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Government Holdings of Tax-Exempt Securities

Government holdings have always been an important factor in the market for government securities. Where the obligations of a government are acquired directly, as in the case of sinking-fund investments, the bonds are virtually retired from the market. Where such obligations are held by the government's own agencies or investment funds, they are generally kept alive and may ultimately be sold or replaced by other bonds. A government may also acquire securities of its own agencies or corporations as a means of financing their operations on more favorable terms: in this case the government substitutes its credit for that of the agency.

A government may also acquire securities of another government, either directly or through its agencies or trust funds. States and municipalities commonly invest their sinking funds and trust funds in obligations of the United States government and other states and municipalities. For somewhat different reasons—stimulation of public investment—the federal government has had extensive holdings of state and local securities.

Government Holdings of State and Local Securities

State and Local Sinking Funds. Sinking funds of state and local governments are established for the purpose of systematically retiring their debt. If the fund is on a sound actuarial basis, periodic payments will be made into the fund and invested so that the principal plus earnings will be sufficient to retire the debt at maturity.¹ General obligations of states and municipalities usually

¹ Sinking funds without investments are also maintained for the amortization of debt obligations by their purchase before maturity or for the redemption of serial bonds

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have no provision for redemption before maturity which would permit their systematic retirement by periodic call, as in the case of corporation bonds. Most bonds of public authorities, however, do provide for redemption before maturity. Serial bonds have been increasingly used as an alternative to sinking-fund bonds.

In 1913 sinking-fund investments amounted to about 13.5 per cent of total state and local debt. Such investments paralleled the expansion of state and local gross debt during most of the 1920's and remained at a fairly constant average of 13 to 15 per cent of those outstanding.

Sinking-fund investments in state and local securities then dropped from a peak of \$2.4 billion in 1930 to \$1.6 billion in 1932, and until 1943 accounted for only 9 per cent or less of the gross debt outstanding. The initial decline is largely attributable to the cancellation by the Commissioners of the Sinking Fund of \$774 million general-fund bonds held in the sinking funds of New York City.² The lower level also reflected the use of funds to liquidate maturing obligations as they fell due and the failure to maintain payments for new loans. During the depressed state of finances of the 1930's, revenues were diverted to meet more essential demands for government services, and sinking funds were "raided" to finance capital outlays and expenditures for relief.³

After 1943, sinking-fund holdings of state and local bonds declined further to around \$1 billion and by 1950 accounted for only about 5 per cent of their gross amount.⁴

The relative decline of sinking-fund investments in state and local securities after 1940 is partly attributable to their displacement by United States government securities. As shown by Table 3, yields on high-grade municipals declined below yields on governments of comparable maturities, particularly after the issuance of

maturing in practically equal amounts each year. See Bureau of the Census, *Financial Statistics of Cities, 1940*, p. 121; *1941*, p. 155, description of general tables. For a description of sinking-fund management, see C. H. Chatters and A. M. Hillhouse, *Local Government Debt Administration* (Prentice-Hall, 1939), Chap. V.

² City of New York, *Annual Report of the Comptroller for 1932*, p. 39.

³ Dept. of Commerce, *Indebtedness in the United States, 1929-1941*, 1942, p. 25.

⁴ After 1950 the Bureau of the Census discontinued its breakdown of sinking-fund and other fund investments in securities.

fully taxable federal bonds. Between 1943 and 1946 this interest spread exceeded one percentage point. Since state and local governments were exempt from federal tax, and federal securities met other sinking-fund requirements with respect to safety and liquidity, investment in government securities became more attractive.⁵ (Lower-grade municipals, however, offered comparable yields.)

The changing character of municipal and state borrowing has also contributed to a gradual decline in the relative importance of sinking funds. Partly because of the experience with sinking-fund assets during the financial distress of the 1930's, the term bond has been generally replaced by the serial bond. Increasing use of serial maturities will reduce the need for large accumulations of sinking-fund assets in the future.

State and Local Trust and Investment Funds. Public trust funds were first established by states and local governments for the purpose of administering assets received from donations and bequests for the support of education, libraries, hospitals, care of the poor, and similar purposes. The more recent development of retirement and compensation systems for state and municipal employees has greatly expanded such funds.⁶

⁵ In 1940, 93 per cent of the sinking-fund investments of large cities were in municipal bonds (including 91 per cent in own-city bonds), and 5 per cent were in United States government bonds (*Financial Statistics of Cities, 1940*, p. 96). By 1950, however, municipal bonds had declined to 74 per cent (including 70 per cent in own-city bonds), and federal securities had increased to 20 per cent. (Bureau of the Census, *Large-City Finances in 1950*, p. 46.) Similarly, investments of state sinking funds in state and local securities dropped from 95 per cent of the total in 1940 to 29 per cent in 1950. Holdings of federal securities increased from 5 to 40 per cent of the total. (Bureau of the Census, *Financial Statistics of States: 1940, Statistical Compendium*, p. 46; *Compendium of State Government Finances in 1950*, p. 39.)

⁶ The size and composition of assets in state and large-city employee retirement funds alone, in 1950, is shown by the following summary:

	States	39 Large Cities	Total
	(m i l l i o n s o f d o l l a r s)		
Cash	62.6	40.3	102.9
State and local securities	543.8	830.7	1,374.5
Federal securities	1,895.8	582.4	2,478.2
Other	368.5	98.4	466.9
Total	2,870.6	1,551.8	4,422.4

Source: Bureau of the Census, *Large-City Finances in 1950*, p. 50; *Compendium of State Government Finances in 1950*, p. 45.

TABLE 3
 AVERAGE ANNUAL YIELD ON LONG-TERM MUNICIPAL SECURITIES
 AND UNITED STATES GOVERNMENT BONDS, 1919-1953
 (per cent)

YEAR	MUNICIPAL BOND YIELD	U.S. GOVERNMENT BONDS			
		<i>Partially Tax-Exempt</i> ^a		<i>Taxable</i> ^b	
		<i>Yield</i>	<i>Differential</i>	<i>Yield</i>	<i>Differential</i>
1919	4.20	4.73	.53	...	...
1920	4.54	5.32	.78	...	...
1921	4.70	5.09	.39	...	...
1922	4.09	4.30	.21	...	...
1923	4.05	4.36	.31	...	...
1924	4.00	4.06	.06	...	...
1925	3.97	3.86	— .11	...	...
1926	3.98	3.68	— .30	...	...
1927	3.91	3.34	— .57	...	...
1928	3.92	3.33	— .59	...	...
1929	4.20	3.00	—1.20	...	...
1930	3.97	3.29	— .68	...	...
1931	3.72	3.34	— .38	...	...
1932	3.96	3.68	— .28	...	...
1933	3.69	3.31	— .38	...	...
1934	3.20	3.12	— .08	...	...
1935	2.73	2.79	.06	...	...
1936	2.57	2.69	.12	...	...
1937	2.52	2.74	.22	...	...
1938	2.25	2.61	.36	...	...
1939	2.08	2.41	.33	...	...
1940	1.83	2.26	.43	...	...
1941	1.54	2.05	.51	...	...
1942	1.66	2.09	.43	2.46	.80
1943	1.39	1.98	.59	2.47	1.08
1944	1.16	1.92	.76	2.48	1.32
1945	1.07			2.37	1.30
1946	1.10			2.19	1.09
1947	1.45			2.25	.80
1948	1.87			2.44	.57
1949	1.66			2.31	.65
1950	1.56			2.32	.76
1951	1.61			2.57	.96
1952	1.80			2.68	.88
1953	2.31			2.92	.61

"Investment funds" are distinguished from sinking funds and public trust funds. They may include real property held by a municipality to secure rents or taxes, or to realize a profit arising from an increase in its value. In many cases they represent funds accumulated or borrowed for capital outlays, pending construction. Permanent funds have also been built up by many cities and states for the purpose of underwriting their own fire risks. All together, however, public *investment* funds are of somewhat less importance than public *trust* funds proper.

The accumulation of trust and investment funds by states and municipalities provided a rapidly growing market for state and local securities. Between 1913 and 1932 such holdings accounted for 5 to 6 per cent of the gross supply. By 1938 they surpassed sinking-fund investments in importance, and by 1943 they represented 12 per cent of total state and local securities. They have since declined to less than 9 per cent of total state and local securities.

Although the volume of state and local trust funds continues to expand, their investments have been increasingly diverted to United States government securities, as in the case of sinking funds, because of their more attractive yields.

Federal Agencies. Prior to 1932 practically no official recognition had ever been given by the federal government to the idea of making loans to the states and local governments. While federal grants-in-aid were well established as a means of stimulating certain expenditures by the states in which there was a national interest, the borrowing power of the states and localities had in general

NOTES TO TABLE 3

^a After Dec. 15, 1945, there were no bonds with fifteen years or more to first call date or maturity.

^b October 1941 through March 1953, bonds neither due nor callable for 15 years. After March 1953, bonds due or callable within twelve to twenty years.

... indicates none outstanding.

Source: U.S. Treasury bonds: 1919-1935, Dept. of the Treasury, *Annual Report of the Secretary of the Treasury, 1943*, p. 663; 1936-1945, *Treasury Bulletin*, February 1953, p. 57; 1946-1953, *Treasury Bulletin*, February 1954, p. 43. State and local bonds: 1919-1936, Lucile Derrick, *Exemption of Security Interest from Income Taxes in the United States* (University of Chicago Press, 1946), p. 40; 1937-1953, Moody's Investors Service, Aaa municipal bonds.

proved adequate to their requirements. By 1931, however, the deterioration of their financial condition enforced a contraction in public borrowing, particularly by municipalities. Tax delinquencies, defaults on debt service, and the approach to legal debt limits precluded further borrowing in many cases. Other governments were unwilling to embark on public-construction programs in the face of the uncertain fiscal outlook.⁷

The federal loan program was initiated with the Emergency Relief and Construction Act of 1932.⁸ Title II of this act authorized the Reconstruction Finance Corporation to make loans to certain private corporations, public corporations, states, and municipalities for "self-liquidating" construction projects.⁹ These loans were ordinarily made by the purchase of state and local securities, although they occasionally took the form of contracts for deferred payment of advances made by the RFC.

Largely because of the restrictions imposed by the standards adopted for "self-liquidating" projects, this program met with little response. In June 1933 the Public Works Administration superseded the Reconstruction Finance Corporation in this function. Although the RFC was authorized to supplement the financing of projects already initiated, by the end of 1937 it had made only \$231 million in self-liquidating loans out of an original authorization of \$1.5 billion.¹⁰ The Emergency Farm Mortgage Act of 1933 also authorized the RFC to make self-liquidating loans to drainage, levee, irrigation, and similar districts. These loans grew to a volume of \$83.5 million by December 31, 1940. Finally, in 1934, the RFC was authorized to purchase loan securities from the PWA for disposal in the public market. The RFC inventory of state and local securities for the above purposes reached about \$500 million

⁷ For a good summary of these limiting conditions see Arthur D. Gayer, *Public Works in Prosperity and Depression* (National Bureau of Economic Research, 1935), pp. 315-332.

⁸ Public Law 302, 72d Cong., 1st sess., signed July 16, 1932, 47 Stat. L. 709. A similar bill, passed July 11, 1932, was vetoed by President Hoover, partly because he objected to the provision for loans to the states and localities.

⁹ See J. K. Williams, *Grants-in-Aid under the Public Works Administration* (Columbia University Press, 1939), p. 31.

¹⁰ *Report of the Reconstruction Finance Corporation, Fourth Quarter, 1940*, p. 67.

in 1938. Half of this was liquidated by 1942, and by 1952 only \$30 million or so remained.

The National Industrial Recovery Act of 1933 greatly enlarged the scope of the public-works loan program. This program called for a dual system of outright grants and loans to states and localities for the construction of self-liquidating projects, in addition to direct federal construction. A limit of 45 per cent (originally 20 to 25 per cent) of the cost of approved projects was placed on grants, with the balance financed by loans for which "reasonable" security was to be offered. The securities were acquired with a view to their resale under more favorable market conditions or their final redemption out of the proceeds of the "self-liquidating" project.¹¹ Proceeds of the sale of these securities to the RFC constituted a revolving fund, with a limit of \$300 million, which was devoted to further loans on nonfederal projects. After several extensions, the authority of the PWA to make such loans and grants for new projects expired January 1, 1939.

During the period from June 1933 to June 1940 the PWA purchased \$789 million bonds and securities of public bodies. Of this amount \$670 million was retired before maturity or sold to the RFC, \$11 million was canceled in payment of grants, and \$10 million was transferred to the United States Housing Authority.¹² A balance of \$97.4 million remaining in 1940 has since been reduced to about \$87 million (1953).

Under the provisions of the Public Housing Act of 1937 the federal government undertook to finance a large program of slum clearance and low-rent housing. In addition to annual subsidies to insure low rents, the United States Housing Authority was authorized to make loans and advances to local housing authorities for not in excess of 90 per cent of the development cost. The amount of such loans and advances held by the Housing Authority increased from \$3.4 million in June 1938 to a peak of \$380 million

¹¹ Although the 1935 appropriation act removed the "reasonable" security requirement, the PWA continued to insist on acceptable security which could be marketed (Williams, *op. cit.*, p. 124).

¹² Federal Works Agency, *First Annual Report*, 1940, p. 156. There still remained loan commitments for about \$35 million.

in 1942 and then declined to under \$300 million. The Housing Act of 1949 revived this housing program, and by June 1952 federal loans and advances increased again to around \$600 million.

Other loans to state instrumentalities have also been authorized for the Rural Electrification Administration and the Tennessee Valley Authority, but only modest amounts have been advanced under these authorizations. The great bulk of loans to state and local governments have been made by the RFC, PWA, and the Federal Public Housing Authority.

Federal Reserve Banks. Federal Reserve banks were originally authorized to purchase municipal tax-anticipation warrants, within strict limits. In 1915 and 1916 annual purchases of municipal warrants amounted to \$65.9 million and \$90.7 million, respectively, or about 15 per cent of their total open-market purchases. By 1918 these purchases were reduced to less than \$2 million, and in 1919 to \$1 million; thereafter, they were of only negligible importance.¹³ Holdings of municipal warrants amounted to \$5.2 million at the close of the fiscal year 1932, but declined to \$.5 million by June 30, 1934.¹⁴

Government Holdings of Federal Farm Loan Bonds

The federal government provided a market for bonds of the federal farm loan banks since their organization in 1917. At that time war financing requirements interfered with the financing of the farm loan banks, and it became necessary for the government to come to their aid. On January 18, 1918, the Treasury was authorized to purchase \$100 million of land-bank bonds for each of the years 1918 and 1919. This authority was extended by joint resolution of Congress, May 20, 1920, to meet the unusual situation arising from the litigation over the constitutionality of the farm loan system, which was not settled until 1921. Treasury purchases aggregating \$195 million were made under this authority, but repayments reduced the amount to \$183 million on June 30, 1921, and to \$102

¹³ See B. H. Beckhart, *The Discount Policy of the Federal Reserve System* (Holt, 1924), pp. 231, 299, 439.

¹⁴ Dept. of the Treasury, *Securities Exempt from the Federal Income Tax as of June 30, 1937*, p. 55.

million in 1923. Liquidation of Treasury holdings by early 1927¹⁵ was facilitated by purchases made by the government life insurance fund (and in minor amounts by the District of Columbia teachers' retirement fund). Holdings of these funds increased from nil in June 1924 to \$102 million on June 30, 1927.¹⁶ As a result, government investments in land-bank bonds continued at a level of around \$106 million until 1933.

With the stiffening of interest rates in 1928 and 1929, an attempt was made in 1929 to revive the Treasury authority to purchase land-bank bonds, but this failed of enactment.¹⁷ By 1932, however, the deterioration of agricultural-credit conditions led to the enactment of new measures for federal financial support. In 1933, emergency farm-mortgage legislation authorized the purchase of land-bank bonds by the newly established Federal Farm Mortgage Corporation, production credit corporations, and banks for cooperatives. On June 30, 1934, purchases of these organizations amounted to \$217 million out of total government holdings (including the government life insurance fund) of \$317 million. By 1935, total government holdings reached a peak of \$928 million.

Federal government investments in tax-free land-bank bonds remained in excess of \$800 million until 1942; they then declined with the redemption of tax-exempt bonds. For a period of nine years, between 1935 and 1943, federal holdings of such wholly tax-exempt securities accounted for about 40 per cent of the gross amount outstanding.

Holdings of Federal Obligations: Direct and Guaranteed

Federal Sinking Funds. The federal government has never maintained a sinking fund in the strict sense of the term. Legislation was enacted in 1919 for systematic retirement of the World War I debt¹⁸ by annual appropriations to a "sinking fund," but the Treasury obligations purchased for this purpose were immediately retired or canceled. Purchases made for the 5 per cent

¹⁵ *Annual Report of the Secretary of the Treasury, 1928*, p. 568.

¹⁶ *Annual Report of the Secretary of the Treasury, 1924*, p. 107; *1927*, p. 141.

¹⁷ Federal Farm Loan Board, *Annual Report, 1929*, pp. 37-38.

¹⁸ Section 6 of the Victory Liberty Loan Act, approved Mar. 3, 1919.

bond-purchase fund for the support of the government bond market during World War I were also retired.¹⁹ Thus the Treasury has never directly maintained an investment account in its own bonds similar to that maintained by sinking funds of states and municipalities.

Federal Agencies and Corporations. During World War I the War Finance Corporation was established to help stabilize the market for government bonds and for other purposes. By November 15, 1919, its holdings of government securities amounted to \$482 million, but they declined to \$40 million in 1920 and were shortly thereafter liquidated with the diversion of this corporation to other functions.²⁰ The United States Railroad Administration had modest investments in United States government bonds between 1919 and 1921, and small amounts were held by the Panama Railroad Company and the Interstate Commerce Commission. The federal land banks and the intermediate credit banks maintained appreciable investments throughout the 1920's.

With the proliferation of government corporations during the 1930's, beginning with the Reconstruction Finance Corporation in 1932, intergovernmental debt holdings greatly increased in amount and complexity. Many of these corporations issued their own tax-exempt obligations, which were guaranteed by the federal government with respect to principal and/or interest. These obligations were frequently purchased in turn by other government corporations.

By 1940 total investments of federal agencies, corporations, and trust funds in tax-exempt federal direct and guaranteed marketable obligations reached a peak of \$2.3 billion, of which only \$86 million was wholly tax-exempt. About one-third was held by federal agencies and corporations, including the Federal Deposit Insurance Corporation, the Federal Savings and Loan Insurance Corporation, and various agencies of the Farm Credit Administration. The balance was held by trust funds. As of June 30, 1953,

¹⁹ *Annual Report of the Secretary of the Treasury, 1921*, pp. 59-64.

²⁰ *Annual Report of the Secretary of the Treasury, 1919*, p. 106; *1920*, p. 153; *1921*, pp. 49-55.

holdings of government agencies and corporations were negligible.

Federal Trust Funds. Since 1920 government trust funds have accounted for the major portion of United States public marketable securities owned by the federal government and its instrumentalities.²¹ The trust funds administered by the Treasury were originally invested in regular marketable issues (with the exception of postal savings bonds), but since 1925 the Treasury has issued special securities for this purpose.²²

During the 1920's the largest trust-fund holdings of government bonds were those of the Alien Property Custodian. These reached a peak of \$180 million in 1927, and thereafter declined to a level of about \$30 million between 1930 and 1940, when they were finally liquidated.²³ As of June 30, 1940, the Postal Savings System accounted for \$1.1 billion out of \$1.5 billion investments in marketable government bonds held by all trust funds, and the government life insurance fund held \$.3 billion. Indian trust funds were invested in United States government securities in the amount of \$42 million. By June 30, 1953, federal trust-fund holdings of wholly and partially tax-exempt securities declined to around \$50 million.

State and Local Sinking and Investment Funds. State and local sinking-fund investments in federal tax-exempt bonds were virtually limited to partially exempt issues. It was not until 1932 that these investments were significant enough to record, when they amounted to an estimated \$50 million. By 1941 they reached slightly over \$100 million, but thereafter declined to negligible proportions. By then, of course, it was more advantageous to invest in taxable government securities.

Investment of public trust funds in federal tax-exempt securities never reached major proportions. It was not until 1933 that their holdings of partially tax-exempt securities exceeded \$100 million. By 1941 they grew to \$500 million, and thereafter declined to a level of \$100 million. With the issuance of taxable obligations in

²¹ Prior to 1920 the War Finance Corporation was the largest source.

²² Since these special issues are not included in the gross tax-exempt debt for purposes of this study, no account is taken of their ownership.

²³ *Annual Report of the Secretary of the Treasury, 1927*, p. 144; *1940*, p. 224.

1941, states and localities began to take advantage of their higher yields.

Holdings of the Federal Reserve Banks. The Federal Reserve banks are fiscal agents of the federal government, as well as instrumentalities for control of the money supply, and their holdings of tax-exempt bonds have not been dictated by purely investment considerations.²⁴ Since 1923 Federal Reserve policy in this respect has been determined by the Open Market Committee, often in consultation with the Treasury Department.²⁵

The Federal Reserve banks played an important role in the financing of World War I, both directly through purchases of government securities and indirectly through their discount operations. Their direct holdings of federal securities increased from \$8 million in June 1915 to \$66 million in June 1917 and then expanded to \$255 million in June 1918 and \$292 million in June 1919. However, these wartime direct holdings did not exceed 2 per cent or so of the total federal debt outstanding during this period.²⁶ Wholly tax-exempt securities represented only a small part of these holdings.

After increasing to \$555 million in June 1922, Federal Reserve holdings declined to between \$200 and \$400 million during most of the 1920's and never exceeded about 2 per cent of the total federal debt. Holdings of wholly tax-exempt securities were negligible.

After 1930, the Federal Reserve banks became a significant fac-

²⁴ World War II and postwar open-market policy was somewhat compromised by the support of the government bond market, but tax-exempt securities were no longer an important factor.

²⁵ This committee was not given statutory status until 1933, although its origins are found in the Open Market Investment Committee of 1922. It was reorganized in 1935, when it was given plenary powers. See G. L. Bach, "The Federal Reserve and Monetary Policy Formation," *American Economic Review*, December 1949, 1173-1191.

²⁶ Of considerably greater importance to their wartime support of the government bond market was their discount operations with the member banks. The Treasury Department encouraged subscribers to Liberty bonds to finance their purchase by bank loans, using the bonds as collateral. The member banks in turn borrowed from the Reserve banks at preferential rates on their own 15-day notes, secured by government bonds, up to their full par value. The volume of such loans is indicated by the situation in June 1918, when total member-bank borrowing from the Reserve banks stood at \$1,160 million, of which 80 per cent was estimated to be secured by United States government obligations. (Beckhart, *op. cit.*, pp. 294, 297.)

tor in the market for government securities, when active measures were taken to promote business recovery by an expansion of bank credit. By June 1932 Federal Reserve investments rose to 9.5 per cent of federal public marketable securities. Such holdings of tax-exempt securities continued to increase to over \$2.5 billion in 1937-1939 but, because of the expanding federal debt, declined to around 6 per cent of the total. With the issuance of federal taxable securities in 1941, Reserve bank holdings of tax-exempt securities declined and after 1950 disappeared.

Before 1930, Reserve bank holdings of federal wholly tax-exempt securities were negligible. Between 1930 and 1939, however, they exceeded partially tax-exempt issues in importance and ranged between 13 and 21 per cent of the total amount outstanding. Wholly tax-exempts were no longer held after 1944. Although partially tax-exempt securities owned by the Reserve banks exceeded the wholly tax-exempts owned after 1939, they never represented more than around 4 per cent of the total amount outstanding.