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XI

THE FINANCING OF PUBLIC WORKS: LOCAL GOVERNMENTS

Current Revenue and Borrowing

The relative proportions in which public improvements in the United States are financed from current revenue and through borrowing vary greatly from city to city and almost as much between different states, counties, school districts and other civil divisions. While some cities, such as New York and Buffalo, generally finance their outlays almost entirely or very largely from the proceeds of bond sales, others, like Boston, have inclined towards a pay-as-you-go policy. The situation is similar with respect to states: the greater portion of the public works expenditures of New York are financed from current revenue, although the state also borrows extensively for this purpose; on the other hand, Michigan had no recourse to long-term obligations during 1924–33 for any purpose other than refunding.

Generally, during the post-War period, the rate of increase in outlays for public works by states tended to exceed the proportional expansion of tax revenues. This trend is indicated in Table 83. Moreover, outlays constituted an increasing proportion of total governmental cost payments during this period (see Table 84). From these data one might infer that the states experienced a growing need for borrowing to finance public works.

States differed, too, in the amounts of available current revenue for purposes other than ordinary operation expenditures. Thus in 1926, most states, after meeting operation and

TABLE 83

PERCENTAGE INCREASE OVER 1915 IN REVENUE RECEIPTS AND AGGREGATE PAYMENTS OF THE STATES, 1917–1931

FISCAL YEAR	CURRENT RECEIPTS	GOVERNMENTAL-COST PAYMENTS FOR: OPERATION AND MAINTENANCE	INTEREST	OUTLAYS[1]	TOTAL
1917	14.1	12.4	14.1	−28.7	4.6
1919	47.4	43.0	29.8	−25.3	29.4
1922	153.0	141.6	122.7	234.1	158.7
1924	199.0	165.6	201.1	367.8	205.8
1926	261.3	175.3	314.5	413.0	226.2
1928	322.4	219.5	368.7	514.0	281.7
1930	389.5	267.3	446.9	728.6	362.8
1931	407.3	282.0	497.5	889.4	406.9

Source: Financial Statistics of States, 1931

[1] Outlays include expenditures for land, purchases for museums, equipment, etc., as well as construction.

TABLE 84

PERCENTAGE DISTRIBUTION OF GOVERNMENTAL-COST PAYMENTS BY STATES, 1915–1931

FISCAL YEAR	OPERATION AND MAINTENANCE	INTEREST CHARGES	OUTLAYS
1915	77.0	3.7	19.2
1917	82.8	4.1	13.1
1919	85.1	3.8	11.1
1922	71.9	3.2	24.8
1924	66.9	3.7	29.8
1926	65.0	4.8	30.2
1928	64.5	4.6	30.9
1930	61.1	4.4	34.4
1931	58.1	4.4	37.5

Source: Financial Statistics of States

interest charges, had unused balances of from 20 to 35 per cent of their tax receipts that could be utilized for outlays. During the next three years, certain states, for example, Arkansas and Mississippi, found negligible proportions of their receipts available for outlays, while others, such as Delaware, Nebraska, and some of the New England States, had almost

half of their receipts so available.[1] During the first two years of the depression those states which had not achieved margins of this kind found two major difficulties in financing outlays. The widespread tendency of current expenditures to exceed current income prevented any large expenditure on outlays. Furthermore, the impaired credit rating caused by unbalanced budgets retarded the possibility of negotiating extensive loans for outlays. On the other hand, those states which had large unused margins that could be used for public works found it relatively easy to borrow for the same purpose.

The tabulation indicates the percentage of municipal long-term debt incurred respectively for public works and other purposes.[2] Although greatly below the usual level, public works still constituted more than half of the total in 1932.

PURPOSE	*1927*	*1928*	*1929*	*1930*	*1931*	*1932*	*1933*
Public works	93.34	94.79	95.09	92.80	88.10	58.39	38.93
Refunding	1.34	.89	1.98	2.26	4.21	18.90	7.13
Funding	2.29	2.46	1.51	3.57	4.83	10.24	10.35
Miscellaneous	3.03	1.86	1.42	1.27	2.86	12.47	43.61 [1]

[1] Includes 37.97 per cent for relief.

The decline, furthermore, is not as severe as it appears at first sight. In view of the marked increase in refunding operations, which are merely an expedient for reducing the cost of previously incurred long-term debt and do not represent the assumption of new debt, public construction has remained the chief purpose of the issue of long-term obligations. Issues for relief purposes and the funding of short-term notes explain the reduced proportion represented by public works. The

[1] See *Financial Statistics of States,* U. S. Bureau of the Census, for the years mentioned. The definitions and classifications used in these publications are of so special a character that only the most general conclusions may be drawn concerning the relation of borrowing to other forms of income and concerning the nature of construction outlay tendencies.

[2] State and Municipal Compendium, June 1933, and *Commercial and Financial Chronicle,* May 19, 1934.

startlingly low level of permanent loans for public improvement in 1933, shown in the tabulation, is a misleading summary. The *Commercial and Financial Chronicle* includes in its data only those loans made through the ordinary borrowing channels; loans made by the Federal government through the Reconstruction Finance Corporation and the Public Works Administration have been excluded. It is likely, therefore, that the relative proportion of long-term bonds for public works was at least as great as in the preceding year.

Relation between the Cost and Volume of Municipal Borrowing

The aggregate volume of long-term indebtedness contracted annually by local governments throughout the country has in the past been very large, as may be seen from Table 85, and until the depression showed every sign of continuing to be so. The trend of municipal [3] borrowing since the close of the War has been markedly upward. In particular, distinctively state bonds, which in pre-War years made their appearance at such infrequent intervals and in such relatively small volume that it was thought they might become altogether extinct, and which in early post-War years largely took the form of soldiers' bonus bonds, have been put out in heavily increased amounts in recent years. The exemption of such bonds from Federal taxation has contributed to their salability.

Consequently conditions of the money and investment markets, and especially the cost of municipal borrowing, have been and are matters of direct and considerable moment to local governmental agencies and enter as a factor

[3] In keeping with common usage the term 'municipal' is employed throughout this chapter to designate obligations put out not only by cities, but also by states, counties, school and other districts and the various minor civil governmental units, unless the contrary is expressly stated.

TABLE 85

TAX RECEIPTS AND NEW BOND ISSUES OF AMERICAN CITIES, 1918–1933

(in millions)

YEAR	ALL TAX RECEIPTS OF CITIES HAVING POPULATION 30,000 AND OVER[1]	AMOUNT OF LONG-TERM BONDS ISSUED[2]	AMOUNT OF SHORT-TERM BONDS ISSUED[2]	TOTAL AMOUNT NEW BONDS[2]
1918	$791	$263	$473	$736
1919	875	770	450	1,220
1920	897[3]	774	664	1,438
1921	919	1,383	762	2,145
1922	1,441	1,280	396	1,675
1923	1,485	1,135	514	1,649
1924	1,617	1,447	979	2,426
1925	1,736	1,405	866	2,271
1926	1,901	1,362	661	2,023
1927	2,047	1,478	625	2,103
1928	2,164	1,390	717	2,107
1929	2,110	1,442	921	2,363
1930	3,379	1,383	952	2,335
1931	2,342[4]	1,252	1,087	2,339
1932	2,046[5]	937	1,092	2,029
1933	[6]	1,164	986	2,150

[1] U. S. Bureau of the Census, *Financial Statistics of Cities.*
[2] *The Bond Buyer, Municipal Bond Sales.*
[3] Interpolated figure.
[4] U. S. Bureau of the Census, *Financial Statistics of City Governments, 1931* (Report of May 1933).
[5] No report issued. Estimate based upon sample of tax receipts of fifty representative cities expressed as ratio of tax receipts of same cities in 1930.
[6] No report issued.

of cardinal importance into their public works programs. This is likely to be particularly so in periods of depression, when the incentive to provide emergency funds for public construction through borrowing rather than from tax receipts is so much the stronger in consequence of reduced current revenue and the difficulty and undesirability of raising tax rates. It is true that municipal improvements are frequently financed in the first instance by temporary borrowing and that these obligations need not be converted into long-term indebtedness until more favorable money market

conditions warrant the step.[4] Indeed, in periods of tight money, when local governments are forced to pay a high price for their credit, the tendency is to attempt to substitute short-term loans for long-term obligations and to reduce the total volume of borrowing until easier conditions have returned. The volume and distribution of borrowing during 1929–32 is a good case in point. Although 1929 was still largely part of the prosperity era, the lucrative opportunities of the stock market reduced the desirability of bonds, and the relatively high cost of long-term borrowing was one of the chief causes of the increase, by more than $200,000,000, in short-term loans over the preceding year. Lower credit prices for the following year and a half bolstered the total volume of borrowing, but the menacing turn of events in the latter part of 1931 and in 1932, and the simultaneous rise in basic yields, had their effects on both the volume and distribution of borrowing. Total obligations dropped $110,000,000 from 1931 to 1932; at the same time the aggregate of long-term bonds declined $315,000,000, and although temporary loans were only $5,000,000 more than in 1931, they exceeded permanent debt incurred in 1932 by $115,000,000. That this expedient of substituting short- for long-term borrowing somewhat reduced, but did not wholly remove, the financial problem involved is indicated by the rise in funding and refunding operations. A loose but persistent relation exists between the cost of borrowing and the amount of new municipal indebtedness incurred.

The manner in which adverse conditions of the money and investment markets act as a check at times amounting to a veritable embargo on the flotation of new bond issues by municipalities, and how, conversely, favorable conditions encourage the issue of obligations, cannot be better illustrated than by tracing the course of events during 1928–33.

[4] This is conspicuously so in the case of New York City; see Ch. VIII.

Repressive influences leading to monetary stringency and bond congestion first developed during the latter half of 1928. The steadily growing attractiveness of the stock exchange call loan market diverted large amounts of the surplus cash of individuals and corporations away from investment in low-rate securities such as municipal bonds. The difficulty of disposing of new offerings which developed during July, August and September is reflected in the unusually low ebb to which bond issues fell for these three months, as may be seen from Table 86. The November and

TABLE 86

TOTAL STATE AND MUNICIPAL ISSUES OF LONG- AND SHORT-TERM BONDS, UNITED STATES, 1928–1933
(in thousands)

	LONG-TERM BONDS					
	1928	*1929*	*1930*	*1931*	*1932*[1]	*1933*[2]
January	$103,139	$73,351	$92,184	$49,977	$135,154	$85,930
February	132,725	88,753	78,740	119,589	35,310	64,951
March	132,897	109,056	127,028	279,443	87,996	45,573
April	129,861	87,343	148,956	111,386	66,671	58,579
May	141,285	179,456	142,448	169,094	85,396	53,925
June	137,213	162,168	153,699	120,336	85,588	107,905
July	75,886	86,745	111,657	85,327	30,362	37,831
August	78,445	80,415	98,514	75,618	47,568	111,393
September	70,170	100,257	79,578	119,142	82,737	68,368
October	98,233	122,346	158,381	18,293	67,178	95,600
November	173,824	65,974	93,982	54,322	47,726	129,750
December	116,141	286,517	97,703	49,244	165,167	304,687
Annual total	$1,389,819	$1,442,381	$1,382,870	$1,251,771	$936,853	$1,164,492
	SHORT-TERM BONDS					
	1928	*1929*	*1930*	*1931*	*1932*	*1933*
January	$73,320	$114,675	$96,779	$81,697	$111,018	$105,173
February	113,389	71,749	81,724	238,686	100,757	77,389
March	75,359	55,411	102,040	64,979	174,948	92,719
April	78,001	105,141	83,074	196,598	118,077	172,948
May	14,896	60,118	24,614	24,772	45,386	105,037
June	44,621	48,109	69,742	30,892	124,685	210,783
July	57,014	59,321	153,067	45,602	46,032	13,916
August	63,543	86,164	26,406	91,522	74,368	16,858
September	73,419	95,978	76,501	104,129	81,688	43,006
October	82,552	99,505	81,222	50,122	28,928	53,830
November	14,496	74,187	80,422	74,625	40,589	21,376
December	26,183	50,624	76,531	83,142	145,590	72,583
Annual total	$716,793	$920,982	$952,122	$1,086,766	$1,092,066	$985,618

Source: The Bond Buyer, Municipal Bond Sales

[1] Includes loans from the RFC.
[2] Includes loans from the RFC and PWA.

December issues of that year resumed normal proportions because municipal authorities met the new situation by making their obligations more attractive through raising the rates offered. Yet the total volume of new issues for the year as a whole was less than in 1927—$1,390,000,000 as compared with $1,474,000,000.

In 1929 the tension increased despite the offer of higher rates. The continued and increased absorption of surplus funds by the stock market and the investment trusts, and the upward flight of rates, severely restricted municipal borrowing. Towards the end of March 1929 call money rates on the New York Stock Exchange rapidly advanced from 12 to 15, 17 and finally 20 per cent. These influences were of course greatly modified in the closing months of the year, after and as a result of the stock market collapse. But though bond sales in December aggregated a very unusual sum,[5] being heavier in amount than during any single month previously, the results for the entire year were not substantially affected. It is not surprising, therefore, that the aggregate volume of new state and municipal issues, which had declined in 1928 from the level reached in 1927, showed no great recovery in 1929.

The explanation for even such recovery as occurred, despite increasingly adverse conditions, is found in the inability which many states and municipalities experienced in 1929 to delay further in making needed issues which had already been postponed. When the bond market began to decline in the spring of 1928, after prices had reached their highest level in twenty years, a considerable amount of borrowing was postponed in the belief that within a few months bonds would again be in active demand. In many instances short-term loans were arranged running for six, nine or twelve months. When, however, after a reasonable delay, the market showed no sign of an early revival, this post-

[5] This, however, was chiefly due to a few very large offerings of bonds made this month, conspicuously one of $130,100,000 by New York City (of which $65,100,000 were sold to the city's sinking fund); $41,000,000 by the city and county of San Francisco; and $24,266,000 by Detroit. These three issues alone constituted more than half of the aggregate municipal bond sales made in December throughout the country.

poned borrowing was negotiated. Thus some of the 1929 borrowing actually represented financing which, under normal conditions, would have been consummated during 1928.

In marked contrast to the two preceding years, conditions for the flotation of municipal bonds in 1930 were on the whole favorable. The easing of the money market, the drop in the charge for loanable funds to unusually low levels, and the rapid decline in value of other forms of investment, made municipal issues once again attractive, except for a brief period during the closing months of the year when the municipal bond market was seriously demoralized in common with security markets generally. In these circumstances, and particularly in view of the greatly decreased costs at which municipalities were able to dispose of their offerings, it is significant that the aggregate volume of new long-term borrowing throughout the country declined to a lower level not merely than in 1929 but in any year since 1926.

The apparent immunity of municipal obligations to the effects of the rapidly widening industrial depression caused an immediate revival of bond prices in January 1931. This recovery was, however, brief. In June municipals sold higher than at any time in the preceding twenty years, but the combined effects of the European financial crisis, followed by an exodus of American gold, and the realization that municipal governments had been affected by the industrial depression, brought a halt to this upward trend. The total of municipal bond sales dropped to $76,000,000 in August and rose again to $119,000,000 in September. This spurt was the result of two large state flotations, $40,000,000 of New York and $20,000,000 of New Jersey bonds. During October the municipal bond market was almost at a standstill; while new issues amounted to only little more than $18,000,000, during the preceding ten years the aggregate par value of new bonds issued in that month had never been less than $65,000,000. The changed conditions were reflected in the cost of borrowing; and the rise in basic yield rates acted as a deterrent to municipal borrowing.

During 1932 the adverse conditions of the latter half of 1931

were intensified. The demoralization of municipal credit continued unabated and increased the selective character of the bond market. Consequently, many municipalities found themselves unable to dispose of bonds and notes to cover maturities. Bank failures, curtailed revenues, increased expenditures, and the high cost of borrowing tended to accelerate defalcation and, concurrently, to reduce the desirability of bonds and the ability to assume the burden of increased long-term indebtedness.

The difficulties involved in obtaining permanent loans increased the volume of temporary issues. In 1928 short-term issues totaled $717,000,000; in 1932, $1,092,000,000. This expedient continued to be utilized in 1933. The volume of long-term bonds in 1932 is structurally different from that of preceding years since it includes almost $113,000,000 of RFC loans for emergency relief and self-liquidating projects.[6] If to this is added the increased borrowing for refunding purposes, the precipitous decline in new debt incurred through customary channels becomes obvious.

The municipal bond market continued to be poor in 1933. Rates of borrowing were high, and increasing bond defaults and bank failures aggravated the financial stringency. These deficiencies were to some extent offset by large loans from the RFC and the PWA; of the permanent loans in 1933 approximately $532,000,000 were sold to these two agencies.[7] Throughout 1934 municipal bonds rose sharply.

[6] The figures given here are those appearing in the *Quarterly Reports* and special releases of the RFC. These figures differ from those quoted by *The Bond Buyer* for 1932, which are $17,000,000 for self-liquidating projects and $112,000,000 for relief. For self-liquidating projects, the RFC total is probably correct because *The Bond Buyer* merely summarized loans as they were reported by cities. Rescindments subsequent to authorizations, therefore, possibly account for the difference of $1,000,000. *The Bond Buyer* obtained its data for relief loans from various RFC reports, but the lack of uniformity in RFC statements makes for such confusion that it is impossible to determine which set of figures is the more accurate.

[7] Quotations of RFC loans, 1933
(*in millions*)

	THE BOND BUYER	*RFC*
Self-liquidating projects	18	48
Relief	187	203

Municipal Borrowing and Money Market Conditions

The outstanding developments of the bond market during 1928–33, the marked decline in interest rates during the eighteen months following the stock market collapse and the wide variations in the cost of credit to different municipal units following the break in the bond market in October 1931, are illustrated equally well by the changing costs at which local governments did their borrowing over this period. The experiences of New York City, recounted in Chapter VIII, may be again touched upon and elaborated as an instructive case in point. The tabulation summarizes the details of bond issues floated by New York during 1928–33.

DATE	AMOUNT (*in thousands*)	COUPON RATE (*per cent*)	BASIC RATE
February 29, 1928	$52,000	4	3.866
November 20, 1928	55,000	4¼	4.2002
May 20, 1929	52,000	5¼	4.8065
December 11, 1929	65,000	4½	4.351
October 21, 1930	50,000	4	3.9986
March 4, 1931	100,000	4¼	4.134
May 12, 1931	52,000	3	2.997
January 22, 1932	100,000	6	6.000
May 19, 1932	5,000	5½	5.500
November 20, 1933	70,000	4½	4.500

It will be observed that between February 1928 and May 1929, a period of fifteen months, the cost of borrowing to the city, as represented by the basis on which its issues were sold, advanced almost one per cent. Indeed, four months later, at the height of the speculative fever, New York had to pay as much as 6 per cent on its offerings of short-term notes. The release of funds effected by the stock market collapse is reflected in the quickly reduced interest basis on which the issue of December 1929 was disposed of. The further improvement which took place in 1930 is shown by the interest cost of the issue in October of that year. It is worth recalling, however, that an offering of $75,000,000 had

originally been contemplated and that the Comptroller had found it necessary to reduce this amount by a third because, despite the easy money and ample bank credit available, bond prices were sharing in the demoralization experienced by security markets in general. In 1931, however, municipal bonds recovered their appeal. The slightly higher basic cost to the city of its issue of March 1931, as compared with that of October 1930, is probably explained chiefly by the magnitude of the offering, the result being considered highly gratifying by the Comptroller. The sale effected in May 1931 at an interest cost of 2.997 per cent, on the other hand, marks, as pointed out in an earlier chapter, the lowest interest basis at which the city has floated a bond issue since its incorporation as Greater New York in 1898.

At the close of the year, however, New York City experienced great difficulty in meeting current expenses. Curtailed revenue, despite a rise in tax rates in 1931, extravagance, and increased expenses for relief, resulted in a shortage of cash. This crisis, which damaged the city's credit position, together with the general stringency of the bond market, prevented the flotation of new issues. After eliciting a promise from city officials that a number of budgetary economies would be effected, a banking group of 46 members agreed to sell an issue of $100,000,000 of 6 per cent corporate stock notes maturing in three to five years. On January 22, 1932 these notes were offered at par with accrued interest. Thus within eight months the cost of credit to New York City more than doubled. On May 18 another issue for only $5,000,000 of bonds was sold to the Chase National and National City Banks at a cost of 5.5 per cent. This extraordinary increase in the price paid for money in 1932 is sufficient evidence of the depreciation of the credit standing of New York City. The difficulties encountered in selling long-term bonds alienated the support of investment houses; consequently, on June 16, 1933 the Board of Estimate adopted the Comptroller's plan to sell tax anticipation loans and long-term bonds directly to the public. On November 20, 1933, the city disposed of $70,000,000 of bonds

to a group of New York banks including the Bankers Trust, Chase National, First National and the Guaranty Trust. Despite the size of the flotation, the issues were sold at a lower cost than either of the two bond issues of the preceding year.

In direct contrast to the above example of diminished prestige is the case of New York State. Its experience is illustrative of the facility with which certain state bonds could be floated because of superior credit standing.

On December 14, 1932 New York State floated its only issue of that year, $30,400,000 of bonds, at a basic cost of 3.027 per cent. On June 28, 1933 it disposed of $26,595,000 of serial bonds at 2.936 per cent, which represented the best terms it had received for 25 years. Even as late as October 24, 1933, it borrowed $29,000,000 at a cost of only 3.437 per cent. These easy terms are especially significant in view of the fact that New York State is one of the largest local borrowers. During this period Massachusetts and Pennsylvania also found it relatively easy to borrow because of their sound position.

The upward course of borrowing rates until November 1929, its reversal after that date and the differentials in rates due to intensified selection after October 1931 could be shown from the basic cost of the successive issues floated in many municipalities throughout the country. Four further instances, chosen almost at random, of cities of different size, should afford sufficient illustration. The accompanying tabulations,[8] however, do not tell the full story because many municipalities failed to dispose of bonds offered despite increased interest rates, while others stayed out of the market altogether, and others again had recourse to short-term financing as a temporary expedient.

[8] Source: *Commercial and Financial Chronicle.*

DATE	AMOUNT *(in thousands)*	BASIC RATE *(per cent)*
DETROIT, MICHIGAN		
March 20, 1928	$17,272	4.066
November 20, 1928	19,460	4.22
December 5, 1929	24,266	4.446
May 12, 1930	20,350	4.415
November 21, 1930	19,692	4.4377
May 18, 1931	19,337	4.16
August 13, 1931	8,000	4.44
	22,000	5.91
BUFFALO, NEW YORK		
February 6, 1929	$594	4.70
April 1, 1929	2,520	4.25
December 9, 1929	3,590	4.09
April 7, 1930	2,880	4.00
September 4, 1930	3,675	3.91
January 7, 1931	3,200	3.85
September 10, 1931	2,210	3.33
February 24, 1932	1,790	4.93
June 15, 1932	4,000	4.68
October 5, 1932	4,000	3.78
January 5, 1933	3,000	3.08
May 11, 1933	4,000	6.00
August 24, 1933	9,500	4.18
PHILADELPHIA, PENNSYLVANIA		
January 4, 1928	$15,000	3.88
March 5, 1928	7,500	3.86
November 19, 1928	5,000	4.06
December 17, 1928	8,000	4.24
June 3, 1929	10,000	4.415
July 22, 1929	9,350	4.24
December 2, 1929	12,976	4.25
April 16, 1930	3,884	3.90
July 7, 1930	15,000	4.128
Dec. 15, 16, 18, 1930	13,400	4.25
February 27, 1931	15,000	4.12
October, 1931	4,038	4.75
November, 1931	4,851	4.75
December, 1931	4,054	4.75
January, 1932	179	4.75
February, 1932	17	4.75
March, 1932	2,000	4.75
June, 1932	174	5.00
July, 1932	926	5.00
August, 1932	1,869	5.00
September, 1932	13,071	5.00

DATE	AMOUNT *(in thousands)*	BASIC RATE *(per cent)*
PHILADELPHIA, PENNSYLVANIA *(cont.)*		
October, 1932	$5,999	5.00
June 12, 1933	1,750	5.00
July 21, 1933	1,250	5.00
August 10, 1933	2,736	5.00
August 31, 1933	170	5.00
PROVIDENCE, RHODE ISLAND		
February 18, 1929	$2,000	4.31
November 20, 1929	3,000	4.35
May 8, 1930	2,000	4.11
December 19, 1930	3,000	4.09
June 19, 1931	2,000	3.66
April 5, 1932	3,000	4.52
March 13, 1933	3,000	3.50

In 1931 Philadelphia's cumulative deficit of bank loans, mandamuses and bills totaled almost $18,000,000. To increasingly critical investors this situation reduced the attractiveness of the city's bond issues. In October 1931, when many cities were disposing of bonds at basic costs of little more than 4 per cent, Philadelphia had great trouble in marketing $15,000,000 of bonds at 4.75 per cent. In the late spring of 1932 the city had difficulty in selling $20,000,000 of bonds even at 5 per cent. During 1932 Detroit engaged in no long-term financing and on February 15, 1933 it defaulted on its debt charges. Buffalo, on the other hand, negotiated a loan of $4,000,000 in October 1932 at a basic cost of 3.78 per cent, and in January 1933 a loan of $3,000,000 at 3.08 per cent. But here, too, an offering of $4,790,000 five per cent bonds on February 10, 1932 did not receive a single bid, and a $4,000,000 offering on April 22, 1933 shared the same fate. The latter flotation was disposed of in May at a basic cost of 6 per cent.

Classification of Bond Issues by Purpose and Governmental Division

The purposes for which municipal bonds have been issued in recent years are of considerable interest. Tables 87 and 88 show that there is much variation from year to year in

TABLE 87

PURPOSE OF MUNICIPAL BOND ISSUES IN THE UNITED STATES, 1924–1933
(in thousands)

PURPOSE	*1924*	*1925*	*1926*	*1927*	*1928*	*1929*	*1930*	*1931*	*1932*	*1933*
Water supply	$120,064	$105,864	$104,950	$95,459	$62,173	$90,694	$111,763	$74,948	$50,932	$36,889
Schools	57,799	120,591	59,556	83,802	56,624	92,443	59,164	55,608	23,603	10,214
Sewers	46,094	69,243	54,479	59,804	50,285	71,323	72,925	42,997	26,446	38,191
Street improvement	90,979	112,587	99,543	114,753	114,534	122,174	111,597	73,016	42,308	13,271
Public utilities	34,924	24,247	60,022	107,712	76,208	127,543	48,043	136,582	7,219	19,503
Parks	14,243	8,826	7,431	6,375	20,532	10,661	12,911	11,388	1,924	1,536
Public buildings, hospitals, police and fire departments	53,900	28,674	42,085	46,968	41,031	45,548	42,474	35,138	20,576	10,281
Miscellaneous	310,133	228,482	283,514	243,930	219,136	231,505	187,556	244,048	246,619	412,285

Source: The Bond Buyer, Municipal Bond Sales

TABLE 88

PURPOSE OF MUNICIPAL BOND ISSUES IN THE UNITED STATES, EXCLUDING MUNICIPALITIES IN NEW YORK STATE, 1924–1933
(in thousands)

PURPOSE	*1924*	*1925*	*1926*	*1927*	*1928*	*1929*	*1930*	*1931*	*1932*	*1933*
Water supply	$92,564	$98,704	$83,138	$81,146	$55,749	$68,265	$86,594	$68,431	$47,552	$34,804
Schools	45,031	51,504	50,861	50,541	29,883	39,491	46,794	23,163	13,070	5,366
Sewers	41,720	64,984	49,321	54,103	46,934	65,319	67,679	39,935	23,390	35,863
Street improvement	82,808	101,399	88,552	98,545	98,513	108,226	96,744	60,599	33,730	10,885
Public utilities	15,368	21,962	29,194	26,416	8,652	16,483	20,924	24,582	7,032	1,686
Parks	12,996	6,719	6,660	4,918	19,939	9,518	11,399	10,938	1,720	1,536
Public buildings, hospitals, police and fire departments	48,646	23,630	36,259	40,786	37,647	42,256	39,223	32,877	18,705	7,168
Miscellaneous	...	216,559	239,434	208,190	183,535	200,228	161,559	147,525	103,567	77,567

Source: The Bond Buyer, Municipal Bond Sales

the purposes of city issues, but street improvements, the building of schools and other public structures, the construction of water supply systems and of sewers always account for the bulk of the total sales. Issues of municipalities in New York State have been excluded in Table 88 because some of the classes shown in Table 87 are heavily weighted by the large issues of New York City. This is especially true for public utilities, a large portion of the flotations for which has consisted in recent years of long-term borrowing by New York City for rapid transit purposes. Total issues for school purposes are also somewhat distorted, though in less degree, by New York's share.

As explained in note 3, the term 'municipal' has been used throughout this chapter to cover bond issues of states, counties, school and other districts, as well as of municipalities proper. The preponderating portion of total obligations of this sort is always put out by cities. The accompanying tabulation,[9] which gives the percentages accounted for by different civil divisions in the aggregate

YEAR	STATES	COUNTIES	SCHOOL DISTRICTS	CITIES, TOWNS, VILLAGES, ETC.	TOTAL
1926	9.57	14.97	12.62	62.84	100.00
1927	8.70	19.02	10.89	61.39	100.00
1928	11.49	20.00	9.16	59.35	100.00
1929	11.17	15.29	8.75	64.99	100.00
1930	15.95	18.01	8.27	57.77	100.00
1931	19.71	13.64	5.51	61.14	100.00
1932	23.09	13.09	3.27	60.57	100.00
1933	37.02	12.21	2.92	47.85	100.00

volume of all bonds issued each year by local governments throughout the country, shows that city bonds are half as large again in volume as all other bonds issued. City and school district bonds together constitute between two-thirds

[9] *Commercial and Financial Chronicle,* State and Municipal Compendium, 1933, and the *Commercial and Financial Chronicle,* May 19, 1934.

and three-quarters of the total, while if those counties which are dominated by one large city were added the percentage would be higher still.

The supply of state bonds has steadily increased in recent years following a sharp decline during 1925–27 from the total for the record year 1924. Even during the depression, when all other local governmental units were curtailing their borrowings, the volume of state bonds increased, as is indicated in the accompanying tabulation.[10] In 1928 the states

(in thousands)

YEAR	HIGHWAY	MISCELLANEOUS	TOTAL
1927	$76,825	$37,934	$114,759
1928	87,995	71,598	159,593
1929	127,554	50,018	177,572
1930	140,645	80,797	221,442
1931	117,750	134,397	252,147
1932	78,250	198,049	276,299
1933	24,278	352,974	377,252

undertook a wide variety of public improvements; in 1929 and 1930 the increase was almost entirely due to the issuance of highway bonds. The steady increase in the total volume of state bonds during the succeeding three years is only partly explained by investors' preference for this class of municipals. The essential cause of the expansion was the enlargement of relief issues. In 1932 and 1933 state borrowing for emergency needs was augmented by RFC loans amounting to $300,000,000. In May 1933 relief issues were stimulated further by an amendment to the RFC Act which permitted the distribution of an additional $500,000,000 through the Federal Emergency Relief Administration. Although one-half of this sum was to be granted outright to states, the other half was to be given only on condition that the states matched each relief dollar with three of their own. In 1933, too, the PWA and RFC lent money to states

[10] *The Bond Buyer,* Municipal Bond Sales, 1927–33.

for public works, but in comparison with the loans to cities these emissions were of minor significance. The marked decline in the volume of highway bonds during this three-year period was a concomitant of the change in emphasis resulting from the above-mentioned exigencies of the depression. In 1933, moreover, PWA grant allotments to states for roadbuilding and repair reduced the need to borrow for this purpose and helped preserve the tendency for states to rely on gasoline tax revenues and Federal aid for their roadbuilding programs.[11]

The total of county, school and other district bonds was substantially reduced in 1929. Roadbuilding activities of counties in 1930 caused a rapid expansion in the bonds put out by them, but in 1931 and 1932, in common with other local units, excluding states, their borrowing contracted severely. City, town and village issues, which had increased in 1929, fell sharply in the succeeding four years. Cities, unlike states, did not receive very substantial aid from the RFC in 1932. According to reports of the RFC, it loaned to cities approximately $16,000,000 for self-liquidating projects.[12] In 1933 the RFC expanded the volume of its bond purchases and loaned $48,000,000 for self-liquidating projects to cities and states. In addition to these loans the PWA in 1933 bought from cities about $280,000,000 of bonds. The tabulation [13] shows the aggregate volume of state and other local bonds issued annually, 1926–33. The significant fact is that the largest and most important class of local obligations, that of municipalities, strictly defined, declined markedly after 1929, while such increases as occurred in bonds put out by

[11] In 1932 nearly one-half of the states depended entirely on the gasoline tax for their own road programs, according to Dr. Carl Shoup, in *Current Problems in Public Finance.*

[12] These loans were to both cities and states but virtually the entire sum was expended for city bonds.

[13] *The Bond Buyer,* Municipal Bond Sales, 1929–33.

(in thousands)

YEAR	STATE	OTHER LOCAL
1926	$120,495	$1,231,000
1927	114,759	1,350,000
1928	159,593	1,123,000
1929	177,572	1,259,000
1930	221,442	1,151,000
1931	252,147	998,407
1932	276,299	658,114
1933	377,252	542,174

states are accounted for chiefly by issues for road- and bridge-building and relief purposes.

The net annual increase in the amount of municipal bonds outstanding is found by deducting from the new issues made each year the amount of old debt redeemed and retired. Table 89 shows the gross annual new issues, the volume of maturities and redemptions and the net annual increase in the amount of municipal bonds outstanding

TABLE 89

GROSS AND NET INCREASE IN PERMANENT MUNICIPAL INDEBTEDNESS, 1923–1933 [1]
(in thousands)

YEAR	NEW ISSUES [2]	OLD ISSUES RETIRED	NET ADDITIONS TO DEBT
1923	$1,063,120	$234,480	$828,639
1924	1,398,953	261,521	1,137,433
1925	1,399,638	284,278	1,115,359
1926	1,365,057	337,539	1,027,519
1927	1,509,583	386,193	1,123,390
1928	1,414,785	455,966	958,819
1929	1,430,651	454,181	976,470
1930	1,487,313	488,196	999,117
1931	1,256,255	505,764	750,491
1932	849,480	526,082	323,398
1933	520,478	546,338	–25,860

Source: Commercial and Financial Chronicle, State and Municipal Compendium, 1933

[1] Includes states, cities, counties, etc.
[2] The difference in the gross amounts of new issues as they appear in this table from the figures appearing in Table 86 is explained by the difference in the gathering agencies responsible.

since 1923. The net addition to debt in 1932 is probably overestimated. Many large cities, either in an effort to retrench or unable to meet maturities because of curtailed revenue, resorted to refunding. *The Bond Buyer* has estimated that municipal flotations specifically described as 'refunding' rose from approximately $62,000,000 in 1931 to more than $87,000,000 in 1932.

Influences Tending to Check Municipal Borrowing during Depressions

The sharp decline in the aggregate volume of bond flotations by municipalities in 1930 shows that though high interest costs act as a deterrent, as in 1929, upon the contraction of new debt, low rates do not necessarily enlarge the volume of borrowing unless other factors are also favorable. Powerful tendencies of an opposite sort, to which depression itself has given rise, may be actively at work. This was already the situation in large measure in 1930. Although faith in municipal soundness temporarily enhanced the desirability of bonds, local governments themselves were beginning to curtail their borrowing.

TAX DELINQUENCIES

The only security behind municipal bond flotations is the promise of the city to pay; this promise is in turn based on the city's mandate to levy taxes.[14] As pointed out above, until 1931 investors were confident that the cities could collect as well as levy taxes. In 1931, however, tax receipts began to drop seriously. "A survey of all the Federal census reports for 1931, available on February 1, 1933, discloses that in 205 cities located in 37 states the ratio of property

[14] In the case of state obligations the creditor cannot compel the levying of the necessary tax to pay the debt.

tax receipts to tax levies increased from 1929 to 1931 in 18 states and decreased in 19 states." [15]

During 1932 and 1933 tax delinquencies increased to such an extent that many cities were operating with approximately three-quarters of their current tax levies. The accompanying tabulation, illustrating the trend in tax de-

CITY	PERCENTAGE OF TAX DELINQUENCY YEAR ENDING			
	1930	*1931*	*1932*	*1933*
New York	14.6	17.7	26.5	26.5
Chicago [1]	15.3	27.5	42.0	41.0
Philadelphia	16.6	21.3	25.8	27.2
Detroit	10.8	17.2	25.0	34.6
Los Angeles	4.8	6.4	8.1	12.9
St. Louis	20.4	23.2	26.7	31.0
San Francisco	1.5	1.6	2.0	5.4
Buffalo	.8	1.3	6.9	11.5
Cincinnati	5.6	7.3	11.1	10.1
Oakland	3.8	5.1	6.5	8.9

[1] Percentages for Chicago are for levies of 1928, 1929, 1930 and 1931. The 1932 levy was not yet in collection at the time of this study.

linquency in selected cities,[16] indicates that Los Angeles, San Francisco and Oakland, those municipalities in which business activity (as reflected in indices of bank debits) was least retarded, and Cincinnati, an especially well-administered community, suffered least from non-payment of taxes.

Buffalo, another city with a fairly low rate of tax delinquency, has in the past been hampered less by uncollected taxes than have other large cities. Buffalo sells its unpaid taxes to tax buyers; unsold taxes are purchased by the city from a special fund created for the purpose. Prior to 1931–32, 80 to 90 per cent of the city's annual unpaid taxes were purchased by tax buyers; during the last two fiscal years the city has, however, been obliged to purchase most of these arrears.

The extremely high delinquency in Chicago is the result of

[15] *The Internal Debts of the United States*, ed. by Evans Clark, p. 267.
[16] F. L. Bird, Four Year Trend in Tax Delinquency, *National Municipal Review*, February 1934.

peculiar circumstances. The quadrennial assessment of 1927 was so inequitable that in 1928 the Illinois State Tax Commission ordered a complete reassessment of real property in Chicago. While this task, which took until the end of 1929, was being accomplished, all tax collections were suspended. The upshot of this reassessment was a reduction of over $400,000,000 in the assessed real estate valuations for 1928 from those of 1927. During this period of suspended tax collections, each governmental body had continued to spend money on an increasing scale from the proceeds of the sale of tax anticipation warrants. This diminution in assessed valuation, therefore, resulted in large deficits in virtually every governmental unit of Cook County. Late in 1929 the Cook County Taxpayers' Warrant Trust was formed to buy tax anticipation warrants and to sell 'certificates of interest' to the public.[17] Tax collections were resumed in 1930 but by this time the depression had already injured the paying ability of many citizens.

Dissatisfaction with assessments continued despite the review of 1928–29, and early in 1932 the Committee on Public Expenditures was formed to unify government affairs. Despite these new civic interests and attempts at adjustment, Cook County had a floating debt of over $270,000,000 at the close of 1932.

With a shrinking revenue and the relatively greater difficulty of maintaining tax rates at a high level (to raise them would be still more difficult), and with an additional burden often thrown upon them in the shape of emergency expenditures to alleviate distress, city governments are not unlikely to be reluctant to increase their outstanding indebtedness at such times and incur the added debt service charges entailed. Tax delinquency, in particular on property, may be less an indication of adverse economic conditions than a reflection of tax 'strikes' and organized opposition to payment on a possibly unjustifiable economic

[17] Facts drawn from Financial Dictators Replace Political Boss, by W. C. Beyer, *National Municipal Review*, April 1933.

TABLE 90

GENERAL PROPERTY TAX DELINQUENCIES IN NINETEEN STATES

STATE	DATE OF REPORTED DELINQUENCY		ASSESSMENT (*in thousands*)	LEVY (*in thousands*)	UNCOLLECTED AND DELINQUENT AMOUNT (*in thousands*)	UNCOLLECTED AND DELINQUENT PERCENTAGE OF DELINQUENCY	RANGE OF PERCENTAGE DELINQUENCY BY COUNTY
Arizona	6/30/33		$473,342	$18,815	$4,495	23.89	3.8-39.6
California [1]	6/30/33		8,487,708	140,813	18,139	12.88	1.3-51.6
Colorado [2 3]	12/31/33		1,284,257[5]	39,998	7,140	17.85	3.4-65.4
Georgia [4]	12/31/33	A	935,043[5]	4,675	. . .	. . .	. . .
		B	714,869[5]	3,574	457	13.00	0.5-53.0
Indiana [2]	9/30/33		3,994,598[5]	108,986[6]	32,710	30.00	8.0-96.0
Louisiana [2 7]	2/28/34		1,509,770	46,805	3,353	7.16	0.6-47.1
Massachusetts [8]	12/31/32		7,178,219	223,192	9,363	4.20	.0-10.7
Michigan [2 9]	6/30/33		5,499,441[5]	216,581	88,198[10]	40.72	10.1-92.3
Minnesota [2]	10/15/33		1,635,748[5]	108,214	23,309	21.54	4.3-68.9
Missouri [2]	3/1/33	A	4,171,683[5]	86,094	. . .	. . .	. . .
		B	3,990,668[5]	83,425	20,136	24.00	8.0-54.0
Montana [2]	12/31/33	A	375,283[5]	26,354	. . .	. . .	. . .
		B	308,126[5]	21,402	4,259	20.00	2.0-64.5
Nebraska [2]	2/1/34	A	2,520,661[5]	49,589	. . .	. . .	. . .
		B	2,374,154[5]	47,171	11,777	24.97	8.9-68.1
Nevada [2]	. . .		199,024[5]	4,668	375	8.04[11]	0.7-41.4
New Hampshire [8]	1/31/33		586,408	16,893	2,720	16.91	3.2-28.4
Ohio [2]	8/1/33		10,032,442[5]	202,251	50,526	25.00	4.5-39.5
Oregon [2]	10/5/33		852,668[5]	41,994	18,380	44.00	33.5-82.0
Rhode Island [2]	. . .		1,382,189[5]	28,439	4,973	17.50	10.5-27.5
Washington [2]	12/31/33		1,054,281	66,444	19,681	29.61	13.1-46.1
Wyoming [2]	12/31/33	A	354,504[5]	9,330	. . .	. . .	. . .
		B	307,314[5]	8,095	605	7.50	2.0-20.0

Source: Compiled from current reports of Bureau of Census Division of Real Estate Taxation: General Property Tax Levies, Collection and Delinquency, by Counties (CWA Project F-40). Figures not comparable as between states.

A All Counties.
B Counties reported on tax delinquency.
[1] County and school levy; excludes municipal levies except combined county-city levy of San Francisco, taxes on intangibles, railroads and utilities.
[2] Levies for state and local purposes.
[3] Excludes municipal taxes.
[4] State property levy; excludes taxes on public service corporations, professions and polls.
[5] Excludes special assessments.
[6] Delinquent taxes are added to current levy from year to year, hence figures are on a cumulative basis, not comparable with other states.
[7] Excludes municipal taxes except New Orleans.
[8] Town and city levy.
[9] Excludes railroads and certain utility levies.
[10] Computed on basis of data which included special assessments.
[11] Rate of delinquency may be about twice as high, as property of utilities comprises about ½ of total valuation, and taxes thereon generally paid.

basis. However, such an attitude extends naturally from refusal to pay taxes already levied to a refusal to incur more debt. In periods of industrial stagnation, and particularly of declining real estate values, the tax paying public is likely to be not only keenly conscious of the burden of local taxation but also sharply critical of, if not strenuously opposed to, the assumption of further obligations, as indeed to expanded expenditures in general. The explanation of the marked decline noted above in the issuance of county, city, town and district bonds during the depression, in contrast to the concurrent increase in state borrowing, is probably to be found partly in the fact that local bond issues entail definite and direct increases in local taxation, whereas state obligations are usually payable from indirect taxes such as the gasoline tax, and are spread so thin or levied in such manner as to be relatively less objectionable to the individual taxpayer. During the post-War period the states in the aggregate have been responsible for a much smaller proportion of the citizen's tax burden than the cities. As a consequence it has been relatively easier for them to secure the support of voters in programs of large-scale borrowing during the depression.

Despite reliance on numerous forms of taxation, states have been seriously affected by general property tax delinquencies. This is indicated in the study made by the Division of Real Estate Taxation of the Bureau of the Census. Table 90 shows the delinquency rates in 19 states. Fifteen states that levy property taxes reveal very high delinquencies when combined with local delinquent taxes, for the fourth year of the depression. In other states, where local property taxes only are levied, the existence of delinquency on this particular tax simply involves the state government in various types of aid to localities. Even though the states may not be heavily dependent on property taxation for revenue, they

cannot avoid some strain on their own revenues when localities experience financial stringencies. This is another reason for the more extensive borrowing by state governments. During the depression the states have been forced to resort to three major types of assistance to localities: they have increased grants for local functions, they have assumed a part of the financial burden of highway and school financing, and they have shared the revenue obtained from various state-collected taxes, particularly income and inheritance taxes, motor vehicle and gasoline taxes, and sales and liquor taxes.[18]

BOND DEFAULTS

In 1930 the volume of municipal indebtedness in default in respect of principal or interest rapidly increased. The growing difficulty of collecting taxes has been discussed. Failure of tax collections to cover both operating costs and debt service had already manifested itself in Florida. But in 1930 to Florida were added the following states where municipal insolvency existed in more or less serious degee: [19] the Carolinas, Texas, Tennessee, New Jersey, New York, Michigan, Massachusetts. The inability of Chicago, Cook County and various districts in that region to meet their tax notes has already been dwelt upon above, and though the situation in this instance was due in large part to peculiar local circumstances of a rather different nature, they were intensified by conditions created by the general business depression. Elsewhere in the Middle West and on the Pacific Coast many drainage, irrigation and special improvement districts found themselves in trouble, and some

[18] Bulletin No. 6, April 1934, *Sharing Taxes with Local Governments*, General Welfare Tax League.

[19] *The Bond Buyer*, Municipal Bond Sales, 1930.

defaults on general obligations issued by counties and cities occurred.

In 1931, 1932 and 1933 defaults continued unabated. Even in 1931 probably every state had had some defaults. According to the Municipal Securities Committee of the Investment Bankers Association of America, the wave of bank failures involving losses of municipal deposits and the general tightening of the bond market were largely responsible for the accelerated rate of temporary defaults in 1931.[20]

It has recently been estimated that during 1930–33 from 1000 to 2000 American cities defaulted on their debts.[21] Of a total defalcation of approximately $1,000,000,000, $550,000,000 are the obligations of districts in and around Chicago and Detroit, the latter city having first failed to meet payments in February 1933 as a result of Governor Comstock's closing of Michigan banks. Municipal insolvency was most prevalent in Florida, New Jersey, North Carolina, Ohio, Texas, Michigan, Kentucky, Missouri and Tennessee.[22] States, too, suffered from this epidemic inability to pay: in 1933 three states, Arkansas, Louisiana and South Carolina, were known to be in default.

Dr. Wylie Kilpatrick, in a Study of State and Local Debt,[23] points out that the types of security that have been largely responsible for defalcation are special assessment bonds and short-term loans issued in anticipation of taxes. The rising wave of tax delinquency and the frequent lack of legal provision for funding short-term paper have led to the amassing of large floating debts which cannot be paid at maturity. The use of special assessment bonds, which grew in volume with rapid real estate development, have con-

[20] *Ibid.*, 1931.
[21] *Commercial and Financial Chronicle*, January 13, 1934.
[22] S. Shanks, Jr., The Present State of Municipal Credit, *National Municipal Review*, February 1934.
[23] *The Internal Debts of the United States*, pp. 271, 272.

tributed directly and indirectly to defalcation. During the depression the rate of delinquency on assessment taxes has been even higher than the rate of property tax delinquency. Since non-payment of assessments may result in confiscation of property by the assessment lien holder, the property owner, facing the loss of his property on this account, has no incentive to continue paying either his assessment or his other taxes, and thus the possibility of default is spread to other types of bond.[24]

The financial difficulties encountered by local governments during the depression have had an interesting development. The increased reliance on banks for aid, several instances of which have been cited in this chapter, noticeably expanded the amount of municipal bonds in bank portfolios. The accompanying tabulation reveals this quite clearly.[25] These figures, taken from *Annual Reports* of the Comptroller of Currency, are probably an underestimate due to the inadequate manner in which records are

	(in millions)		
1927	$1724	*1930*	$1702
1928	1890	*1931*	2266
1929	1746	*1932*	2802

[24] The Municipal Bankruptcy Bill, recently passed by the House of Representatives and in a slightly modified form by the Senate, is another illustration of the general policy of the Roosevelt administration to aid local governmental units in the solution of emergency problems. The enactment of this bill would make it possible for insolvent municipal governments and their creditors to decide upon a plan of refinancing and settlement. Upon the acceptance of the readjustment plan by 51 per cent of the holders of securities, the agreement might be approved by the Federal courts under their constitutional powers to deal with bankrupts. Before confirming the execution of any such agreement the court must have received the written consent of two-thirds of the holders in amount of each class of securities and of three-fourths in amount of all creditors. The House bill differs from the Senate bill in that it requires the consent of only 30 per cent of the creditors to petition court approval; petition may or may not include a plan of readjustment. Furthermore, it is not necessary to receive the signed approval of 75 per cent of all holders of securities to execute the refinancing measure.

[25] Willis and Chapman, *The Banking Situation*, p. 837.

both kept and reported in banks that are not members of the Federal Reserve system. The growth is more significant in view of the fact that heavy purchases of Federal securities have greatly expanded total bond portfolios.

CHANGES IN ASSESSED VALUES OF PROPERTY

Conditions of general business depression affect municipal expenditures through the assessed valuation of real estate in a twofold manner. First, the base on which the tax levy falls, and which yields the preponderating portion of the current revenue of local governments, is narrowed or at best expands less rapidly than in periods of prosperity. Second, if it is narrowed or enlarged at a slower rate than usual, counties and cities are likely to be brought into closer proximity to their debt limits, which are almost invariably fixed at some percentage of the assessed value of taxable property. Instances of cities which found themselves encroaching dangerously upon their debt limits already in 1930 have been cited above; and although this was not the case in New York, that city affords an instructive example of the financial embarrassment caused by an increase in assessed valuations which proved to be smaller than had originally been expected and reckoned upon.

Furthermore, the attenuation of the revenue base, if accompanied by a general drop in total tax receipts, increases the prominence of debt service in the budget and thus discourages the obligation of new debt. A recent survey made by the New York State Bureau of Municipal Information of 60 cities in New York State [26] indicates that funded debt legally chargeable against the 10 per cent constitutional debt limit of New York State increased from $1,212,000,000 to approximately $1,670,000,000, a rise of 38 per cent from

[26] Report No. 1477, *Comparative Analysis of Funded Debt, Assessed Valuation and Borrowing Capacity of New York State Cities, 1925–1934.*

January 1, 1925 to January 1, 1934. Excluding New York City, the expansion is even greater—58 per cent. Since there are numerous methods by which the constitutional limit can be exceeded, this estimate is probably very conservative. The mounting debt has meant that larger portions of the tax dollar are expended for interest and principal payment. Further data gathered by the Bureau revealed that funded debt for these cities had declined 2 per cent from January 1, 1933 to January 1, 1934; excluding New York City, 1 per cent. This reduction has been achieved by refunding and the curtailment of new obligations.

DECREASING REVENUES FROM VARIABLE STATE TAXES

After the World War, the state governments tended to rely more and more heavily for their current revenues on other forms of levy than the general property tax. Some of these taxes have been characterized as 'variable' because of their fluctuations as revenue producers at different phases of the business cycle. The trend towards the new tax forms is evident in the tabulation of the percentage distribution

	TAXES				SUBVENTIONS,	
YEAR	PERSONAL PROPERTY	SPECIAL	BUSINESS AND NON-BUSINESS LICENSE	SPECIAL ASSESSMENTS AND CHARGES	GRANTS, AND PENSION ASSESSMENTS	ALL OTHER [1]
1922	30.0	16.9	26.3	0.8	9.5	16.5
1923	28.3	17.5	27.2	1.4	9.5	16.1
1924	25.7	16.6	31.8	1.7	9.8	14.4
1925	24.1	15.9	34.3	2.1	9.7	13.9
1926	22.7	16.2	37.2	1.7	8.4	13.8
1927	21.7	17.2	38.6	1.5	7.9	13.1
1928	19.7	17.5	40.5	1.8	7.3	13.2
1929	17.0	19.5	41.6	1.5	7.4	13.0
1930	15.4	18.9	44.9	1.2	6.7	12.9
1931	16.0	16.7	43.6	1.1	10.4	12.2

[1] Polls franchise taxes for highway privileges, rents and interest, earnings of general departments and public utility enterprises.

of revenue receipts by source from 1922 to 1931.[27] The declining importance of property taxation is clearly shown; special taxes, defined in the *Financial Statistics of States* as corporation, income, inheritance and other specific and direct taxes, show an increase until 1930, while business and non-business license taxes, including motor vehicle levies and general and special sales taxes, have increased strikingly. The use of direct, or special, taxes was favored during the post-War boom because of their highly satisfactory yield. The so-called 'license' taxes were made up in large part of motor vehicle and gasoline levies, which were turned in normal times chiefly to the account of road programs, the most important construction activity of the states as a whole. Subventions and grants were declining as a source of revenue until increased Federal-aid road grants in 1931 reversed the direction. But the variable nature of the 'special' group dealt a blow to the states in 1930 and 1931. In the following two years the situation became acute: the general property tax, which though of declining importance had been relied upon as 'non-variable', failed as a revenue producer in the face of reduced assessments and growing delinquency.[28] At the same time, the demands on the states for aid to localities grew heavier. As current revenues declined and approached the level of ordinary expenditures, the opposition of voters to large-scale borrowing programs increased. Forty-six state legislatures convened in 1933 in regular or special session to wrestle with the problem of raising revenues. In general, two steps were taken to solve this dilemma: attempts were made to increase the adequacy of existing revenue by retrenchment of expenditures, and new forms of revenue (mentioned above) were more widely adopted to supple-

[27] *Financial Statistics of States.*

[28] The material which follows is drawn largely from an article by Professor Harold M. Groves, reprinted from the *Tax Magazine*, March 1934.

ment the property tax. Of the sixteen states now using the sales tax, or the comparable gross income tax, fifteen adopted the tax after 1930, and thirteen in the single year 1933. Thirteen additional states turned to the net income tax in some form, making a total of twenty-nine that have this tax. Liquor taxes, imposed in thirteen states from December 1, 1933 to March 1, 1934, added to the list. Increases in rates of taxes were out of the question in most states: Oregon alone increased the gasoline tax rate in 1933, Arkansas in the early part of 1934; the inheritance and personal income surtax were increased in Montana, and a special levy on personal and corporate income for relief purposes was employed in New York State. The property tax collapsed as a revenue producer; the vigorous movement for relief from its burden still continues and several states have responded by extending dates of payment, by removing penalties, and by numerous other devices calculated to relieve the property tax payer.[29]

The rapid changes taking place in state tax systems have a twofold significance for proposals of public construction expansion in depression periods. First, as far as the present era is concerned, it is evident that the progressive forms of taxation now in use are not sufficient to maintain state finances in a condition conducive to additional borrowing programs during depressions. To rely on localities for relief of unemployment in such a period is to do practically nothing. Even after the Federal government came to the aid of the localities, it was the outright grants of funds, rather than the loans, which were rapid in their effects (see Ch. V and IX). The second consideration is of long-run interest: advocates of public works programs financed by borrowing, and paid for from general taxation rather than from regressive

[29] For a description of the steps taken by a wealthy state with respect to reallocation of taxes, see the section on California in Ch. VI.

tolls on self-liquidating projects, have found themselves faced with the very situation they wished to avoid. It has been estimated [30] that by 1932 about four-fifths of local revenues (state and municipal) were derived from taxes regressive in effect. A virtual 100 per cent increase in new sales taxes and an increase of less than 50 per cent in new net income taxes since 1930 is ample evidence (in view of the tendency of tax legislation, once written, to remain on the statute books) that the loans received from the Federal government in 1932 and 1933–34 may ultimately be paid for in large part by the lower-income groups, as is claimed to be true of tolls. Whether the present trend continues, or whether reforms of the progressive tax system will relieve the situation, the fact remains that the question of the consistency of the fiscal revenue system with the ultimate aims of public works expansion has been raised to considerable prominence in the last few years.

CHANGES IN THE LEVEL OF LOCAL TAXATION

Widely varying practices in assessing taxable property and other local differences make any accurate comparison of the burdens on taxpayers of different cities almost impossible. An interesting attempt, however, has been made annually during the last eleven years by the Detroit Bureau of Governmental Research to compute comparable figures showing total taxes levied by city, school, county and state authorities in a great number of cities throughout the country. This is done by calculating the tax rate in dollars per $1000 of the assessed valuations of real and personal property subject to taxation, and correcting these figures by the estimated ratio that the assessed bears to the true valuations of property.

[30] By A. Buehler, in *Current Problems in Public Finance,* p. 245.

The results for some seventeen selected cities for 1928–33 are given in Table 91. A considerable range of variation is clearly shown.

TABLE 91

TAX RATES OF SELECTED CITIES IN THE UNITED STATES COMPARED, 1928–1933[1]

	1928	*1929*	*1930*	*1931*	*1932*	*1933*
New York City	$23.88	$23.21	$24.30	$24.48	$24.12	$21.87
Chicago	19.40	19.40	19.06	22.76	24.94	27.20
Philadelphia	25.65	25.96	24.08	24.64	24.98	24.98
Detroit	21.74	21.16	23.14	27.09	31.69	29.02
Los Angeles	20.75	21.30	17.12	21.35	16.97	19.55
Cleveland	20.00	25.30	20.96	21.72	22.08	23.46
St. Louis	19.43	18.34	18.83	17.62	18.97	20.55
Boston	25.92	25.20	27.72	28.35	35.50	32.80
San Francisco	15.05	15.00	15.35	15.35	17.82	15.31
Buffalo	25.08	26.64	27.36	26.16	24.67	21.77
Cincinnati	22.14	19.44	21.60	19.89	20.70	21.96
Newark	38.30	38.00	39.40	39.80	30.40	22.96
Indianapolis	21.12	21.60	22.64	22.24	25.11	25.38
Rochester	24.31	24.40	24.01	24.68	26.22	25.66
St. Paul	21.59	21.80	21.92	21.62	22.46	27.93
Birmingham	15.12	15.12	15.12	15.12	14.40	14.40
Albany	26.88	21.80	24.38	24.84	28.01	22.83

Source: Comparative Tax Rates of Cities, an annual compilation by C. E. Rightor and the Detroit Bureau of Governmental Research, published each year in the December number of the *National Municipal Review.*

[1] All figures represent tax rate in dollars per $1000 of assessed valuation, corrected by estimated ratio that the latter bears to the true valuation of property, in order to give the estimated real and comparable tax rate for all cities. Figures are for total taxes levied by city, school, county and state authorities.

Though year-to-year comparisons cannot be made with confidence, owing to inadequate and changing estimates of the probable ratio of assessed to true valuations of property, the general upward tendency of taxes until 1933 is established beyond reasonable doubt.

Although it is not possible to posit an absolute correlation between diminishing valuations and mounting tax rates during the depression, an indication of this tendency is per-

tinent because suggestive. The accompanying tabulation

CITY	*1930*	*1931*	*1932*
Philadelphia	$27.75	$27.38	$27.75
Detroit	27.23	30.10	35.21
Los Angeles	42.80	42.70	43.50
Cleveland	26.20	27.15	27.60
Boston	30.80	31.50	35.50
Indianapolis	28.30	27.80	27.90
St. Paul	27.40	27.02	28.08

shows the trend of tax rates in seven large cities during the three-year period beginning with 1930. These particular cities have been chosen because they experienced an absolute decrease in assessed valuations rather than a diminished rate of increase. It is apparent from this sample that the tax rate was manipulated to compensate in some measure for the attenuated tax base. The consequences of the increases in the tax burden, in so far as they relate to public works, are very clear. In view of the strong and not unjustifiable opposition offered by the tax paying public and by organized real estate interests to rising tax rates in periods of depression, and in view also of the relatively greater difficulty of collecting taxes, municipal authorities are disinclined to expand their building programs beyond essential requirements at such times, whether the improvements are to be financed from current revenue or by borrowing. The downward revision in valuations and tax rates which occurred in 1933, while still not universal, was undoubtedly an effort to curb tax delinquency and appease irate tax payers. Whether this shrinkage will continue for any length of time is dubious, since retrenchment in current expenditures is limited and since depression expedients for economy in permanent indebtedness are in large part merely deferments.

DEBT LIMITS

Both the form and content of constitutional limitations upon the debt-incurring power of local governments, whether city, county, or special administrative district, show great variation from state to state alike in the restrictions laid upon the purposes for which debt may be incurred, its amount, the amount of the tax levy which may be used for debt payment, and even the form of borrowing. This multiplicity of legislative provisions cannot be adequately summarized. Despite the great variety, however, in the restrictions imposed, the fact remains that practically all local governmental divisions are limited in their capacity to borrow by more or less rigid constitutional provisions, and that these debt limits are usually computed upon a basic percentage of the assessed value of real estate.

The general effect of the changes in assessments on these margins prior to and during the depression may be illustrated by data furnished by the New York State Bureau of Municipal Information in the study mentioned earlier in this chapter. On January 1, 1933 the total debt margin of the 60 cities examined was $756,000,000 as compared with $231,000,000 on January 1, 1925.[31] On January 1, 1934 this margin had dropped to $666,000,000, $90,000,000 less than in the preceding year. The total debt margin, exclusive of New York City, demonstrates equally clearly the serious shrinkage in borrowing capacity during 1933: from $155,000,000 on January 1, 1933 to $144,000,000 on January 1, 1934. Additional testimony of the serious handicap of attenuated bor-

[31] The figure given for 1933 is not meant to represent the peak in total borrowing margin. The Bureau's figures cover only three dates: January 1, 1925 and January 1 of 1933 and 1934, the beginnings of the fourth and fifth years of the depression. The data do, however, roughly indicate the large expansion of borrowing capacity in the pre-depression period.

rowing margins is furnished by the inability of many cities and towns to borrow from the PWA.[32]

Limitations upon borrowing by state governments take a different form, but usually involve a lengthy and time-consuming procedure. In only ten states can debt be incurred by legislative approval; in fifteen a majority vote of the electorate is required; in twenty-three a constitutional amendment is necessary. Certain exemptions from these requirements are found: in forty-three states the government may borrow to "repel invasion or suppress insurrection"; in thirty-nine states borrowing, under various restrictions, is permitted to meet casual deficiencies; and in twelve it is permitted to pay existing debt. Other forms of limitation on debt exist; among them the requirement that provision for service of the debt be made and that the debt maturities be for no more than certain specified periods of years. Although there is no necessary correlation between rigidity of restrictions and the present credit status of a state, these legal provisions are bound to produce a lag between the impact of depression and financial relief through borrowing, even if they do not altogether inhibit expansion of state bond issues.[33] Cities and counties in some states are also under certain circumstances required to submit proposed bond issues to the electorate for its approval. For a variety of reasons this approval is far from being accorded as a matter of course, and it frequently happens that projected public improvements cannot be undertaken because of the rejection at the hands of the voters of the bond issue needed to finance their cost.

[32] See Appendix C for a discussion of borrowing margins of specific cities and their relation to PWA loans.

[33] The material above is drawn from a detailed table prepared by Mr. L. Ecker, and published in the *National Tax Association Bulletin,* March 1934.