

This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: The Ownership of Tax-Exempt Securities, 1913-1953

Volume Author/Editor: George E. Lent

Volume Publisher: NBER

Volume ISBN: 0-87014-361-1

Volume URL: <http://www.nber.org/books/lent55-1>

Publication Date: 1955

Chapter Title: Institutional Holdings Of Tax-Exempt Securities

Chapter Author: George E. Lent

Chapter URL: <http://www.nber.org/chapters/c6457>

Chapter pages in book: (p. 56 - 78)

Institutional Holdings of Tax-Exempt Securities¹

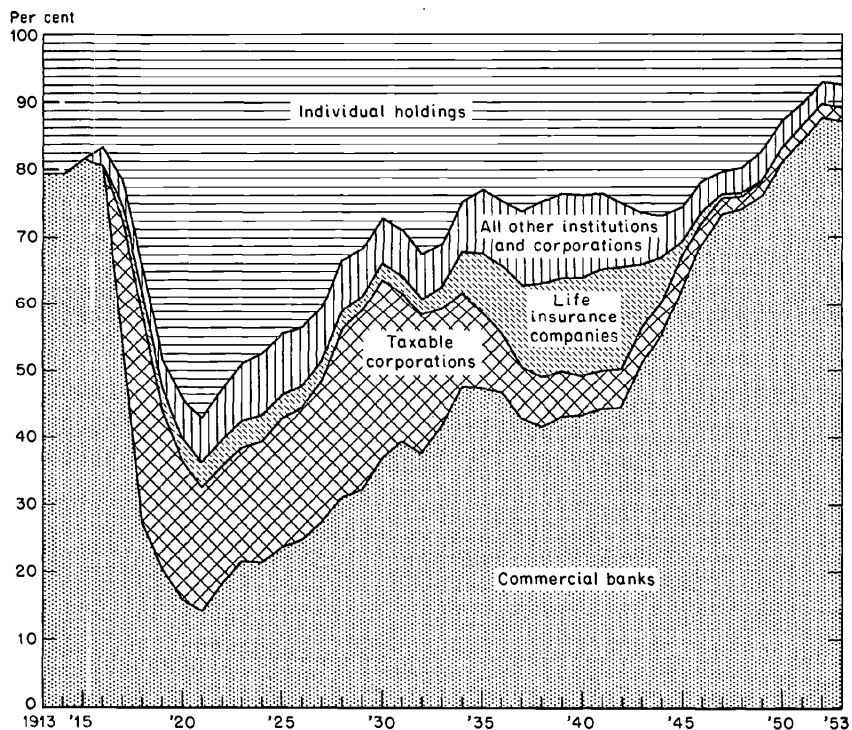
The various classes of corporations which comprise the institutional market for tax-exempt securities have been subject to highly differential federal taxation over the years. Mutual savings banks and fraternal benefit societies, as well as certain mutual non-life insurance companies, have traditionally been tax-exempt. Life insurance companies, both stock and mutual, have enjoyed preferential tax treatment, the extent of which has varied from time to time. Commercial banks, joint-stock savings banks, and stock fire, marine, and casualty insurance companies (with some exceptions) have long been fully subject to the corporation income tax, as well as excess profits taxes, but have escaped special surtaxes levied at various times. Finally, the industrial corporation itself, which has been a large source of demand for government securities, has been the object of the full scale of corporation income and excess profits taxes.

Charts 5 and 6 show the percentage distribution of ownership of privately held federal tax-exempt securities and state and local securities, respectively, by the principal classes of institutions and by individuals over the period from 1913 to 1953.

¹ See Appendix E for sources of data and detailed description of estimating methods. The tax-exempt holdings of the principal classes of investment institutions may be estimated with varying degrees of accuracy over the period 1913-1953. Because of the typical failure to classify the tax-exempt status of federal bonds, it has been necessary to group these into a single category including both wholly and partially tax-exempt issues. Estimates have been made, however, of *total* institutional investments in wholly tax-exempt federal securities. The limited data on investments in farm loan securities do not permit complete analysis of their distribution. The analysis is therefore limited principally to federal direct and guaranteed issues and state and local securities.

CHART 5

PERCENTAGE DISTRIBUTION OF INSTITUTIONAL AND INDIVIDUAL HOLDINGS
OF PRIVATELY HELD FEDERAL TAX-EXEMPT SECURITIES,
JUNE 30, 1913-JUNE 30, 1953



Source: Table B-2.

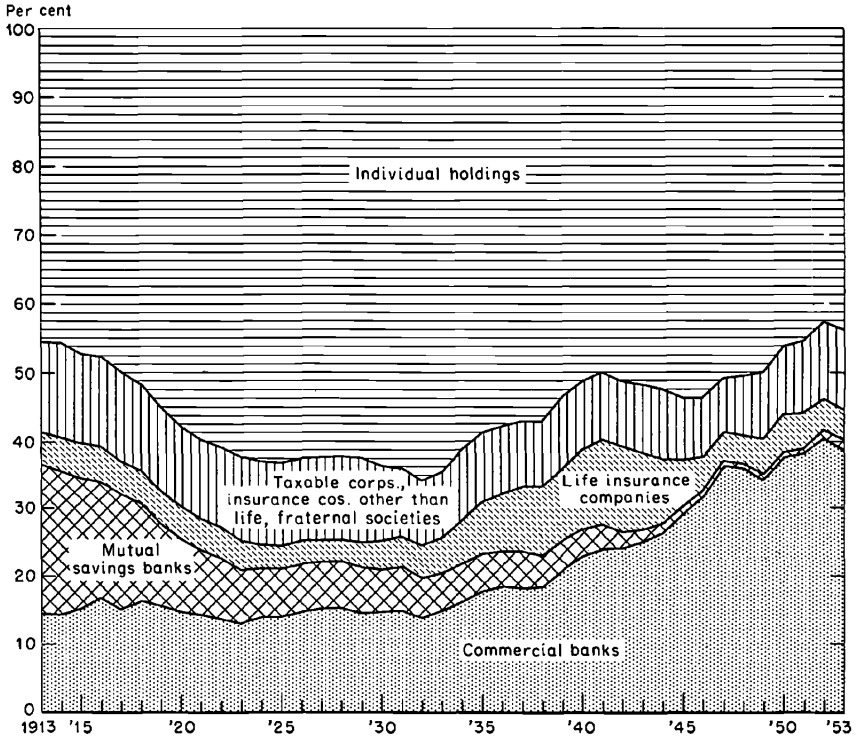
Commercial-Bank Holdings

Federal Tax-Exempt Securities. World War I Experience. Commercial banks have always dominated the market for federal tax-exempt securities, both through their direct acquisitions and through their lending on collateral loans. Prior to 1917 national banks in particular accounted for virtually all the federal debt outstanding, because these obligations carried the circulation privilege as security for national bank notes.

Banks played an indispensable role in the financing of World War I through their expansion of bank deposits necessary to accom-

CHART 6

PERCENTAGE DISTRIBUTION OF INSTITUTIONAL AND INDIVIDUAL HOLDINGS OF PRIVATELY HELD STATE AND LOCAL SECURITIES, JUNE 30, 1913-JUNE 30, 1953



Source: Table B-1.

moderate Treasury borrowing and the greatly expanded needs of business. Commercial banks initially absorbed about one-half of the increase in the federal debt through June 1917. However, their relative holdings progressively declined with the greatly expanded volume placed on the market through June 1919, when they owned about one-fifth of all private holdings. Liquidation of these investments began in mid-1919, with the contraction in the supply of short-term certificates, and continued until 1921. In these two years, total bank holdings were reduced by more than one-third to about 14 per cent of the total.²

² The participation of the commercial banks in the government bond market was not limited to their direct investments. Under the Treasury slogan of "borrow and

Although the corporation normal tax rate (from which the interest on most of these bonds was exempt) reached a level of 12 per cent in 1918 and 10 per cent between 1919 and 1921, such exemption served simply to lower the nominal interest rate that banks were willing to accept. They were not only subject to the pressure of patriotic appeals but were also assigned quotas for their share in new offerings. Following the end of the war, banks continued to underwrite the sale of certificates to their customers at the request of the Treasury Department, but the removal of wartime compulsions left bank purchases to their own discretion.

Excess Reserves and the Growth of Bank Holdings, 1921–1940. The end of the year 1921 marked a reversal of the previous trend out of governments. The abundance of free funds made available by the large-scale liquidation of commercial loans between 1920 and most of 1922 made possible substantial accretions in federal bonds.

By this time the Treasury was marketing its securities strictly on an investment basis.³ Government bonds were then selling at a discount to yield over 5 per cent. The increase in the corporation normal tax rate from 10 to 12.5 per cent, which accompanied the repeal of the excess profits tax, may also have been an inducement. Commercial banks continued to increase their holdings of the diminishing supply of governments, until by 1930 they owned 37

buy," the banks financed the purchase of Liberty bonds by others through collateral loans. The relative amount of such securities held as collateral between December 1918 and June 1921 is indicated by the following data for weekly reporting Federal Reserve member banks:

	<i>Owued</i>	<i>Held as Collateral</i>	<i>Total</i>
	<i>(millions of dollars)</i>		
Dec. 27, 1918	\$1,787.5	\$1,269.4	\$3,056.9
June 27, 1919	1,919.9	1,380.6	3,300.5
Dec. 26, 1919	1,660.7	1,020.4	2,681.1
June 25, 1920	1,291.1	1,026.3	2,317.4
Dec. 31, 1920	1,121.9	908.9	2,030.8
June 29, 1921	1,103.6	672.3	1,775.9

Source: *Federal Reserve Bulletin*. Bonds owned to secure circulation are included. Estimated for December 1920 and June 1921.

³ *Annual Report of the Secretary of the Treasury, 1922*, p. 34.

per cent of total private holdings, compared with only 14 per cent in 1921.

After 1931 substantial excess reserves were generated as a result of the monetary policy of the federal government and the Federal Reserve banks, and the low level of demand for commercial credit from borrowers regarded by the banks as good risks.⁴ Reserve bank purchases of government securities and the inflow of gold increased member-bank excess reserves from \$1.8 billion in June 1934 to a peak of \$3 billion in early 1936. Mainly as a result of this credit expansion, commercial-bank holdings of the expanding federal debt increased to around 47 per cent of total private holdings between 1934 and 1936.

Temporary sterilization of gold and increases in reserve requirements in 1936 brought this easy money policy to a halt. Commercial-bank investments in government securities declined through 1938 to about 42 per cent of private holdings. This interval was followed by a period of credit relaxation which induced an increase in bank holdings of federal tax-exempt issues to an all-time peak of \$16.3 billion in 1940, or 43 per cent of the total.

Commercial banks continued to maintain a high level of investment in federal tax-exempt bonds despite the decline in their supply. After 1942 these securities were increasingly concentrated in bank portfolios, until by 1952 they owned an estimated 87.5 per cent of the available supply.

Tax Considerations, 1940–1953. The sharp increase in corporation normal tax rates after 1939 greatly enhanced the attractiveness of partially tax-exempt securities to large corporations. The corporation normal tax rate applicable to banks was raised sharply from 16.5 per cent in 1939 to 24 per cent in 1940, where it remained through 1949. In 1941 the corporation tax was split into a normal rate and surtax rate (initially 7 per cent) so as to avoid

⁴ Between March 1932 and October 1936 \$1.6 billion additional reserves were made available by Reserve bank purchases. Excess reserves were also greatly augmented by the inflow of gold following the devaluation of the dollar and demonetization of gold, officially approved in January 1934 by the Gold Reserve Act. Although the direct accretion in value of the gold stock was "sterilized," devaluation was followed by a steady stream of gold from abroad which entered into the monetary base until 1936, when gold imports were temporarily sterilized.

any further tax advantage to holders of partially tax-exempt securities. After a reduction to 23 per cent in 1950, however, the normal tax rate was raised in two stages to 30 per cent in 1952 and 1953.

A greater rise in the combined normal and surtax rates, shown in Table 4, below, would appear to have proved an even greater attraction for the purchase of wholly tax-exempt notes and certificates. Banks were also subject to wartime excess profits taxes between 1940 and 1945, which further enhanced the attraction of wholly tax-exempt investments.⁵ Both partially and wholly tax-exempt income was exempt from the excess profits tax of 1950–1953.

Despite the high level to which corporation rates were raised after 1939, however, the proportion of all privately owned federal wholly tax-exempt securities held by banks declined from around 55 per cent in 1936 to around 15 per cent in 1944.⁶

State and Local Securities. A Record of Continuous Growth. Since World War I, commercial banks have been the largest single institutional market for state and municipal obligations. (Prior to this they were exceeded by mutual savings banks.) Between 1913 and 1931 their holdings rose from about \$.5 billion to \$2.4 billion. During this period their share of total private holdings ranged within the narrow limits of 13 to 17 per cent.

After declining in 1932, bank investments in municipals rose to a prewar peak of \$3.7 billion in June 1941, when they accounted for about 24 per cent of such privately held securities. As in the case of federal securities, their strong demand for state and local securities during this period is largely attributable to the increased availability of bank credit.

Over the war period commercial banks made a net accretion in their state and local holdings of about \$.4 billion in the face of a contraction in the total supply of about \$2.8 billion between June 1940 and June 1946.

⁵ Corporations using the invested capital method, however, could elect to include wholly tax-exempt income in their taxable income (Internal Revenue Code of 1939, Sec. 720d). In this case such securities were included in their admissible assets. No similar election was provided in the Excess Profits Tax Act of 1950.

⁶ Estimated from reports of the Federal Deposit Insurance Corporation, 1934–1940, and annual reports of the Treasury Department, 1941–1944.

TABLE 4

COMPARATIVE YIELDS ON HIGH-GRADE LONG-TERM MUNICIPAL AND CORPORATION BONDS, AND CORPORATION TAX RATES APPLICABLE TO BANKS, 1919-1953
(per cent)

YEAR	AVERAGE YIELDS			DIFFERENTIAL AS PERCENTAGE OF CORPO- RATION YIELD	CORPORATION TAX RATES	
	<i>Municipal Bonds</i>	<i>Corporation Bonds</i>	<i>Differ- ential</i>		<i>Normal and Surtax</i>	<i>Excess Profits Tax^a</i>
1919	4.20	5.34	1.14	21	10 ^b	20-40
1920	4.54	5.92	1.38	23	10 ^b	20-40
1921	4.70	5.82	1.12	20	10 ^b	20-40
1922	4.09	5.08	.99	20	12.5	
1923	4.05	5.07	1.02	20	12.5	
1924	4.00	5.00	1.00	20	13.5	
1925	3.97	4.84	.87	18	13.5	
1926	3.98	4.73	.75	16	13.5	
1927	3.91	4.55	.64	14	13.5	
1928	3.92	4.50	.58	13	12	
1929	4.20	4.79	.59	12	11	
1930	3.97	4.63	.66	14	12	
1931	3.72	4.50	.78	17	12	
1932	3.96	5.26	1.30	25	13.75	
1933	3.69	4.65	.96	21	13.75	
1934	3.20	4.06	.86	21	13.75	
1935	2.73	3.50	.77	22	13.75	
1936	2.57	3.22	.65	20	15 ^c	
1937	2.52	3.06	.54	18	15 ^c	
1938	2.25	2.85	.60	21	16.5 ^d	
1939	2.08	2.67	.59	22	16.5 ^d	
1940	1.83	2.44	.61	25	24	25-50
1941	1.54	2.50	.96	38	31 ^e	35-60
1942	1.66	2.57	.91	35	40 ^e	81
1943	1.39	2.49	1.10	44	40 ^e	81
1944	1.16	2.57	1.41	55	40 ^e	85.5
1945	1.07	2.49	1.42	57	40 ^e	85.5
1946	1.10	2.44	1.34	55	38 ^e	
1947	1.45	2.53	1.08	43	38 ^e	
1948	1.87	2.71	.84	31	38 ^e	
1949	1.66	2.58	.92	36	38 ^e	
1950	1.56	2.55	.99	39	42 ^e	15
1951	1.61	2.78	1.17	42	50.75 ^e	30
1952	1.80	2.88	1.08	38	52 ^e	30
1953	2.31	3.12	.81	26	52 ^e	30

With the postwar revival of state and local borrowing, bank holdings more than doubled from \$4.1 billion in 1946 to \$10.6 billion in June 1953. Until 1952 banks absorbed one-half of the increase in total private holdings, with the result that they owned 40 per cent of the total compared with a prewar proportion of 24 per cent. In 1953, however, commercial banks acquired only 25 per cent of the year's increase in private holdings. This declining demand apparently reflected in part the tightened money conditions of early 1953 as well as the huge volume of securities of all types placed on the market during this period.

Tax Considerations. The comparative annual yield on high-grade state and local securities and taxable industrial bonds of comparable maturity, over the period 1919–1953, is indicated by Table 4. This shows a differential interest rate in favor of corporation securities of at least .5 per cent during the entire period, ranging to over 1 per cent between 1919 and 1923, in 1932, and during most of the years after 1940. In 1944–1945 an interest differential of around 1.4 per cent was attained. Of greater significance, however, is the percentage by which the average yield on tax-exempt bonds fell below yields on taxable bonds of comparable grade and maturity.

The relative interest differential between high-grade municipals and industrial bonds tended to vary with corporation income tax rates. Between 1919 and 1929 it drifted downward from over 20 per cent to 12 per cent, in general conformity with the level of corporation tax rates. After 1929 the relative differential tended to rise with the level of corporation income tax rates, until by 1940 the two were roughly equivalent. Between 1944 and 1946 the

NOTES TO TABLE 4

^a Excluding the declared-value excess profits tax in effect during the years 1932–1946.

^b Based on net income in excess of the excess profits tax for the current year.

^c Corporations other than banks and insurance companies were subject to a tax on undistributed profits ranging from 7 to 27 per cent after deduction of income tax.

^d Corporations other than banks and insurance companies were subject to a 19 per cent rate with a 2.5 per cent credit for dividends paid.

^e Combined normal tax and surtax.

Source: Bond yields: 1919–1936, from 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 and Aaa industrial bonds.

differential rose substantially above corporation normal and surtax rates but remained below excess profits tax rates. After 1946 the differential tended to converge to a remarkable degree with corporation income tax rates.

In 1953, however, the unprecedented volume of new municipal securities placed on the market—over \$5 billion—encountered restricted money-market conditions which reduced the average yearly yield differential to about 26 per cent of that of corporate industrial securities. Within a year—August 1952 to June 1953—the average yield differential declined from around 40 per cent to around 23 per cent.

During most of this period the relative yield differential in favor of high-grade corporation bonds apparently exceeded federal corporation normal and surtax rates. This relationship was conspicuously true of the war period, which was characterized by two unusual features of the corporation tax structure. One factor was the so-called normal and surtax notch rates on income just above \$25,000, which rose to as high as 53 per cent during the years 1942 through 1949.⁷ There is little evidence, however, that such rates significantly influenced yield differentials of taxable and tax-exempt securities. Between 1940 and 1944, for example, there was a decline in the average tax-exempt holdings of banks with income within the notch area.⁸ Moreover, after 1946 the average yield differential declined to below its normal relationship with the basic corporation tax rates. The other unusual factor was the excess profits tax. Banks apparently were little affected by this tax, however, either during the war or during the 1950–1953 period.⁹

⁷ These rates were as follows:

YEARS	INCOME BRACKET	RATE		
		Normal (%)	Surtax (%)	Total (%)
1940	\$25,000–\$38,565	36.9	0	36.9
1941	25,000– 38,461	37.0	7	44.0
1942–1949	25,000– 50,000	31.0	22	53.0

⁸ *Annual Report of the Federal Deposit Insurance Corporation, 1940, and 1944.*

⁹ In 1943, for example, only 486 of 12,239 banks with net income reported excess profits tax. Excess profits tax liability of \$2.8 million was reported by these banks,

It may be asked what net tax advantage, if any, there is in tax-exempt investments if the difference in their yield with respect to taxable corporation bonds exceeds the corporation tax rate. One technical consideration is the fact that the entire gross income from tax-exempt securities is free of tax, since operating or investment expenses are not allocable to such income for tax purposes. Before 1942 there was also some tax advantage in the purchase of high-coupon bonds at a premium. Since the premium was not required to be amortized, the interest was completely tax-exempt, and a capital loss could be taken on sale or redemption of the bond. In 1942 the law was amended to require amortization of the premium by other than dealers.¹⁰

More fundamental, however, are the imponderables involved in the measure of the interest differential itself. Probably most important is the comparative degree of risk attached to the different classes of securities. In this respect high-grade state and local bonds are probably more akin to federal securities than to private bonds. Imperfections of the market as well as market prejudices are also sometimes significant. Securities of local housing authorities, for example, the income of which is virtually guaranteed by the federal government, frequently sell at yields only slightly below yields on comparable federal bonds, despite their tax exemption. Municipals also generally enjoy state and local tax privileges in the state of issue, which tend to reduce their yield. For example, securities of the state and local governments of Pennsylvania are exempt from state and local taxes on intangible property. These taxes total 8 mills and 10 mills on the dollar, respectively, in Philadelphia and Pittsburgh.

Important differences in yield may also arise from differences in

compared with \$457 million net income. Dept. of the Treasury, *Statistics of Income for 1943*, Part 2, p. 85. In 1951, excess profits taxes of banks amounted to only \$20 million on net profits of \$1.4 billion. R. C. Kolb, "Excess Profits Taxes of Commercial Banks," *Federal Reserve Bulletin*, June 1952, pp. 1-17.

¹⁰ Internal Revenue Code, 1939, Sec. 125. In 1950, dealers using the inventory method were required to amortize the premium on bonds with a maturity of less than five years if such bonds are held for more than thirty days.

maturity, redemption provisions, and coupon rates.¹¹ The variation of bond yields with term to maturity is well known. The noncallable feature of most municipal bonds protects the investor against a decline in interest rates. On the other hand, most corporation securities are callable and run some chance of refunding at lower rates. Since yields also vary directly with coupon rates, it is important for measurement purposes to select securities trading at or near par. Finally, it is a moot question whether the relative yield differential between high-grade tax-exempt and taxable securities is comparable to that between lower-grade securities, which constitute the largest part of the supply.

Although bond interest differentials may be measured only imperfectly, their historical variation with income tax rates (and with the supply of tax-exempt and other securities) is still apparent.

*Other Taxable Corporations*¹²

Federal Tax-Exempt Securities. The Impact of World War I. By June 1917 business corporations had invested an estimated \$500 million in the first Liberty loan, or about 20 per cent of the total amount outstanding. Over the next twelve months they absorbed an additional estimated \$3 billion in Liberty loans and certificates, which brought their share of the total to about 30 per cent. Their holdings continued to rise to an estimated level of \$5.8 billion in June 1919, but their share of the total fell to around 24 per cent.

As in the case of World War II, these accumulations may have reflected the need for liquidity in meeting postwar contingencies.¹³

¹¹ See David Durand and Willis J. Winn, *Basic Yields of Bonds, 1926-1947: Their Measurement and Pattern*, Technical Paper 6 (National Bureau of Economic Research, 1947), pp. 15-16, 31-40. For a good discussion of the factors influencing the yield differential, see also L. C. Fitch, *Taxing Municipal Bond Income* (University of California Press, 1950), pp. 29-44.

¹² This class of investors includes nonfinancial business corporations as well as financial corporations other than banks and insurance companies. It therefore includes security brokers and dealers, investment companies, loan and commercial credit corporations, real estate and holding companies, as well as miscellaneous other financial organizations.

¹³ Cf. the view of Charles H. Schmidt and Ralph A. Young, *The Effect of War on Business Financing: Manufacturing and Trade, World War I*, Occasional Paper 10 (National Bureau of Economic Research, 1943), p. 50.

Inducement was given to the purchase of partially tax-exempt obligations by their exemption from normal tax, which reached 12 per cent, and in the case of the first Liberty loan and Victory loan by their exemption from excess profits taxes and war profits taxes as well. However, such exemption was bartered for lower coupon rates of interest.

During the latter part of 1919, corporations began a steady liquidation of their government securities to finance new investment in capital goods and inventories. Between June 1919 and June 1920 their holdings declined an estimated \$1 billion to about \$4.8 billion. This postwar liquidation was substantially completed over the next two years, when holdings declined another \$1 billion to \$3.8 billion, or about 17.5 per cent of all private holdings. Much of this reduction apparently was accounted for by their use for payment of income tax liabilities.¹⁴

During the next few years corporation holdings of government bonds became stabilized at a level of around \$3.6 billion and accounted for between 17 and 21 per cent of all private holdings. In 1928 and 1929 corporation investments then rose to around \$4 billion, or more than one-fourth of all private holdings.

World War I thus introduced a radical structural change in the composition of business assets. Although corporations held modest amounts of temporary investments in marketable securities before 1917, their total marketable investments now rivaled cash in importance. Government securities were held not for permanent investment purposes but primarily as a medium for employment of excess cash balances. They also represented a convenient means of funding income tax liabilities, although during the 1920's corporation federal tax liabilities never exceeded one-third of their estimated investments in government bonds.

¹⁴ To meet the needs for tax accruals the Treasury tailored special issues of certificates maturing on quarterly installment dates, which were accepted at par in payment of tax liabilities. Beginning in August 1918, eight series aggregating \$3.4 billion were issued in anticipation of income and war and excess-profits tax liabilities payable in 1919. This policy was continued for later years. These certificates carried interest ranging from 4 to 4½ per cent, which was exempt from normal tax.

Decline of Government Bond Investments Following 1930. The business depression of the 1930's was accompanied by a steady decline of corporation investments in United States government securities. Although the federal debt expanded, corporation holdings were reduced from \$3.8 billion in 1930 to \$2.3 billion in 1940, when they amounted to only 6 per cent of private holdings. Non-financial corporations accumulated substantial liquid funds between 1933 and 1940, but they were kept largely in the form of cash rather than invested in government securities as was customary in the past.¹⁵

Corporation holdings of tax-exempt federal securities continued to decline after 1940, when they were displaced by the new taxable issues which were better designed to meet the needs of business for liquidity and tax funding. By mid-1946 their tax-exempt holdings dropped to an estimated \$.7 billion compared with total investments of \$25.2 billion in Treasury securities.¹⁶

State and Local Securities. Appreciable amounts of state and local securities have traditionally been held by business corporations on a temporary investment basis. Prior to World War I such investments represented about 7 per cent of total private holdings. They continued to increase through the 1920's to around \$750 million in 1929, but their relative importance dropped to about 5 per cent of the total in 1930. They then gradually declined to between 3.3 and 4.5 per cent of total private holdings during the 1930's. Since World War II they have further dropped to an estimated 2.5 per cent of total private holdings in 1952 and 1953.

Although the elimination of federal tax-free securities made municipal bonds an increasingly important means of avoiding the corporation surtax rate instituted in 1940, and the excess profits tax of 1940-1945, corporations evidenced little interest in them. A similar lack of interest was manifest during the high post-Korean income and excess profits tax rates. One important consideration may be their limited marketability as compared with governments.

¹⁵ Between 1933 and 1940, cash balances increased from \$5.6 billion to \$10.3 billion, while holdings of federal securities declined from \$3.4 billion to \$2.3 billion. *Statistics of Income for 1933, and 1940, Part 2.*

¹⁶ For the latter estimate see *Treasury Bulletin*, January 1948, p. 36.

Legal Reserve Life Insurance Companies

Federal Tax Policy. The investment policy of life insurance companies with respect to tax-exempt securities has revolved on significant changes in the federal tax treatment of this industry. Prior to 1921 life insurance companies were taxed like other corporations on their total net income. This included net underwriting profits and investment income in excess of contractual interest requirements on reserves and dividend return of premiums. Since tax-exempt interest was excluded from the tax base, there was some advantage in holding tax-exempt securities.

In 1921 underwriting profits were excluded from taxation, and taxable income was limited to net investment income. Although a standard deduction of 4 per cent was allowed for interest on policy reserves, this deduction was reduced by the amount of the tax-exempt income received. Insurance companies thus received no tax advantage because the same amount as was gained in tax-free income was deducted from the credit allowed for interest on policy reserves.¹⁷ Since their tax-exempt income was in effect taxed, insurance company holdings of tax-exempt holdings were allowed to decline.

The constitutionality of this provision was challenged by the National Life Insurance Company of Vermont, and on June 4, 1928, the Supreme Court declared that "Congress had no power purposely and directly to tax State obligations by refusing to their owners deductions allowed to others. It had no purpose to subject obligations of the United States to burdens which could not be imposed upon those of a state."¹⁸

¹⁷ According to Vickrey, representatives of the insurance companies agreed that interest on government bonds should not be specifically exempted because of the favorable treatment accorded them by the reserve earnings deduction. W. Vickrey, "Insurance under the Federal Income Tax," *Yale Law Journal*, June 1943, p. 575.

¹⁸ *National Life Insurance Company v. United States*, 277 U.S. 508 (1928). Justices Brandeis, Holmes, and Stone dissented. The Court held that tax-exempt credits may not be taxed directly or indirectly, and in levying a tax on property, "they must be treated as non-existent." The Court proclaimed it to be "settled doctrine . . . that the United States may not tax state or municipal obligations." On the other hand, Justice Stone, dissenting, contended that "while it may be conceded that the petitioner has been discriminated against, the discrimination occurs only in respect of an

(Continued on page 70)

As a result of this decision, life insurance companies were given an even greater bounty than was originally intended by the 4 per cent credit for interest on reserves. It was not until 1932 that Congress attempted to remedy this "double deduction" for tax-exempt interest but succeeded only in reducing the credit to a standard $3\frac{3}{4}$ per cent.¹⁹

Because of declining interest rates the taxable income of insurance companies rapidly diminished under this standard rate of credit for reserves.²⁰ It should not be inferred, however, that tax-exempt income was of no tax benefit to the industry. Since it was not only excluded from net income but also allowed as a reserve credit, investments in such obligations probably served to keep many insurance companies free of federal income tax.

In 1942 the taxation of insurance companies was completely revised by bringing the reserve credit into line with current investment yields and removing the double deduction of tax-exempt income.²¹ In place of the previous deduction for reserves, Congress substituted a "reserve and other policy liability credit" to be computed each year by the Secretary of the Treasury in accordance with a statutory formula. This credit was a flat percentage of net investment income *after* allowances for tax-exempt interest. By including the tax-exempt interest in the denominator of the formula (but not in the numerator), the percentage of net taxable income allowed as a deduction was reduced and the "double deduction" for tax-exempt interest was, in effect, eliminated. This formula proved excessively responsive to changes in interest rates and in 1947 and 1948 had the effect of exempting the entire indus-

act of bounty. Petitioner's only complaint is that Congress has not granted it as large an exemption—purely a matter of grace—as it has accorded to others owning no tax-exempt securities."

¹⁹ Revenue Act of 1932, Sec. 203 (2). The 4 per cent rate was retained for a small amount of contracts still on the books of the insurance companies at rates of 4 per cent or more.

²⁰ Federal income taxes paid by all life insurance companies dropped from 1.7 per cent of net investment income in 1929, to only 0.1 per cent in 1935, and remained at this negligible fraction through 1941. Treasury Department, "Taxation of Life Insurance Income," Statement of Secretary Snyder before the House Committee on Ways and Means, 81st Cong., 2d sess., Feb. 3, 1950, Exhibit 3.

²¹ House Committee on Ways and Means, *Report on the Revenue Bill of 1942*, H.R. 2333, 77th Cong., 2d sess., 1942, p. 107.

try from federal income tax on its life insurance investment income.

In 1950 this formula was replaced by a stopgap formula, retroactive to 1949, which was designed to exact a moderate tax on investment income. The Revenue Act of 1951 substituted another stopgap provision which assessed all life insurance companies at a rate of 3.75 per cent of their first \$200,000 of investment income and 6.5 per cent on income over \$200,000. This was renewed through 1954, pending further study.

Federal Tax-Exempt Investments. Life insurance companies were never important holders of World War I tax-exempt obligations. Their investments rose to a level of about \$875 million in 1922–1923, when they accounted for only 4 per cent of total private holdings. They declined to a low of \$350 million in 1930, or about 2.5 per cent of the total.

During the 1930's, insurance companies were faced with shrinking investment opportunities for their large accumulation of funds. Since the growing federal debt constituted the largest single source of new investment, their holdings of federal securities expanded to a peak of \$5.6 billion in 1940, or 15 per cent of all private holdings, and were exceeded only by investments of commercial banks. Such investments declined between 1940 and 1942, but continued to account for about 15 per cent of all privately held federal tax-exempt securities.

After the 1942 tax revision, insurance companies rapidly liquidated their holdings of tax-exempt governments. By June 1947 their total investment was reduced to \$100 million, or about .5 per cent of total private holdings. This liquidation of tax-exempt issues was accompanied by greatly increased investments in fully taxable governments.²²

State and Local Obligations. Investments of life insurance com-

²² By June 1943, tax-exempt holdings amounted to only 28.8 per cent of their total investments in governments, compared with 66.3 per cent in June 1942; by 1944, they declined to 12 per cent and in June 1945, to 3 per cent of their government portfolio. This compares with the relative distribution of commercial bank holdings in tax-exempt governments of 31.2 per cent in 1943, 21.6 per cent in 1944, and 18 per cent in 1945. (*Annual Report of the Secretary of the Treasury, 1943*, pp. 736–737; *1945*, pp. 678–680.)

panies in state and local securities were modest throughout the entire period 1913–1928. They rose from around \$175 million in 1913 to \$375 million in 1922 and remained virtually unchanged at this level until 1928 despite the considerable increase in their supply. As a result, the share of life insurance companies in total private holdings declined from around 5 per cent in the immediate prewar period to about 3 per cent in 1927 and 1928.

The National Life Insurance Company decision in 1928 awakened new interest in municipal bonds. Investments increased rapidly from \$400 million in 1928 to almost \$2 billion in 1941, when they accounted for about 13 per cent of private holdings.

Life insurance investments in state and local securities then declined to little more than 4 per cent of the total in 1947. The new federal tax formula adopted in 1942 reduced the former advantage of investing in tax-exempt securities, and insurance companies found unattractive the exceedingly low yields to which they were driven by the high wartime income tax rates generally applicable to other investors. During the war period federal income taxes averaged less than 3 per cent of their investment income. Not only were holdings allowed to run off at maturity, but also many companies took advantage of the favorable price situation to dispose of their investments in tax-exempt bonds and to invest the proceeds in United States government bonds.²³ This policy was encouraged by the freedom of insurance companies from capital-gains tax. Their exemption from income tax by operation of the formula in 1947 and 1948 of course discouraged their reentry into the tax-exempt market.

Despite the low statutory rate of tax on their investment income after 1948, life insurance investments in state and local securities increased from around \$600 million in 1947–1948 to around \$1.2 billion between 1950 and 1953. Their renewed interest in such investments may be explained in large part by the increased availability of revenue bonds the yields of which are comparable to those on taxable securities. However, state and local investments

²³ *Life Insurance Fact Book* (Institute of Life Insurance, 1949), p. 55; Life Insurance Association of America, *Proceedings, 1944, 1945, 1946*, p. 106.

of insurance companies remain below 5 per cent of total private holdings.

Fire, Marine, and Casualty Insurance Companies

Tax Considerations. Unlike the tax treatment of life insurance companies, a distinction has historically been made between mutual and stock non-life insurance companies for purposes of federal taxation. Further classification has been made between marine insurance companies and all other types of businesses underwriting fire and casualty insurance.²⁴

Stock marine, fire, and casualty companies have been consistently taxed like other business corporations on their entire earnings, including underwriting and investment income. Since 1921 their taxable income has been defined essentially by the legal requirements of the various states within which they operate.

Before 1942, complete exemption was given to mutual hail, cyclone, casualty, or fire insurance companies, the income of which was used or held exclusively for the purpose of paying losses and expenses. Those not specifically exempted were allowed a deduction for premium dividends and amounts retained for expenses, losses, and reinsurance reserves.²⁵ In 1942 the tax treatment of mutual companies was revised to restrict their exemption to small companies with gross receipts of less than \$75,000 or net investment income of less than \$3,000. Larger mutuals were taxed at the corporation rate on their net investment income or 1 per cent on the sum of their net premiums (after deduction of premium dividends) and gross investment income, whichever was higher. Most taxable mutuals pay the 1 per cent gross-receipts tax. Their total resources, however, are only about a fourth as large as those of stock casualty

²⁴ The taxation of health and accident insurance is analogous to that of life insurance, since it is largely underwritten by this class of company. For this reason it is lumped with life insurance for purposes of this study. Life insurance companies are taxed on their accident and health business under a special formula providing for tax at regular corporate rates on a base equal to 3.25 per cent of their nonlife reserves.

²⁵ Although this provision of Sec. 101 was originally designed to exempt only small and local mutual companies, most mutual companies enjoyed an outright exemption. With few exceptions the remaining mutual companies paid no tax under the method of computing their income, even though not specifically exempted. House Committee on Ways and Means, *Report on the Revenue Bill of 1942*, as cited, p. 113.

and fire insurance companies, which are subject to the regular corporate rate.

Holdings of Tax-Exempt Securities, 1913–1953. The resources of fire, marine, and casualty insurance companies have always been greatly exceeded by those of life insurance companies. Their investments in tax-exempt securities have nevertheless been substantial.

Holdings of United States government bonds rose to \$600 million in 1923 and accounted for a fairly stable proportion of about 3 per cent of all private holdings until 1929, when they declined in importance. They began to rise again to about 4 per cent of the total between 1940 and 1943, and then decreased. After 1940, fire and casualty insurance companies shifted to federal taxable issues. By June 1943, however, their tax-exempt holdings comprised 59 per cent of their government investments, compared with only 29 per cent for life insurance companies.²⁶

State and local obligations held by non-life insurance companies ranged within the narrow limits of 2.4 to 3.1 per cent of all private holdings over the entire period 1913–1930. Between 1930 and 1947 they declined to a slightly lower level of about 2 per cent.

Since the end of World War II there has been a spectacular increase in the holdings of municipal securities by non-life insurance companies from \$250 million to an estimated \$2.0 billion in 1953, when they accounted for over 7 per cent of total private holdings.

Mutual Savings Banks

Mutual savings banks long constituted the largest single class of tax-exempt institutions in the government bond market. Between 1913 and 1953 their total loans and investments expanded from \$3.8 billion to over \$25 billion. Until 1952 they were completely exempted from federal income tax as nonprofit institutions whose earnings accrue to the benefit of the depositors. Beginning in 1952, however, earnings in excess of dividends and certain amounts placed in reserves were made subject to the corporation income tax by the Revenue Act of 1951.

²⁶ *Annual Report of the Secretary of the Treasury, 1943*, p. 739.

Holdings of State and Local Securities. Mutual savings banks were the largest institutional market for state and local securities prior to World War I, when their total investments accounted for 17 to 22 per cent of all such privately held obligations. Their share of the municipal bond market declined steadily to around 7 per cent in the later 1920's, to 4 per cent in 1940, and finally to less than 1 per cent in the postwar period. After 1932, municipals were diverted more and more to the portfolios of commercial banks (and, until 1941, to life insurance companies) the income of which was subject to increasingly higher rates of tax. Commercial banks could thus afford to bid the dwindling supply of tax-exempts away from the savings banks, for whom municipal issues held no tax attractions.

The interest of mutual savings banks in state and local securities was revived in 1952 with the taxation of their undistributed income. Their investments then rose to around \$375 million in June 1953 but represented little more than 1 per cent of all private holdings.

Federal Tax-Exempt Securities. Mutual savings banks have experienced two cycles of investment in federal tax-exempt obligations. In 1913 these holdings amounted to only \$12 million. Following World War I they rose steadily from less than 1 per cent of the total in 1918 to about 5.6 per cent in 1924 and 1925, and then declined to a low of 3.5 per cent in 1930.

Savings banks reentered the government bond market in 1931, and their holdings steadily increased to 8.4 per cent of the total. After 1940, however, taxable government issues provided a higher yield. By 1945 their tax-exempt governments were reduced to less than 1 per cent of all private holdings and represented only 2.2 per cent of their government bond portfolio.²⁷

Between 1932 and 1940, mutual savings banks found it more advantageous to invest in tax-exempt federal securities than in municipals of similar safety and maturity. During this period a steady liquidation of state and local issues was accompanied by an

²⁷ "Treasury Survey of Ownership," *Annual Report of the Secretary of the Treasury, 1945.*

increase of \$2.4 billion in federal tax-exempt issues. Virtually all the federal securities were long-term partially tax-exempt bonds with coupon rates of 2.5 to 3 per cent, which after 1934 were equal to, or in excess of, yields on comparable municipals (Table 3).

A premium is also given to the purchase of federal securities by their exemption from various state taxes. In Massachusetts, for example, securities of state and local governments (other than those of the Commonwealth) must yield at least one-half percentage point more than the return on federal securities to be equally attractive. This is because of the annual state tax of .5 per cent on average deposit balances from which a deduction is allowed for bonds of the United States government and certain other investments. This special form of tax was one important factor inducing Massachusetts banks to invest in government bonds at the expense of private and other public securities as yield differentials narrowed after the mid-1930's.²⁸ In New York State there is no comparable tax situation.

Fraternal Benefit Societies

Tax-Exempt Investments. There are several hundred fraternal associations in the country which are formed for the purpose of providing the payment of life, sick, accident, or other benefits to their members or dependents. Their total assets have grown from around \$200 million in 1913 to over \$2.25 billion in 1952.²⁹ These societies are entitled to complete exemption from federal income tax if they are operated either under the "lodge system" or for the exclusive benefit of the members of a society so operating.³⁰

Investments of fraternal societies in state and municipal obligations increased from about \$100 million in 1913 to a peak of about

²⁸ J. Lintner, *Mutual Savings Banks in the Savings and Mortgage Markets* (Harvard University, Graduate School of Business Administration, 1948), pp. 226, 245.

²⁹ *Statistics of Fraternal Societies*, compiled by Arthur S. Hamilton and published annually by the *Fraternal Monitor*.

³⁰ Internal Revenue Code of 1939, Secs. 101-3. "Operating under the lodge system" is defined as "carrying on of activities under a form of organization that comprises local branches, chartered by a parent organization and largely self-governing, called lodges, chapters, or the like." In 1949 there were 92,345 lodges providing such insurance (*Statistics of Fraternal Societies, 1950*).

\$700 million in 1934, when they accounted for about 4.5 per cent of all private holdings. Their share of total private municipal investments then declined gradually to around 2 per cent in 1953.

On the other hand, their investments in federal tax-exempt bonds have been negligible. In 1921 they aggregated about \$50 million and then dropped to about \$10 million in 1933. They rose to about \$75 million in 1937 and remained at this level until about 1942, when they virtually disappeared.

Investment Policies. In view of their tax-exempt status it is curious that fraternal societies should have had such a high concentration of state and local obligations in their portfolios. Between 1924 and 1936, municipals accounted for around 60 per cent of their total assets. Their relative importance then declined to about 20 per cent of total assets after 1945. The relatively minor interest shown in federal securities is no less surprising.

Investment policies of fraternal benefit societies have been governed by considerations of safety, yield, and, to some extent, maturities. The superior yield of municipal bonds over that of federal securities during most of the earlier period largely explains the relative attraction of the former. Since liquidity was of subordinate importance, there was little need to sacrifice yield for the superior marketability of federal obligations. Yield considerations alone, however, cannot explain the overwhelming preference for municipals over high-grade corporate bonds which would have given a somewhat higher return on investment. This preference might be explained partly by faith in the general excellence of local government credit experience. Fraternal societies are also known as buyers of high-yielding municipals principally of local significance.

The unmistakable influence of the tax structure may be seen in the shift of fraternal societies out of state and local bonds after 1940, when a high premium was placed on their ownership by taxable corporations and individuals subject to high wartime and postwar tax rates. Although their investments in municipals increased after the end of the war, their relative share of the total continued to decline.

Miscellaneous Tax-Exempt Institutions

Less reliable estimates are available on the tax-exempt investments of other tax-exempt institutions.³¹ Available data indicate that investments of these various institutions in state and local securities have been negligible, and they are therefore neglected.³²

Investments of these institutions in federal securities rose to an estimated \$125 million during World War I, where they remained until about 1923. They then declined to about \$50 million by 1927. Over this period their role in the market was negligible, accounting for between .3 and .6 per cent of all private holdings.

With the expansion of the federal debt after 1930 their investments in government bonds increased and between 1934 and 1939 accounted for more than 1 per cent of all private holdings. This new interest in federal securities was probably stimulated by the paucity of traditional investment opportunities. Building and loan associations and two large foundations together accounted for most of this accretion in investment; holdings of fraternal societies never were very large. Beginning in 1941, however, these various tax-exempt institutions began to shift to taxable government securities, and by 1945 their investments in tax-exempt federal bonds were insignificant.

³¹ These include foundations such as the Rockefeller Foundation, the Carnegie Corporation, and related investment funds, colleges and universities, hospitals, churches, and various eleemosynary institutions. Also included are building and loan associations and joint-stock land banks, but not farmers' cooperatives or mutual savings banks. For convenience, federal tax-exempt holdings of fraternal societies are lumped with this class of investors.

³² As of 1930 the largest universities held only \$5 million of state and local securities [Wood, Struthers & Co., *Trusteeship of American Endowments* (1932)]; as of December 1940, holdings of foundations for which information is available showed a total of \$11.5 million [Raymond Rich Associates, *American Foundations and Their Fields* (1942), Chap. V]. Since no continuous data are available for state and local securities, their holdings are not shown here.