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Chapter Title: The Small Proportion of Personal Interest Receipts Reported on Taxable Returns

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II. THE SMALL PROPORTION OF PERSONAL INTEREST RECEIPTS REPORTED ON TAXABLE RETURNS

1. *About one-fourth of individuals' interest income reported on taxable returns in the period 1930–1950*

Although they reflect the general movements of total personal interest receipts, the annual amounts of interest reported on taxable individual income tax returns are also importantly influenced by factors other than the movements of total personal interest receipts, such as statutory changes in the level of personal exemptions, changes in the distribution of income, the relative amounts of taxable and tax-exempt interest, etc. It is nevertheless striking to observe that the high point in the absolute amount of interest reported on taxable individual returns was reached as long ago as 1928. In that year, when only 2.5 million taxable income tax returns were filed, the amount of interest reported on them was $2.0 billion. In 1950, when the number of taxable returns was fifteen times as large and the total amount of income on them seven times as large, the amount of interest they included was

TABLE 12

INTEREST INCOME REPORTED ON TAXABLE INDIVIDUAL RETURNS, 1918–1950

	Interest on taxable returns (millions of dollars)	Adjusted gross income on taxable returns (millions of dollars)	Interest as percentage of adjusted gross income		Interest on taxable returns (millions of dollars)	Adjusted gross income on taxable returns (millions of dollars)	Interest as percentage of adjusted gross income
1918	1,305.6	15,545.9	8.4	1935	813.0	11,437.7	7.1
1919	1,395.3	20,064.7	7.0	1936	902.7	16,023.3	5.6
1920	1.482.0	22.893.4	6.5	1937	882.3	17,407.2	5.1
1921	1,262.2	15,667.2	8.1	1938	866.1	14,548.4	6.0
1922	1,441.8	17,348.8	8.3	1939	900.3	17,873.2	5.0
1923	1,869.3	20,295.4	9.2	1940	987.5	26,214.6	3.8
1924	2,009.0	22,207.4	9.0	1941	1,148.2	49,882.0	2.3
1925	1,641.0	19,962.5	8.2	1942	1,142.3	73,216.3	1.6
1926	1,757.1	19,790.5	8.9	1943	1,095.4	105,248.9	1.0
1927	1,833.6	20,322.9	9.0	1944	1,079.7	115,417.0	0.9
1928	2,032.5	23,700.7	8.6	1945	1,068.6	118,418.3	0.9
1929	2,018.5	23,144.2	8.7	1946	1,227.6	119,115.8	1.0
1930	1,708.4	16,011.3	10.7	1947	1,246.5	136,275.5	0.9
1931	1,141.0	10,490.6	10.9	1948	1,301.2	143,043.7	0.9
1932	1,012.1	8,716.1	11.6	1949	1,514.8	139,493.2	1.1
1933	847.5	8,128.4	10.4	1950	1,618.5	159,779.1	1.0
1934	813.9	9,595.3	8.5				

Source: *Statistics of Income.* The figures for total adjusted gross income are not perfectly comparable throughout the period. Adjusted gross income is defined in the Internal Revenue Code as gross income only $1.6 billion, or about 20 per cent less than in 1928 (Tables 12 and 13, Chart 4).

Not only in 1950, but also in each of the preceding nineteen years, the amount of interest reported on taxable individual returns was less than that reported in every year between 1923 and 1930.

Further, whereas interest constituted about 8.6 per cent of the aggregate adjusted gross income of taxable individuals in 1928 and averaged 9.0 per cent of such income annually between 1918 and 1933, its percentage importance had shrunk to 1 per cent by 1943, and has remained at about that level in every year since (up to and including 1950, the latest year for which the figures are available as this is written).

The amounts reported on taxable income tax returns represented only about one-fourth, on the average, of total personal interest receipts in 1930–1950 (Table 13 and Chart 5). Prior to 1930 the proportion was substantially higher.

In 1918, when the low World War I personal exemptions gave wide coverage to the income tax, it had been 66 per cent. After falling steeply to 36 per cent by 1921, it rose to 52 per cent in 1924 and then fluctuated somewhat above 40 per cent during the remainder of the 1920's. Then it plunged to reach a low of 19 per cent in 1933 and 1934. A gradual rise during the next eight years brought the proportion to 33 per cent in 1942, after which it fell off again. It was about 25 per cent in each of the four years 1947–1950.

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minus allowable trade and business deductions, expenses of travel and lodging in connection with employment, reimbursed expenses in connection with employment, deductions attributable to rents and royalties, deductions for depreciation and depletion allowable to life tenants or to income beneficiaries of property held in trust, and allowable losses from sales of property. Each component of adjusted gross income, therefore, is the net income or loss from that source after making the deductions that are specifically allowed. A net loss from any source of taxable income constitutes a part of the adjusted gross income (or deficit) as well as a net profit (see *Statistics of Income, 1948*, p. 9).

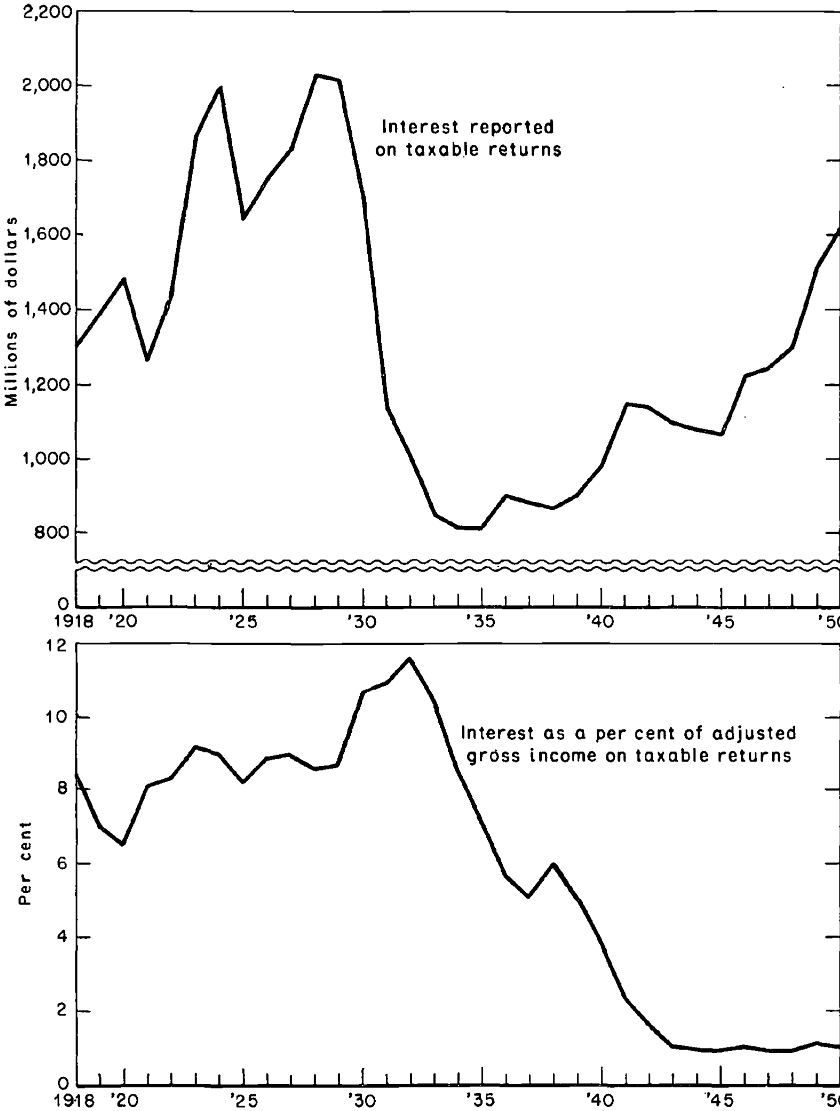
For years prior to 1944, when the Bureau of Internal Revenue first revised its basis of tabulating and reporting from a net income to an adjusted gross income basis, we constructed the adjusted gross income by adding together the separate components as reported in *Statistics of Income*, but had to ignore the amounts of certain negative components of income that were not reported in *Statistics of Income* prior to various years. (1) Prior to 1924, only positive components of income were reported; (2) capital losses from assets held more than two years were first reported in 1924; (3) other capital losses were first reported in 1926; (4) business and partnership losses were first reported in 1930; (5) rent and royalty losses were first reported in 1944; (6) prior year net losses and net operating losses though allowable as a deduction in 1922–1931 and 1940–1943, respectively, were not deducted in our estimates of adjusted gross income for those years.

For the years 1927–1931 and 1932–1936, respectively, when *Statistics of Income* combined nontaxable returns with taxable returns for net incomes of $5,000–10,000, and $5,000–6,000, the various components of income on taxable returns were estimated by assuming they constituted the same ratio of the total reported of the various components as the ratio of net income on taxable returns to total net income reported.

For interest reported on taxable returns, see note to Table 4.

CHART 4

INTEREST AS A COMPONENT OF ADJUSTED GROSS INCOME ON TAXABLE RETURNS, 1918–1950



Source: Table 12

The varying gaps between estimated total individual receipts of interest and the amounts reported on taxable individual income tax returns arise from a number of different causes. Doubtless one of them is that the statistical sources and methods for estimating total interest receipts of individuals are imperfect. The other principal causes are:

a. Changes in the statutory amounts of personal exemptions and credits

b. Fluctuations in national and total personal income

c. Deferred reporting of accrued interest on unredeemed United States savings bonds

d. Changes in tax-exempt interest received by individuals and in total interest received by nonprofit organizations

e. Underreporting of interest income for tax purposes

TABLE 13

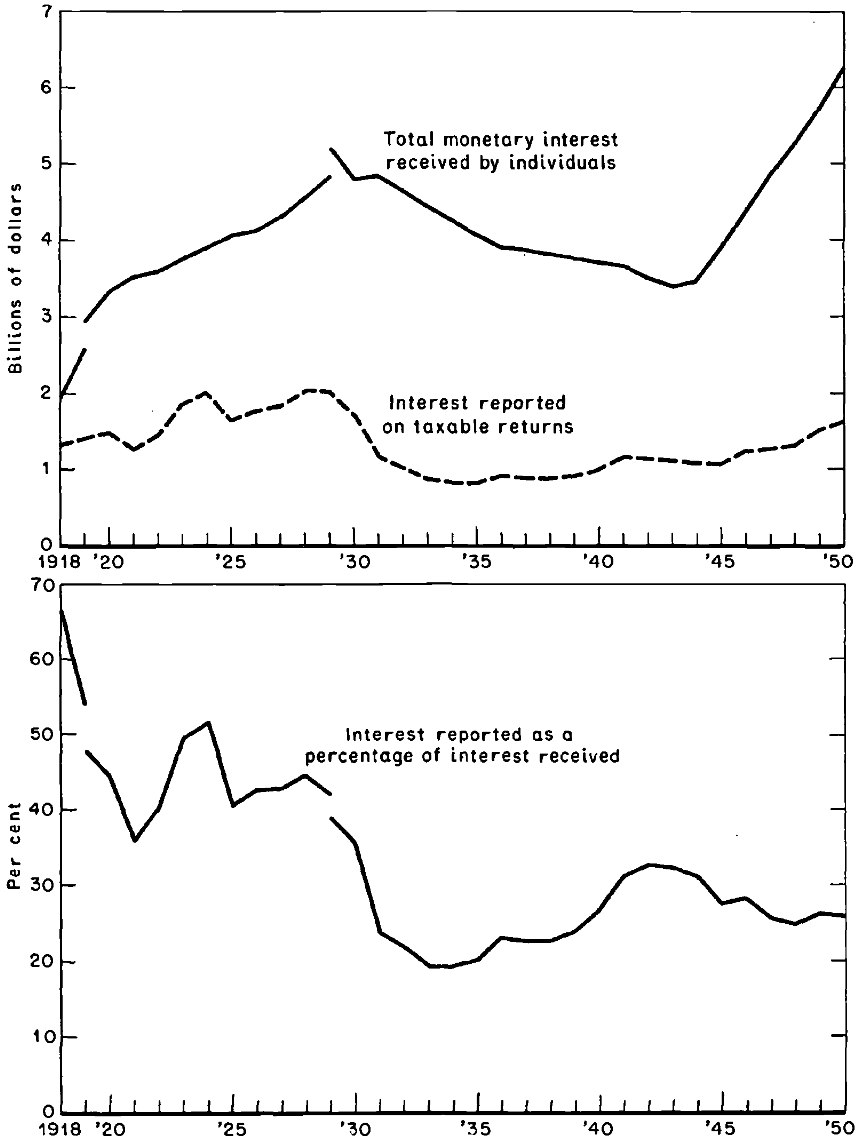
INTEREST REPORTED ON TAXABLE RETURNS COMPARED WITH TOTAL PERSONAL MONETARY INTEREST RECEIPTS 1918–1950

	Total monetary interest (billions of dollars)	Interest reported on taxable returns (billions of dollars)	Interest reported on taxable returns as percentage of total monetary interest		Total monetary interest (billions of dollars)	Interest reported on taxable returns (billions of dollars)	Interest reported on taxable returns as percentage of total monetary interest
1918	1.97	1.31	66.4	1933	4.42	0.85	19.2
1919	2.58	1.40	54.0	1934	4.24	0.81	19.2
				1935	4.04	0.81	20.1
1919	2.93	1.40	47.6	1936	3.89	0.90	23.2
1920	3.33	1.48	44.5	1937	3.88	0.88	22.7
1921	3.52	1.26	35.8	1938	3.82	0.87	22.7
1922	3.59	1.44	40.2	1939	3.76	0.90	23.9
1923	3.77	1.87	49.6	1940	3.70	0.99	26.7
1924	3.90	2.01	51.5	1941	3.67	1.15	31.3
1925	4.06	1.64	40.5	1942	3.49	1.14	32.7
1926	4.12	1.76	42.6	1943	3.39	1.10	32.3
1927	4.30	1.83	42.7	1944	3.45	1.08	31.3
1928	4.57	2.03	44.5	1945	3.90	1.07	27.4
1929	4.83	2.02	41.8	1946	4.38	1.23	28.1
				1947	4.87	1.25	25.6
1929	5.20	2.02	38.8	1948	5.26	1.30	24.8
1930	4.80	1.71	35.6	1949	5.74	1.51	26.4
1931	4.84	1.14	23.6	1950	6.24	1.62	25.9
1932	4.64	1.01	21.8				

Source: For monetary interest, Table 1; for interest reported on taxable returns, *Statistics of Income* (see note to Table 4).

CHART 5

INTEREST REPORTED ON TAXABLE RETURNS COMPARED WITH TOTAL PERSONAL MONETARY INTEREST RECEIPTS, 1918–1950



Source: Table 13.

2. *Effects of changes in personal exemptions upon interest reported on taxable returns*

Statutory changes in the amounts of personal exemptions and credits have operated at times to reduce materially, or to add to, the number of taxpayers and the amount of income subject to income tax and, therefore, the total amount of interest on taxable returns. Persons with income under $5,000, which includes those most readily shifted out of or into the taxable category by changes in personal exemptions and credits, generally account for a substantial fraction of all interest reported on taxable returns.

A particularly clear example of the effect on taxable interest of raising personal exemptions may be had by comparing the figures for 1925 with those for 1924. An increase from $2,500 to $3,500 in the personal exemption for heads of families and from $1,000 to $1,500 for single persons was made for 1925 (and continued through 1931). The number of taxable returns filed in 1925 dropped 44 per cent below that of 1924, and their aggregate net income dropped 10 per cent, despite a rise in total national income in 1925. A substantial amount of interest income that had previously been included on taxable returns was now exluded. Interest reported by taxpayers with net incomes of $5,000 or less dropped $521 million below the preceding year despite an increase of $153 million in the amount reported by the other income groups. The larger exemptions and credits also caused a smaller rise than would otherwise have occurred in interest income reported on taxable returns in the later 1920's.

3. *Fluctuations in personal and national income affect the amount of interest reported on taxable returns*

More commonly, the effects of statutory alterations in personal exemptions, though important, have been obscured and overshadowed by the influence of major changes in the level of business activity and national income which have operated to shift large numbers of taxpayers out of or into the taxable category by altering the aggregate amounts of their incomes from all sources. In consequence, taxpayers with unchanged income from interest were often taxable in one year and not in another. Deductible capital and other losses, such as were widely incurred in 1921 and 1929–1933, converted many incomes containing substantial interest components into statutory net losses or reduced them below the allowance for personal exemptions and credits for dependents, while in other years some individuals whose interest receipts had previously gone untaxed were brought into the taxable group by increases in their incomes from other sources.

For example, the reduction in taxable interest and total taxable income brought about by the increase in personal exemptions and credits for dependents in 1921 was accentuated by the business recession of that year. In consequence of both the change in law and the recession, the number of taxable returns fell 35 per cent, total statutory net income on them 34 per cent, and the amount of interest included on them 15 per cent below the figures for 1920. With no change in personal exemptions and credits, an extraordinary volume of capital gains, arising largely from the stock market boom, together with a growth of the national income, were major factors in causing the statutory net income of taxable returns in 1925–1928 to rise from $17.5 billion to $21 billion and the amount of interest income reported on them from $1.6 billion to $2.0 billion. Again with no change in personal exemptions the sharp decline in business activity between 1929 and 1931 was accompanied by a decline from $20.5 billion to $9.3 billion in the total net income of taxable returns and from $2.0 billion to $1.1 billion in the amount of interest reported on them. The continuing decline in personal incomes in 1932 outweighed the effects of the reductions in personal exemptions enacted for that year, with the result that total net income and interest income on taxable returns continued to decline.

Apart from the low absolute level of interest income reported on taxable individual returns during the 1940's, the small proportion of the reported interest to the total amounts estimated to have been received is particularly noteworthy because many millions of persons and billions of dollars were added to the income tax rolls in this period by the sharply rising levels of total personal income and by reductions in personal exemptions. The number of taxable individual income tax returns, which had ranged between about $2\frac{1}{2}$ and $5\frac{1}{2}$ million during the 1920's, and $1\frac{1}{2}$ to 4 million during the 1930's, rose above 40 million by 1943 and even higher thereafter. In these circumstances it is distinctly surprising that a material increase failed to take place in the proportion of total personal interest receipts accounted for on taxable returns. Actually, the proportion in the latter part of the 1940's was little different from that of 1939 and much lower than in the 1920's (Table 13, Chart 5).

4. *United States savings discount bonds*

One factor in the failure of reported taxable interest receipts in the 1940's to recover to earlier levels despite the great increase in private holdings of debt was the large investment made by individuals since 1935 in United States savings bonds, the accruing interest on which need not be reported for taxation, if the holder so chooses, until the bonds are redeemed. It is probable that little of the accruing interest is reported until redemption and that a substantial fraction is never reported.[17]

Until April 1940, Series A-D bonds were open to purchase by commercial banks and other corporations as well as by individuals. But each purchaser was limited to $7,500 issue price in any one calendar year. This restriction had the effect of largely confining subscriptions to individuals even before corporations were made ineligible as purchasers. Purchases of Series E bonds were open only to natural persons and were limited at first to $3,750 issue price in any calendar year for each purchaser, a limit that was subsequently raised to $10,000 maturity value and in 1952 to $20,000 maturity value. This series of bonds accounted for 61 per cent of the current redemption value of all the unmatured savings bonds outstanding December 31, 1952.

Until replaced in May 1952 by similar issues bearing higher yields, Series F and G bonds were continuously open to all subscribers except commercial banks in amounts up to $100,000 issue price per year for the two issues combined ($50,000 in calendar year 1944), and commercial banks were also permitted to purchase these bonds during certain periods and under certain restrictions. Series G bonds, which were not discount bonds unless turned in for redemption in advance of maturity, proved far more popular than Series F and were outstanding in the amount of $18.4 billion current redemption value at the end of 1952

[17] United States savings bonds were first offered for sale in March 1935. Bonds of Series A–D were sold until May 1941, when they were succeeded by Series E, F, and G. Series A–E bonds were 10-year discount bonds sold at 75 per cent of maturity value to yield 2.90 per cent per annum if held to maturity and lesser yields if redeemed before maturity. Series F bonds were 12-year discount bonds sold at 74 per cent of maturity value to yield 2.53 per cent per annum if held to maturity and less if redeemed prior thereto.

Series G bonds were twelve-year current income bonds sold at par and bearing interest at 2½ per cent per annum, but redeemable at the option of the holder in advance of maturity at varying discounts from par. Further details may be found in the *Treasury Bulletin*, December 1944, p. 36, and February 1946, p. 37.

A number of changes in the savings bond offerings became effective in May and June 1952: (1) For Series E, the over-all interest rate was raised from 2.9 to 3 per cent without changing the offering price or maturity value, by shortening the maturity from 10 years to 9 years, 8 months; the redemption values were raised for the early and intermediate periods in advance of maturity; and the maximum amount purchasable by any person in any single year was raised to $20,000 maturity value. (2) A new Series H current income bond was introduced, available for individuals in amounts up to $20,000 maturity value annually per purchaser, with issue and redemption at par, and with current payment of interest on a graduated scale at rates closely corresponding to the revised E bond scale and the same maturity as the revised E bonds. (3) Series F and G bonds were replaced by similar bonds, J and K respectively, yielding higher interest rates and eligible for annual purchases up to $200,000 maturity value for the two series combined for each purchaser. When Series E bonds began to mature on May 1, 1951, owners of the matured bonds were offered an extension of maturity of 10 years or an exchange into Series G bonds as alternatives to cash redemption. For Series E bonds maturing after April 30, 1952, a 10-year extension of maturity at an effective interest rate of approximately 3 per cent or an exchange into Series K bonds became available.

as against $3.8 billion of Series F bonds. Large-scale acquisition of F and G bonds by financial institutions and other corporations was prevented by the limitation on each subscriber's annual purchases.

The accrued discount on all unredeemed United States savings bonds held by individuals amounted to only $91 million in the aggregate in the first six years of the program, 1935–1940. Because sales of the bonds expanded after American entrance into World War II and because the effective interest rate on each bond rose for every additional six-month period that it was held (after the first year), the annual accruals of interest (discount) increased substantially thereafter reaching $605 million in 1950 and $697 million in 1952 (Table 14). In the years 1945–1950 accruals on savings bonds owned by individuals were equal to between 9.7 and 10.5 per cent of the annual totals of monetary interest received by individuals and to between 35 and 43 per cent of the annual totals of interest from all sources actually reported on taxable individual returns.

TABLE 14

ACCRUED DISCOUNT OF INDIVIDUALS ON UNREDEEMED UNITED STATES SAVINGS BONDS, BY CALENDAR YEARS, 1935–1952

(Millions of Dollars)

Year	Amount
1935	—
1936	3
1937	9
1938	16
1939	25
1940	38
1941	57
1942	78
1943	141
1944	253
1945	377
1946	440
1947	490
1948	554
1949	591
1950	605
1951	682
1952	697

Source: *Treasury Bulletin* and letter from Treasury Department. It was assumed that individuals held four-fifths of the amount of Series A–D bonds, all of Series E, and two-thirds of Series F.

Nevertheless, the lawful postponement of income tax accounting for the accuring interest (discount) on unredeemed United States savings bonds offers only a partial explanation for the discrepancy between total personal interest and the amounts reported on taxable returns. The most extreme assumption that can be made in this direction is that all the unredeemed savings bonds were owned by persons filing taxable returns and that the latter reported none of the current accruals of interest. If we add these accruals to the amounts of interest included on taxable returns, the proportion of total personal interest income that can be accounted for is raised somewhat, but only to a level averaging slightly more than 35 per cent in the 1940's as against much larger proportions in the 1920's, when the higher personal exemptions and credits excluded the vast majority of adults from income tax liability.

Our figures for the proportion of personal monetary or explicit interest reported on taxable returns for the years prior to 1929 are only roughly comparable with those for subsequent years because the two series are derived from the work of different investigators who employed different procedures. The two series overlap for the year 1929, when the proportion based on the Kuznets data was 41.8 per cent and that based on the Department of Commerce figures was 38.8 per cent. In 1950 the unadjusted proportion based on the Department of Commerce figures was only 25.9 per cent; and when adjusted to include all accrued interest on unredeemed savings bonds, it was 35.6 per cent. But in 1929 the personal exemptions were such that a married man without dependent children paid no income tax unless his net income was above $3,500, whereas in 1950 he was taxable if his adjusted gross income was as little as $1,333. Clearly the proportion of total interest income reported on taxable returns in recent years was much smaller than might reasonably have been expected.

5. *Interest from tax-exempt securities*

To determine how much of the discrepancy between total personal interest receipts and the amounts reported on taxable returns was attributable to interest received on tax-exempt securities, it was necessary to estimate individual receipts of such tax-exempt interest (Table 15).

After rising from $85 million in 1913 to $651 million in 1921, the estimated amount of wholly tax-exempt interest received by individuals fluctuated between $565 and $636 million during the next eleven years. Thereafter it declined without interruption to $239 million in 1947, after which it rose slightly and amounted to $274 million in 1952.

TABLE 15

WHOLLY TAX-EXEMPT INTEREST RECEIVED BY INDIVIDUALS, 1913–1952

(Millions of Dollars)

Year	State and local govt. securities	Wholly exempt			Direct and guar. fed. securities nominally only partially exempt	Total
		Direct federal securities	Postal savings deposits	Federal farm loan securities		
	(1)	(2)	(3)	(4)	(5)	(6)
1913	65.8	18.3	0.6			84.7
1914	75.2	18.3	0.8			94.3
1915	86.9	18.3	1.1			106.3
1916	99.2	18.0	1.6			118.8
1917	111.9	46.0	2.0			159.9
1918	125.1	70.6	2.3	2.4	86.0	286.4
1919	147.6	70.9	2.3	4.8	330.2	555.8
1920	175.2	80.0	2.2	7.3	373.0	637.7
1921	205.9	74.5	2.2	14.6	353.5	650.7
1922	235.4	60.5	2.1	26.2	299.3	623.5
1923	260.2	56.2	2.1	35.6	280.8	634.9
1924	289.6	56.2	2.2	42.6	207.5	598.1
1925	312.4	52.7	2.3	49.5	193.5	610.4
1926	332.9	52.1	2.3	54.0	154.1	595.4
1927	355.3	52.1	2.5	58.4	114.2	582.4
1928	377.6	52.1	2.6	60.5	86.5	579.3
1929	389.8	52.1	2.6	60.4	60.0	564.9
1929	389.8	52.1	2.8	60.4	60.0	565.1
1930	427.7	57.7	3.5	60.3	42.4	591.6
1931	454.3	56.1	7.2	58.0	36.2	611.8
1932	469.6	60.0	13.6	53.2	39.1	635.5
1933	439.8	62.7	19.2	52.8	35.8	610.3
1934	404.6	62.2	21.7	45.7	49.1	583.3
1935	374.5	34.1	21.9	39.2	60.5	530.2
1936	363.8	17.5	22.5	35.6	62.5	501.9
1937	346.1	18.8	23.1	29.9	70.6	488.5
1938	329.3	16.4	23.2	28.1	63.9	460.9
1939	308.3	14.7	23.3	28.2	66.4	440.9
1940	297.1	13.8	23.5	26.4	58.6	419.4
1941	273.5	12.3	3.9	22.9	51.5	364.1
1942	266.2	11.6		20.9	55.0	353.7
1943	261.0	11.9		20.1	55.6	348.6
1944	260.2	10.6		14.1	48.1	333.0
1945	256.1	6.6		4.5	35.2	302.4
1946	235.6	3.8			21.3	260.7
1947	217.0	3.5			18.6	239.1
1948	229.3	3.5			19.8	252.6
1949	232.3	3.4			19.5	255.2
1950	236.3	3.4			13.6	253.3
1951	240.8	3.2			11.4	255.4
1952	265.7	2.9			5.4	274.0

Estimated as follows:

Col. 1: To George E. Lent's estimates of individuals' holdings of state and local government securities, as presented in his *The Ownership of Tax-Exempt Securities, 1913–1952* (National Bureau of Economic Research, Occasional Paper 47, 1955, Appendix C), averaged for each pair of June 30 figures to obtain calendar year estimates, we applied interest rates obtained from estimates of the Dept. of Commerce for 1913, 1922, and 1929–1950. Interest rates for the fiscal years between 1913 and 1922, and between 1922 and 1929 were estimated by straight-line interpolation and then averaged to obtain calendar year estimates. For 1929–1950, June 30 debt estimates in the *Survey of Current Business*, October 1950, September 1952, were averaged to obtain calendar year figures, and the interest rates were derived by using the national income estimates of state and local government interest paid.

Col. 2: As a result of discussions with Treasury officials and others, we estimated that individuals received 80 per cent of the interest from the wholly tax-exempt Treasury bonds outstanding in each year and 80 per cent of the interest from 3¾ per cent Victory Liberty Loan Notes of 1919–1922; and that 10 per cent of individuals' total holdings of wholly tax-exempt obligations of the federal government, as estimated by Lent (*op. cit.*), consisted of other Treasury notes and Certificates of Indebtedness. The interest on wholly tax-exempt federal bonds was computed from the list of such bonds in the *Annual Report of the Secretary of the Treasury* each year, with adjustments for a part of a year when a security was issued or redeemed during the year. For Treasury notes (other than the Victory Liberty 3¾'s cited above) and Certificates of Indebtedness, also listed in the *Annual Report*, an average rate of interest for the calendar year was computed and applied to calendar year averages of individuals' June 30 estimated holdings.

Col. 3: Figures for deposits in 1913–1918 were obtained for fiscal years from the *Annual Report of the Comptroller of the Currency* and averaged to obtain calendar year estimates. Interest paid in these years was estimated by assuming the same rate between deposits and interest as obtained in calendar year 1920. Interest figures for 1919–1929 were taken from Simon Kuznets, *National Income and Its Composition, 1919–1938*, and for 1929–1941 from interest credited to depositors as reported in the *Annual Report of the Postmaster General* and averaged to obtain calendar year estimates. Tax exemption was withdrawn from postal savings interest on balances deposited after February 1941, and tax-exempt interest in the latter year was estimated at one-sixth of the total interest for the year.

Col. 4: From wholly tax-exempt Federal Farm Loan Securities. An average interest rate was derived for each calendar year from Federal Land Bank and Joint Stock Land Bank bonds outstanding and listed in the *Annual Report of the Farm Credit Administration* and the *Annual Report of the Federal Farm Loan Board*. The interest rates were applied to calendar year averages of Lent's June 30 estimates of Federal Farm Loan holdings by individuals (Lent, *op. cit.*). Interest rates for 1923–1927 and 1943 were estimated by straight-line interpolation and 1944 and 1945 fiscal years were averaged to obtain a calendar year rate.

Col. 5: From nominally only partially tax-exempt direct and guaranteed federal securities. Partially tax-exempt direct and guaranteed federal securities consist of bonds issued between 1917 and 1941 by the Treasury and several government corporations, the interest on the first $5,000 principal amount of which in the hands of any investor is exempt from both normal and surtaxes, and the interest from any additional amounts of which is exempt only from normal tax.

Interest rates were obtained by calendar years from the list of such securities in the *Annual Report of the Secretary of the Treasury* and were applied to calendar-year averages of Lent's June 30 estimates of individual holdings of partially tax-exempt federal direct and guaranteed securities (Lent, *op. cit.*) less individual holdings of partially tax-exempt United States savings bonds (see note to Table 14).

For the years 1924–1927 and 1932–1943, both inclusive, we estimated that the amount of partially tax-exempt interest enjoying full tax exemption constituted the same proportion of the total as was tabulated and reported in *Statistics of Income* for taxpayers with net incomes of $5,000, $6,000, or $10,000 and over in different years. Similar figures were not published for other years. We estimated the proportion for the years 1918–1923 by adding several percentage points to the 1924 proportion to allow for the fact that for several years after World War I complete exemption from income tax was extended for limited periods to the interest on varying principal amounts in excess of $5,000 if the holder subscribed to additional amounts of certain new Treasury issues. We estimated the proportions for the years 1928–1931 by straight-line interpolation between the figures for 1927 and 1932 and we assumed a level proportion for the years 1944–1950 slightly below that for 1943.

For the five years 1918–1923, Treasury obligations were the most important source of tax-exempt interest for individuals. Although the interest on most of the federal securities issued during World War I was nominally exempt only from normal tax, except that interest on the first $5,000 principal amount held by any taxpayer was exempt also from surtaxes, complete tax exemption was granted for limited periods on substantial principal amounts of particular issues to promote subscriptions. The Revenue Act of 1921 consolidated the various previous temporary tax exemptions of the 4 per cent and $4\frac{1}{2}$ per cent Liberty bonds into an exemption from normal and surtax of the interest from an aggregate principal amount of $125,000 for each investor for two years after the termination of the war (July 2, 1921) and from a principal amount of $50,000 for three additional years. Such temporary exemptions were responsible for most of the tax-exempt interest derived by individuals from federal securities in 1919–1926. The effect of the reduction, and then the expiration, of the temporary grants of complete exemption was intensified by the substantial retirements of federal securities that took place during the twenties. By 1931, wholly tax-exempt interest obtained by individuals from direct and guaranteed federal obligations, including Postal Savings deposits, had shrunk to $100 million as compared with a high of $455 million in 1920.

The decline in wholly tax-exempt interest of individuals from federal obligations during the 1920's was partly offset by a steady rise in that from state and local government securities. Individual receipts of such interest rose each year without interruption from $66 million in 1913 to $470 million in 1932. In the following fifteen years, however, the annual totals fell steadily, largely because of debt retirements and declining interest rates, and reached a low of $217 million in 1947.

The long period of deficit financing by the federal government in the 1930's and 1940's was accompanied, after 1935, by a decline rather than an increase in wholly tax-exempt interest income of individuals from federal securities. The reasons were that the fully exempt securities issued by the Treasury consisted of short-term obligations commanding low interest rates and these securities were mainly purchased by institutional investors; some previous issues of fully exempt securities were retired; and the federal government ceased issuing tax-exempt securities in 1941.

Since the total of individuals' receipts of tax-exempt interest fell by more than one-half in 1932–1950 while their total monetary interest income rose about 34 per cent, it seems clear that the changes in their receipts of tax-exempt interest should have narrowed, not widened, the gap between their total receipts of monetary interest and the amount reported on taxable returns.

If we subtract from the annual totals of monetary interest of individuals the sum of their tax-exempt interest and accrued interest on unredeemed United States savings bonds and compare the remainders with the annual amounts of interest reported on both taxable and nontaxable individual returns, we obtain the percentages in column 6 of Table 16; and if the comparison is with the amount of interest reported *only* on taxable returns, we obtain the percentages in the last column of the table. After these adjustments the proportion of personal interest income reported on individual tax returns in the 1940's remains much lower than in the 1920's, and only moderately higher than in the late 1930's.

6. *Underreporting of interest income*

Some part of the recent wide gap between the amount of interest that individuals are estimated to receive and the amount they report on taxable returns is doubtless due to receipts by children, retired persons, and others whose total net incomes are too small to be taxable. Another part can be attributed to nonprofit institutions, whose interest income in the aggregate has been growing[18] and whose interest receipts are treated as those of individuals in the national income accounts published by the Department of Commerce. Excluded from taxable interest each year is the amount received by individuals whose ordinary income has been offset by deductible capital and business losses. There may also be minor undiscovered statistical offsets. On the other hand, the gap is understated in this respect: the figures for total monetary interest receipts of individuals are exclusive of interest received by some individuals from other individuals. But on the whole the figures strongly suggest that a significant fraction of the unreported interest estimated to have been received by individuals represents tax evasion.

Many taxpayers among the millions added to the income tax rolls since World War II doubtless neglected to report interest received on savings bank deposits, redeemed savings bonds, building and loan association shares, and mortagage and other loans. The sample study of tax returns for 1948, conducted by the Bureau of Internal Revenue

[18] Robert Rude, in a preliminary progress report of his study of private nonprofit institutions in the United States, found that the endowments (other than physical facilities) of private educational institutions and private nonprofit hospitals had more than doubled between 1938 and 1947, reaching $2.3 billion in the latter year (National Bureau of Economic Research unpublished staff progress reports, May 1952).

TABLE 16

TOTAL MONETARY INTEREST RECEIPTS, TAX-EXEMPT INTEREST, ACCRUED INTEREST ON UNITED STATES SAVINGS BONDS, AND INTEREST REPORTED ON TAXABLE RETURNS, 1918–1950

	Total monetary interest	Wholly tax-exempt interest received by individuals	Accrued interest of individuals on unredeemed U.S. savings bonds	Interest not tax-exempt or on unredeemed savings bonds	Interest reported on taxable and nontaxable returns	All reported interest as percentage of col. (4) (per cent)	Interest reported on taxable returns	Taxable reported interest as percentage of col. (4) (per cent)
	(Figures other than percentages are for millions of dollars)							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1918	1,967	286		1,681	1,403	83.5	1,306	77.7
1919	2,585	556		2,029	1,501	74.0	1,395	68.8
1919	2,932	556		2,376	1,501	63.2	1,395	58.7
1920	3,333	638		2,695	1,642	60.9	1,482	55.0
1921	3,522	651		2,871	1,690	58.9	1,262	44.0
1922	3,589	624		2,965	1,858	62.7	1,442	48.6
1923	3,772	635		3,137	2,330	74.3	1,869	59.6
1924	3,900	598		3,302	2,414	73.1	2,009	60.8
1925	4,055	610		3,445	1,941	56.3	1,641	47.6
1926	4,120	595		3,525	2,083	59.1	1,757	49.8
1927	4,299	582		3,717	2,213	59.5	1,834	49.3
1928	4,569	579		3,990	2,398	60.1	2,032	50.9
1929	4,831	565		4,266	2,534	59.4	2,018	47.3
1929	5,198	565		4,633	2,534	54.7	2,018	43.6
1930	4,795	592		4,203	2,201	52.4	1,708	40.6
1931	4,843	612		4,231	1,703	40.3	1,141	27.0
1932	4,645	636		4,009	1,439	35.9	1,012	25.2
1933	4,421	610		3,811	1,224	32.1	848	22.3
1934	4,239	583		3,656	1,114	30.5	814	22.3
1935	4,039	530		3,509	1,114	31.7	813	23.2
1936	3,886	502	3	3,381	1,061	31.4	903	26.7
1937	3,883	488	9	3,386	1,035	30.6	882	26.0
1938	3,822	461	16	3,345	1,055	31.5	866	25.9
1939	3,761	441	25	3,295	1,072	32.5	900	27.3
1940	3,701	419	38	3,244	1,206	37.2	988	30.5
1941	3,672	364	57	3,251	1,306	40.2	1,148	35.3
1942	3,494	354	78	3,062	1,264	41.3	1,142	37.3
1943	3,391	349	141	2,901	1,132	39.0	1,095	37.7
1944	3,451	333	253	2,865	1,124	39.2	1,080	37.7
1945	3,903	302	377	3,224	1,109	34.4	1,069	33.2
1946	4,376	261	440	3,675	1,289	35.1	1,228	33.4
1947	4,874	239	490	4,145	1,341	32.4	1,246	30.1
1948	5,256	253	554	4,449	1,492	33.5	1,301	29.2
1949	5,737	255	591	4,891	1,745	35.7	1,515	31.0
1950	6,243	253	605	5,385	1,825	33.9	1,619	30.1

Source: See notes to Tables 1, 14, and 15.
Col. 1: See notes to Table 1.
Col. 2: See notes to Table 15.
Col. 3: See notes to Table 14.

under its Audit Control Program, indicated that if all the returns of that year had been audited, about 2 million of them would have been found to contain errors in interest and that in about 1 million of them interest would have been found to be the major source of error.[19] Unfortunately, the study did not yield measures of the amount of understatement of interest or other components of income. The frequency of interest errors was about four times that of errors in dividends. In 93 per cent of the returns where interest was the major source of error, there was understatement of tax liability. Although returns with incomes under $7,000 accounted for about four-fifths of those showing interest errors, such errors were not unimportant among returns with larger incomes. More than half of the estimated increase in tax liability estimated to be disclosable on returns in which interest was the major source of error was attributed to individuals reporting adjusted gross incomes of $7,000 or more or gross receipts from business or profession of $25,000 or more.

The audit sample therefore indicates that understatement and unreporting of personal interest income is not confined to the failure of thousands of small depositors and other small interest recipients to account fully for trifling individual sums. Also suggesting that sizable amounts of interest received from mortgages and federal and corporate obligations have been unreported for tax purposes is the fact that these sources appear to account for not far from three-quarters of the total direct monetary interest paid to individuals in recent years. Selma Goldsmith in *Volume Thirteen* of the National Bureau's *Studies in Income and Wealth* ([1951], pp. 303–304) presented rough estimates, reproduced in Table 17 of the sources of direct interest income of individuals in the three years 1944–1946. Excluding tax-exempt interest, accrued interest on unredeemed United States savings bonds, and residuals varying in the different years between 9 and 18 per cent

Col. 4: Equals col. 1 minus the sum of the figures in cols. 2 and 3.

Col. 5: See notes to Table 4. For years 1918 through 1930, includes annuities and dividends from foreign corporations other than those obtaining more than 50 per cent of their gross income from sources in the United States. For 1931, interest on returns with no net income was estimated from ratio obtaining for taxable returns between interest and other income. For 1941 through 1943, when interest was lumped together on 1040a returns with dividends, rents, royalties, and annuities, interest income on these returns was estimated by assuming that it constituted the same proportion of the lumped components as on 1040 returns. The interest figures for 1943 include partially tax-exempt dividends. For 1944 and 1945, when dividends and interest were lumped together in the returns, interest was estimated to constitute the same proportion of the total of dividends and interest as in 1946.

Col. 7: See notes to Table 4.

[19] See Marius Farioletti, "Some Results of the First Year's Audit Control Program of the Bureau of Internal Revenue," *National Tax Journal*, March 1952; also *The Audit Control Program* (Bureau of Internal Revenue, 1951.

TABLE 17

SOURCES OF DIRECT MONETARY INTEREST INCOME OF INDIVIDUALS,[a] 1944–1946

(Millions of Dollars)

Source	1944	1945	1946
Mortgage loans	650	670	780
Federal obligations[b]	285	575	1,025
Corporate bonds	730	700	650
Commercial bank time deposits	200	300	300
Mutual savings bank deposits	200	215	240
Savings and loan associations and credit unions	165	175	200
Unallocated residual	493	450	331
Total[c]	2,723	3,085	3,526

[a] Individuals include fiduciaries and nonprofit organizations furnishing services to individuals.

[b] Including postal savings deposits.

[c] Direct monetary interest income of individuals was derived by deducting imputed interest, tax-exempt interest, and accrued interest on unredeemed United States savings bonds from the interest component of personal income in the national income statistics of the Department of Commerce. These totals vary slightly from our figures used elsewhere in this book primarily because of small differences between Mrs. Goldsmith's estimates and ours of tax-exempt interest.

Source: Selma F. Goldsmith, "Appraisal of Basic Data for Size Distributions," *Studies in Income and Wealth, Volume Thirteen* (National Bureau of Economic Research, 1951), p. 304.

that she could not allocate to any of the six principal sources of interest income, she found that only about one-fourth of the remainder of monetary interest paid to individuals represented interest on bank deposits and interest or dividends paid by savings and loan associations in the three years. Since, for the three years as a whole, only about one-third of the total cash interest receipts of individuals, exclusive of tax-exempt interest and accrued interest on unredeemed savings bonds, was reported on taxable returns, it would seem that significant amounts of interest on mortgages and corporate and govenment obligations were not reported.

The figures suggest that greater underreporting of interest income developed after the sharp rise in tax rates and taxable incomes during World War II. In 1941 the amount of interest on taxable returns was 35 per cent of total monetary interest received by individuals, exclusive of tax-exempt interest and accrued interest on unredeemed United States savings bonds. This percentage fell by more than 6 percentage points to slightly above 29 by 1948 and was a little above 30 in 1950 (Table 16).

When the Treasury Department in September 1952 proposed to require banks to file information returns with respect to all payments of interest amounting to $100 or more in one year, instead of requiring such returns only with respect to interest payments of $600 or more, the *Wall Street Journal* (Feb. 18, 1953) reported that some holders of savings accounts were dividing up their accounts among a number of banks in order that their interest receipts from any one bank would fall short of $100 a year. In December 1952 the Treasury withdrew the proposed change in its regulations because of protests from bankers that the change would greatly increase their paper work.

III. TAX REVENUES FROM INTEREST

1. *Tax revenues from interest income in the 1940's far exceeded those of previous decades, with a growing proportion from the lower taxable incomes*

Since the personal income tax is levied at the same rates on the total from all sources (except for tax-exempt interest and long-term capital gains) of an individual's taxable income, less his personal exemptions and allowable deductions, his tax liability is not strictly made up of separate amounts attributable to each of the various components of his income, such as salaries, dividends, rents, etc.[20] Nevertheless it is useful for some purposes to act as if this were the situation. In practice the additional tax that would be payable on an additional increment of income is often taken into account by investors in choosing the character and form of new investments—as between bonds and common stocks and as between tax-exempt and taxable bonds, for example. This aspect receives attention in the next section of this paper. Because the composition of taxable incomes of the different income groups and the structure of tax rates have varied significantly over a period of years, it is also interesting to measure the varying average impact of the income tax upon the different components of personal incomes. The average effective tax rate for each income group can be calculated by dividing its total tax liability by its total adjusted gross income. By

[20] The effective tax rates on some kinds of income have differed from the formal rates in varying degree from time to time because of exemptions or credits applicable to particular kinds of income. A zero rate, in effect, has been applied without interruption to interest from state and local government obligations and from some obligations of the federal government and its instrumentalities. Interest from large amounts of securities issued by the federal government and its agencies prior to 1941 was exempt from normal tax, although not from surtax. An earned income credit, varying in different years between 1924 and 1943 (not allowable in 1932 and 1933), reduced the effective tax rates on incomes received as compensation for personal services and with different limits, on property income also. Prior to 1936, dividend income was exempt from normal tax. Under the Revenue Act of 1954, the first $50 of dividend income received by any taxpayer was made wholly exempt from income tax, and a tax credit of 4 per cent of the remainder of his dividend income was made applicable against his total tax liability.