV	M[a]	[a] Up to 3 percent additional debt may be authorized by general assembly, subject to approval by a majority of voters, but such additional debt must be retired in five years.
Municipalities	C	7	LAV	M[a]	
School districts	C	7	LAV	M	
Hawaii:					
Counties	C-S	15	MV	None	
Idaho:					
Counties		No limitations[a]	No limitations[a]		[a] Debt incurred in any year cannot exceed revenue for fiscal year without approval by a 2/3 majority of the voters on the issue.
Municipalities	S	15[a]	MV	None	
School districts		No limitations[a]	No limitations[a]		
Illinois:					
Counties	C-S	5	EAV	None	
Municipalities	C-S	5	EAV	None	
School districts	C-S	5	EAV	None	
Townships	C-S	5	EAV	None	
Indiana:					
Counties	C	2	LAV	None	
Municipalities	C	2	LAV	None	
School districts	C	2	LAV	None	
Townships	C	2	LAV	None	
Iowa:					
Counties	C	5	MV[a]	None	[a] By judicial interpretation.
Municipalities	C	5	MV[a]	None	
School districts	C	5	MV[a]	None	

Exhibit B-5 (Cont.)

STATE CONSTITUTIONAL AND STATUTORY LIMITATIONS ON LOCAL GOVERNMENT POWER TO ISSUE GENERAL OBLIGATION LONG-TERM DEBT, 1971 (Cont'd)

State and Types of Local Government	Citation[1]	Rate Limit Percent	Rate Limit Applied Against[2]	Provisions for Exceeding Limit[3]	Remarks
Kansas:					
Counties	S	1[a]	EAV	None	[a]Debt incurred for hospitals, and for other specified purposes is excluded from limit.
Municipalities	S	8 to 20[b]	EAV	None	[b]Basic rates are: 8 percent for 1st class cities, except such cities with less than 60,000 population for which there is no rate limit; 15 percent for 2d- and 3d-class cities; and 20 percent for certain 3d-class cities (population over 2,600 in county with population between 8,000 and 40,000). These rates can be raised to a percentage that is specified for each class for bonds payable from special assessments.
School districts	S	7[c]	EAV	(d)	[c]10 percent for common school districts in counties with population of 125,000 to 200,000. [d]With approval of state board of education (subject to subsequent election to vote on the question of issuing the increased amount of bonds).
Kentucky:					
Counties	C	2[a]	MV	None[b]	[a] Plus 5 percent for roads.
Municipalities	C	3 to 10[c]	MV	None	[b]Unless emergency public health or safety should require.
School districts	C	2	MV	None	[c]1st- and 2d-class cities, and 3d-class cities with more than 15,000 population, 10 percent; 3d-class cities with less than 15,000 population, and 4th-class cities and towns, 5 percent; 5th- and 6th-class cities and towns, 3 percent.
Louisiana:					
Parishes (counties)	C	10	LAV	None	
Municipalities	C	10	LAV	None	
School districts	C	25	LAV	None	
Maine:					
Counties		No limitations	No limitations		
Municipalities	C	7.5	LAV	None	
Maryland:					
Counties (chartered)	S	15	LAV	(a)	[a]A maximum of 25 percent of local assessed valuation is allowed for sewerage and sanitation treatment facilities bonds.

Exhibit B-5 (Cont.)

STATE CONSTITUTIONAL AND STATUTORY LIMITATIONS ON LOCAL GOVERNMENT POWER TO ISSUE GENERAL OBLIGATION LONG-TERM DEBT, 1971 (Cont'd)

State and Types of Local Government	Citation[1]	Rate Limit: Percent	Rate Limit: Applied Against[2]	Provisions for Exceeding Limit[3]	Remarks
Counties (nonchartered)		No limitations	No limitations		
Municipalities		No limitations	No limitations		
Massachusetts:					
Counties		No rate limitations[a]	No rate limitations[a]		[a] Each county bond issue is subject to state legislative authorization.
Municipalities	S	5[b]	EAV	(c)	[b] Debt incurred for certain purposes is excepted, in some cases with separate rate limits (for example, 10 percent for water supply).
School districts	S	2-1/2[b]	EAV	(c)	[c] An additional 5 percent for towns and 20-1/2 percent for cities with approval of the emergency finance board.
Michigan:					
Counties	C	10	EAV	None	[a] Plus 3/8 of 1% in home rule cities and 1/4 of 1% in fourth class cities for relief of victims of fire, flood or other disaster.
Municipalities	S	10[a]	EAV	None	
School districts	S	15	EAV	None	
Minnesota:					
Counties	S	20	EAV	None	[a] Limitation does not apply to 1st-class cities (St. Paul, Minneapolis, Duluth).
Municipalities[a]	S	20	EAV	None	[b] Where at least 20 percent of the local tax base consists of railroad property (which is exempt from local taxation) special provisions apply.
Townships	S	20	EAV	None	
School districts	S	10	MV[b]	M	
Mississippi:					
Counties	S	10[a]	LAV	None	[a] 15 percent for debt incurred to repair flood damage to roads and bridges.
Municipalities	S	10[b]	LAV	None	[b] 15 percent for debt incurred for water, sewer, gas, electric, and special improvements.
School districts	S	15	LAV	None	
Missouri:					
Counties	C-S	5	EAV	2/3[a]	[a] Additional 5 percent.
Municipalities	C-S	5	EAV	2/3[b]	[b] Cities may incur an additional 5 percent for streets and sanitation and/or for waterworks and electric plants, but total debt outstanding cannot exceed 20 percent. In addition, cities, incorporated towns and villages with less than 400,000 population may issue industrial development bonds up to 10 percent.
School districts	C-S	10	EAV	None	

Exhibit B-5 (Cont.)

STATE CONSTITUTIONAL AND STATUTORY LIMITATIONS ON LOCAL GOVERNMENT POWER TO ISSUE GENERAL OBLIGATION LONG-TERM DEBT, 1971 (Cont'd)

State and Types of Local Government	Citation[1]	Rate Limit Percent	Rate Limit Applied Against[2]	Provisions for Exceeding Limit[3]	Remarks
Montana:					
Counties	C	5	EAV	None	[a]Additional 5 percent for water and sewer debt only (statutory provision).
Municipalities	C-S	5	EAV	M[a]	
School districts	C	5	EAV	None	
Nebraska		No limitations	No limitations		
Nevada:					
Counties	S	10	LAV	None	[a]Some variation authorized.
Municipalities	S	10[a]	LAV	None	
School districts	S	15	LAV	None	
New Hampshire:					
Counties	S	2	LAV	None	[a]10 percent for cooperative school districts.
Municipalities	S	1.75	EAV	None	
School districts	S	7[a]	EAV	None	
New Jersey:					
Counties	S	2	EAV	(a)	[a]Approval of state local finance board.
Municipalities	S	3.5	EAV	(a)	[b]8 percent in cities of first class with population over 350,000.
School districts	S	4[b]	EAV	(a)	
New Mexico:					
Counties	C	4	LAV	None	
Municipalities	C	4	LAV	None	
School districts	C	6	LAV	None	
New York:					
Counties[a]	C	7[b]	MV	None	[a]Excludes the five counties comprising New York City. See footnote (e).
Municipalities	C	7[c]	MV	None	[b]Except Nassau County where the limit is 10 percent.
School districts	C-S	5 to 10[d]	MV	3/5[e]	[c]10 percent for New York City, and 9 percent for other cities over 125,000 population, including debt for school purposes. The 7 percent limit for all other municipalities excludes school debt. [d]5 percent for school districts in cities under 125,000; 10 percent for non-city school districts with assessed valuation over $100,000. No limit for non-city school districts with assessed valuation under $100,000. [e]Subject to approval by the state board of regents and/or the state comptroller.
North Carolina:					
Counties	C-S	5 to 10[a b]	LAV	M[b]	[a]5 percent for school purposes (8 percent where county has assumed debt for all school units within county); 5 percent for non-school purposes and community colleges.
Municipalities	C-S	8[b]	LAV	M[b]	

Exhibit B-5 (Cont.)

STATE CONSTITUTIONAL AND STATUTORY LIMITATIONS ON LOCAL GOVERNMENT POWER TO ISSUE GENERAL OBLIGATION LONG-TERM DEBT, 1971 (Cont'd)

State and Types of Local Government	Citation[1]	Rate Limit: Percent	Rate Limit: Applied Against[2]	Provisions for Exceeding Limit[3]	Remarks
					[b] An additional limitation is imposed by the constitution: Voter approval is required for bonds issued if (1) the amount of the issue exceeds 2/3 of the net debt reduction for the preceding fiscal year or (2) the purpose of the issue is for "non-necessary" expenses (*i.e.*, airports, hospitals, etc.). All local bond issues are subject to approval of the state local government commission.
North Dakota:					
Counties	C	5	EAV	None	[a] Additional debt may be incurred for waterworks, up to 4 percent.
Cities	C	5 [a]	EAV	2/3 [b]	[b] Additional 3 percent.
School districts	C	5	EAV	M [c]	[c] Additional 5 percent.
Ohio:					
Counties	S	(a)	LAV	None	[a] Net indebtedness shall never exceed 3 percent of first $100,000,000 of taxable value plus 1-1/2 percent of taxable value in excess of $100,000,000 and not in excess of $300,000,000, plus 2-1/2 percent of taxable value in excess of $300,000,000.
Municipalities	S	10 [b]	LAV	None	[b] Subject to voter approval. Lower limits are set without voter approval.
Townships	S	2	LAV	None	[c] "Special needs" districts may exceed limit if approved by the state superintendent of public instruction.
School districts	S	9 [b]	LAV	(c)	
Oklahoma:					
Counties	C	5 [a]	LAV	None	[a] Amount incurred in any year may not exceed revenue for the year, except by a 3/5 majority vote.
Municipalities	C	5 [a]	LAV	None	[b] Additional 5 percent.
School districts	C-S	5 [a]	LAV	3/5 [b]	
Oregon:					
Counties	S	2	MV	None	[a] 0.55 percent for grades 1-8; 0.75 percent for grades 9-12; 1.5 percent for community college or area education district.
Municipalities	S	3	MV	None	
School districts	S	(a)	MV	None	
Pennsylvania:					
Counties	S	15 [a]	LAV	(a)	[a] Up to 5 percent without referendum; any debt incurred beyond the 5 percent limit, up to 15 percent, requires a simple majority approval of the electorate.
Municipalities	S	15 [a b]	LAV	(a)	[b] For Philadelphia, the upper limit is 13.5 percent with up to 3 percent without referendum (constitutional provision).
School districts	S	15 [a]	LAV	(a)	

Exhibit B-5 (Cont.)

STATE CONSTITUTIONAL AND STATUTORY LIMITATIONS ON LOCAL GOVERNMENT POWER TO ISSUE GENERAL OBLIGATION LONG-TERM DEBT, 1971 (Cont'd)

State and Types of Local Government	Citation[1]	Rate Limit: Percent	Rate Limit: Applied Against[2]	Provisions for Exceeding Limit[3]	Remarks
Rhode Island:					
Municipalities	S	3	LAV	None	
South Carolina:					
Counties	C	8	LAV	None	[a] Where two or more municipalities or school districts overlap, aggregate limit is 15 percent.
Municipalities	C	8[a]	LAV	None	
School districts	C	8[a]	LAV	None	
South Dakota:					
Counties	C	5	EAV	M[a]	[a] Up to an additional 10 percent (18 percent for cities over 8,000 population) for specified purposes.
Municipalities	C	5	EAV	M[a]	
School districts	C	10	EAV	M[a]	
Tennessee		No limitations[a]	No limitations[a]		[a] Except that industrial building bonds are limited to 10 percent of assessed valuation, and require a 3/4 majority in referendum.
Texas:					
Counties		No limitations[a]	No limitations[a]		[a] Inclusion of debt service in property tax limits has the effect of limiting debt incurrence as well.
Municipalities		No limitations[a]	No limitations[a]		[b] 0.2 percent for junior college districts.
School districts	S	10[b]	LAV	None	
Utah:					
Counties	C	2[a]	MV[b]	None	[a] Debt incurred in any one year may not exceed amount of taxes raised for the year without a simple majority approval of the electorate (property taxpayers).
Municipalities	C	4[a]	MV[b]	(c)	[b] By judicial interpretation.
School districts	C	4[a]	MV[b]	None	[c] 1st and 2d class cities are granted an additional 4 percent, 3d class cities and towns an additional 8 percent debt for construction of water, lights, sewer facilities.
Vermont:					
Municipalities	S	10[a]	LAV	None	[a] The statutory limit is — "10 times the grand list of the municipal corporation." The "grand list" is 1 percent of the locally assessed valuation.
Virginia:					
Counties		No limitations	No limitations		[a] Including counties that elect to be treated as cities.
Municipalities[a]	C-S	18	LAV	None	
Washington:					
Counties	C	5[a]	LAV	(a)	[a] Debt incurrence that would bring total above 1.5 percent subject to approval by 60 percent majority vote, but in no case may it exceed 5 percent. However, an additional 5 percent is authorized for municipally owned utilities.
Municipalities	C	5[a]	LAV	(a)	
School districts	C	10[b]	LAV	(b)	

Exhibit B-5 (Cont.)

STATE CONSTITUTIONAL AND STATUTORY LIMITATIONS ON LOCAL GOVERNMENT POWER TO ISSUE GENERAL OBLIGATION LONG-TERM DEBT, 1971 (Cont'd)

State and Types of Local Government	Citation[1]	Rate Limit: Percent	Rate Limit: Applied Against[2]	Provisions for Exceeding Limit[3]	Remarks
					[b] Debt incurrence that would bring total above 1.5 percent subject to approval by 60 percent majority vote, but in no case may it exceed 5 percent. However, a constitutional amendment authorizes an additional 5 percent for "capital outlays."
West Virginia:					
Counties	C-S	5	LAV	None	
Municipalities	C-S	5	LAV	None	
School districts	C-S	5	LAV	None	
Wisconsin:					
Counties	C-S	5[a]	EAV	None	[a] No more than 4 percent for county buildings or 1 percent (by sole action of the county board) for highways.
Municipalities	C-S	5[b]	EAV	(b)	[b] Municipalities operating schools, except Milwaukee, may incur additional 10 percent for school purposes.
School districts	C-S	5[c]	EAV	(c)	[c] 10 percent for school districts offering no less than grades 1-12 and which are eligible for highest level of state aid ("integrated" districts).
Wyoming:					
Counties	C-S	2	EAV	None	[a] Additional 4 percent authorized for sewer construction.
Municipalities	C	2[a]	EAV	(a)	
School districts	C	10	EAV	None	

[1]The citation is either the state's constitution (C), statutes (S), or both (C-S).

[2]Percentage debt limitations are generally applied against property values, as follows: Full or market value (MV); locally established assessed value, or state established assessed value in the case of state assessed property such as utilities (LAV); or state equalized assessed value (EAV).

[3]Other than by amendment of the constitution or statutes. A simple majority (a favorable majority of 50 percent plus one of all votes subject to counting on the question) is indicated by "M;" where more than a simple favorable majority is required, the required percentage is entered.

Note.—This table deals only with limitations that affect generally the amount of general obligation debt that counties, municipalities, and school districts can issue. In a number of states general obligation debt issued for specified purposes is excluded from the general rate limitations either by constitutional or statutory provisions. In addition, specific debt limitations are often imposed upon special districts. No attempt has been made to treat the exceptions or the special district limitations because of their great variety. Also excluded from this table are provisions that set maximum interest rates or time periods for which bonds may be issued.

Source: Advisory Commission on Intergovernmental Relations, *Significant Features of Fiscal Federalism* (Washington, D.C.: ACIR, 1975).

Appendix C
Selected Bibliography

Advisory Commission on Intergovernmental Relations, *City Financial Emergencies: The Intergovernmental Dimension*, Commission Report A-42 (Washington, D.C.: U.S. Government Printing Office, 1973).

———, *Federal-State-Local Finances: Significant Features of Fiscal Federalism* (Washington, D.C.: U.S. Government Printing Office, 1975).

American Enterprise Institute, *Proposed Alternatives to Tax Exempt State and Local Bonds* (Washington, D.C.: American Enterprise Institute, 1973).

Aronson, J. Richard and Eli Schwartz, eds., *Management Policies in Local Government Finance* (Chicago: Municipal Finance Officers Association, 1975).

The Bond Buyer, Inc., *Municipal Financial Statistics* (New York: The Bond Buyer, issued annually, 1966-1975).

Calvert, Gordon L., ed., *Fundamentals of Municipal Bonds* (Washington, D.C.: Securities Industry Association, 1972).

Dougall, Herbert E. and Jack E. Gaumnitz, *Capital Markets and Institutions*, 3rd. ed. (Englewood Cliffs, N.J.: Prentice-Hall, 1975).

Ecker-Racz, Laszlo L., *The Politics and Economics of State-Local Finance* (Englewood Cliffs, N.J.: Prentice-Hall, 1970).

Etter, Wayne E. and Donald R. Fraser, "Broadening the Municipal Market: A Neglected Issue," *MFOA Special Bulletin*, September 1974, pp. 3-4.

Hempel, George H., "An Evaluation of Municipal 'Bankruptcy' Laws and Procedures," *Journal of Finance*, XXVIII, No. 5 (December 1973), pp. 1339-1351.

———, "Early Warning Indicators of Municipal Financial Problems," unpublished working paper, Graduate School of Business, Washington University, 1976.

———, *Measures of Municipal Bond Quality* (Ann Arbor: University of Michigan, 1967).

———, "Quantitative Borrower Characteristics Associated with Defaults on Municipal General Obligations," *Journal of Finance*, XXVIII, No. 2 (May 1973), pp. 523-30.

———, *The Postwar Quality of State and Local Debt* (New York: National Bureau of Economic Research, 1971).

Lulkovich, Joan, ed., *Statistics on State and Local Government Finance* (New York: The Bond Buyer, Inc., 1975).

Maxwell, James A., *Financing State and Local Government* (Washington, D.C.: The Brookings Institution, 1969).

Moak, Lennox L., *Administration of Local Government Debt* (Chicago: Municipal Finance Officers Association, 1975).

———, and Albert M. Hillhouse, *Concepts and Practices in Local Government Finance* (Chicago: Municipal Finance Officers Association, 1975).

Moody's Investors Service, Inc., *Moody's Municipal and Government Manuals* (New York: Moody's Investors Service, Inc., 1975).

Patton, James M., *Usefulness of Municipal Financial Reporting* (St. Louis: Dissertation at Washington University, 1975).

Petersen, John E., ed., *The Rating Game* (New York: The Twentieth Century Fund, 1974).

Rabinowitz, Alan, *Municipal Bond Finance and Administration* (New York: Wiley-Interscience, 1969).

Salomon Brothers, *An Analytical Record of Yields and Yield Spreads* (New York: Salomon Brothers, 1976).

———, *Supply and Demand for Credit* (New York: Salomon Brothers, issued annually, 1966-1976).

Security Industry Association, *Municipal Market Developments* (New York: Security Industry Association, issued monthly).

U.S. Bureau of the Census, Census of Governments, 1972, Vol. 1, *Governmental Organization* (Washington, D.C.: U.S. Government Printing Office, 1973).

__________, *Governmental Finances* (Washington, D.C.: U.S. Government Printing Office, issued annually).

U.S. Bureau of Economic Analysis, *Survey of Current Business* (Washington, D.C.: U.S. Government Printing Office, issued monthly).

Yawitz, Jess B., "Risk Premiums on Municipal Bonds," unpublished working paper, Washington University Graduate School of Business, 1975.

SELECTED ACIR PUBLIC FINANCE REPORTS

The Role of the States in Strengthening the Property Tax, A Commission Report A-17, (Washington, D.C.: Government Printing Office, Revised 1976), Vol. I (187 pp.)

State-Local Taxation and Industrial Location. A Commission Report A-30, (Washington, D.C.: Government Printing Office, April 1967), 114 pp.

Fiscal Balance in the American Federal System, A Commission Report A-31, (Washington, D.C.: Government Printing Office, October 1967), Vol. I, 355 pp.

Fiscal Balance in the American Federal System—Metropolitan Fiscal Disparities, A Commission Report A-31, (Washington, D.C.: Government Printing Office, October 1967), Vol. II, 393 pp.

State Aid To Local Government, A Commission Report A-34, (Springfield, Virginia: National Technical Information Service, April 1969), 105 pp.

Urban America and the Federal System, Commission Findings and Proposals M-47, (Springfield, Virginia: National Technical Information Service, October 1969), 140 pp.

Federal Approaches To Aid State and Local Capital Financing, A Commission Report A-37, (Washington, D.C.: Government Printing Office, September 1970), 71 pp.

Revenue Sharing—An Idea Whose Time Has Come, An Information Report M-54, (Washington, D.C.: Government Printing Office, December 1970), 29 pp.

Measuring the Fiscal Capacity and Effort of State and Local Areas, An Information Report M-58, (Washington, D.C.: Government Printing Office, March 1971), 209 pp.

In Search of Balance—Canada's Intergovernmental Experience, A Commission Report M-68, (Washington, D.C.: Government Printing Office, September 1971), 123 pp.

Financing Schools and Property Tax Relief—A State Responsibility, A Commission Report A-40, (Washington, D.C.: Government Printing Office, January 1973), 261 pp.

City Financial Emergencies: The Intergovernmental Dimension, A Commission Report A-42, (Washington, D.C.: Government Printing Office, July 1973), 186 pp.

The Value-Added Tax and Alternative Sources of Federal Revenue, An Information Report M-78, (Washington, D.C.: Government Printing Office, August 1973), 86 pp.

The Expenditure Tax: Concept, Administration and Possible Applications, An Information Report M-84, (Washington, D.C.: Government Printing Office, March 1974), 56 pp.

Changing Public Attitudes on Governments and Taxes, A Commission Survey S-3, (Washington, D.C.: Government Printing Office, June 1974), 9 pp.

Local Revenue Diversification: Income, Sales Taxes & User Charges, A Commission Report A-47, (Washington, D.C.: Government Printing Office, October 1974), 85 pp.

General Revenue Sharing: An ACIR Re-evaluation, A Commission Report A-48, (Washington, D.C.: Government Printing Office, October 1974), 65 pp.

The Property Tax in a Changing Environment, An Information Report M-83, (Washington, D.C.: Government Printing Office, March 1974), 297 pp.

Property Tax Circuit-Breakers: Current Status and Policy Issues, An Information Report M-87, (Washington, D.C.: Government Printing Office, February 1975), 40 pp.

Trends in Fiscal Federalism: 1954-1974, An Information Report M-86, (Washington, D.C.: Government Printing Office, February 1975), 40 pp.

Federal-State-Local Finances: Significant Features of Fiscal Federalism, An Information Report M-79, (Washington, D.C.: Government Printing Office, February 1974), 344 pp.

ACIR State Legislative Program, Part 3, State and Local Revenue (M-94) and Part 4, Fiscal and Personnel Management (M-95), (Washington, D.C.: Government Printing Office, November 1975).

what is acir?

The Advisory Commission on Intergovernmental Relations (ACIR) was created by the Congress in 1959 to monitor the operation of the American federal system and to recommend improvements. ACIR is a permanent national bipartisan body representing the executive and legislative branches of Federal, state, and local government and the public.

The Commission is composed of 26 members – nine representing the Federal government, 14 representing state and local government, and three representing the public. The President appoints 20 – three private citizens and three Federal executive officials directly and four governors, three state elected county officials from slates nominated by the National Governors' Conference, the Council of State Governments, the National League of Cities/U.S. Conference of Mayors, and the National Association of Counties. The three Senators are chosen by the President of the Senate and the three Congressmen by the Speaker of the House.

Each Commission member serves a two year term and may be reappointed.

As a continuing body, the Commission approaches its work by addressing itself to specific issues and problems, the resolution of which would produce improved cooperation among the levels of government and more effective functioning of the federal system. In addition to dealing with the all important functional and structural relationships among the various governments, the Commission has also extensively studied critical stresses currently being placed on traditional governmental taxing practices. One of the long range efforts of the Commission has been to seek ways to improve Federal, state, and local governmental taxing practices and policies to achieve equitable allocation of resources, increased efficiency in collection and administration, and reduced compliance burdens upon the taxpayers.

Studies undertaken by the Commission have dealt with subjects as diverse as transportation and as specific as state taxation of out-of-state depositories; as wide ranging as substate regionalism to the more specialized issue of local revenue diversification. In selecting items for the work program, the Commission considers the relative importance and urgency of the problem, its manageability from the point of view of finances and staff available to ACIR and the extent to which the Commission can make a fruitful contribution toward the solution of the problem.

After selecting specific intergovernmental issues for investigation, ACIR follows a multistep procedure that assures review and comment by representatives of all points of view, all affected levels of government, technical experts, and interested groups. The Commission than debates each issue and formulates its policy position. Commission findings and recommendations are published and draft bills and executive orders developed to assist in implementing ACIR policies.

acir