Individual Income Tax Rates, 1987

By Charles Day*

In October 1986, President Reagan signed into law the Tax Reform Act of 1986. Tax Year 1987 represented the first transitional year under the new Act. Total income tax, which included a revised alternative minimum tax, amounted to $369.2 billion for 1987, 2 percent more than for 1986. Average tax was $4,257; for 1986, average tax was $4,374. Direct comparison of the average tax rate (total income tax divided by adjusted gross income (AGI)) for 1987 with that for prior years would be misleading, as there were many changes in the tax treatment of income and loss items which resulted in a broader AGI concept for 1987. Such a broadening would, all other things being equal, act to reduce the average income tax rate. For comparison purposes, AGI was recomputed for 1985, 1986, and 1987 to match the concept used for Tax Year 1979. Average tax rates based on the 1979 AGI concept were 13.56 percent for 1985, 13.59 percent for 1986, and 13.49 percent for 1987.

Excluding the alternative minimum tax, there were five basic tax rates for 1987, plus an additional maximum tax rate for long-term capital gains. Returns with these marginal rates generated the following percentages of the basic individual income tax (before reduction by tax credits) [1]:

11 percent rate - 0.3 percent
15 percent rate - 22.9 percent
28 percent maximum capital gain rate - 4.1 percent
28 percent rate (other income) - 22.7 percent
35 percent rate - 24.7 percent
38.5 percent rate - 25.3 percent.

EFFECTS OF THE TAX REFORM ACT OF 1986

Figures A and B present summary statistics on average tax and tax rates from 1985 and 1986 (the last two years in which the Economic Recovery Tax Act of 1981 (ERTA), which gradually reduced tax rates, was in force) and Tax Year 1987 (the first transitional year under the Tax Reform Act of 1986). Care should be taken when comparing average tax rates for 1987 with prior years. The Tax Reform Act of 1986 broadened the definition of AGI by limiting or

Figure A.--Adjusted Gross Income, Total Income Tax, Average Tax Rate, and Average Total Income Tax, 1985-1987

Tax year	Total number of returns	Taxable returns					
		Number of returns	Adjusted gross income (billions)	Total income tax (billions)	Average tax rate 2/	Average per return 1/	
						Adjusted gross income (dollars)	Total income tax (dollars)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Using each tax year's AGI concept							
1985	101,660,287	82,846,420	$2,259	$326	14.42%	$27,268	$3,931
1986	103,045,170	83,967,413	2,440	367	15.05	29,062	4,374
1987	106,996,270	86,723,796	2,701	369	13.67	31,142	4,257
Using common AGI concept 3/							
1985	101,660,287	82,846,420	2,403	326	13.56	29,003	3,931
1986	103,045,170	83,967,413	2,703	367	13.59	32,194	4,374
1987	106,996,270	86,723,796	2,736	369	13.49	31,551	4,257

1/ The average AGI, average total income tax, and average tax rate were calculated from unrounded data.
2/ Average tax rate is "Total income tax" as a percentage of adjusted gross income.
3/ These statistics are based on AGI recomputed to reflect the Tax Year 1979 concept to allow valid comparisons to be made of the average tax rates between years. Changes in the definition of AGI between years render direct comparison of the unadjusted figures misleading. For additional information, see Statistics of Income, Individual Income Tax Returns for 1985, 1986, and 1987.

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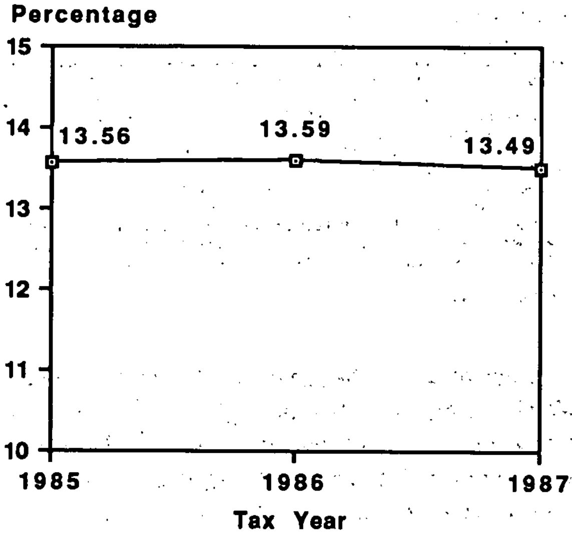
Figure B

Taxable Returns: Average Tax Rates Using Common AGI Concept, Tax Years 1985-1987



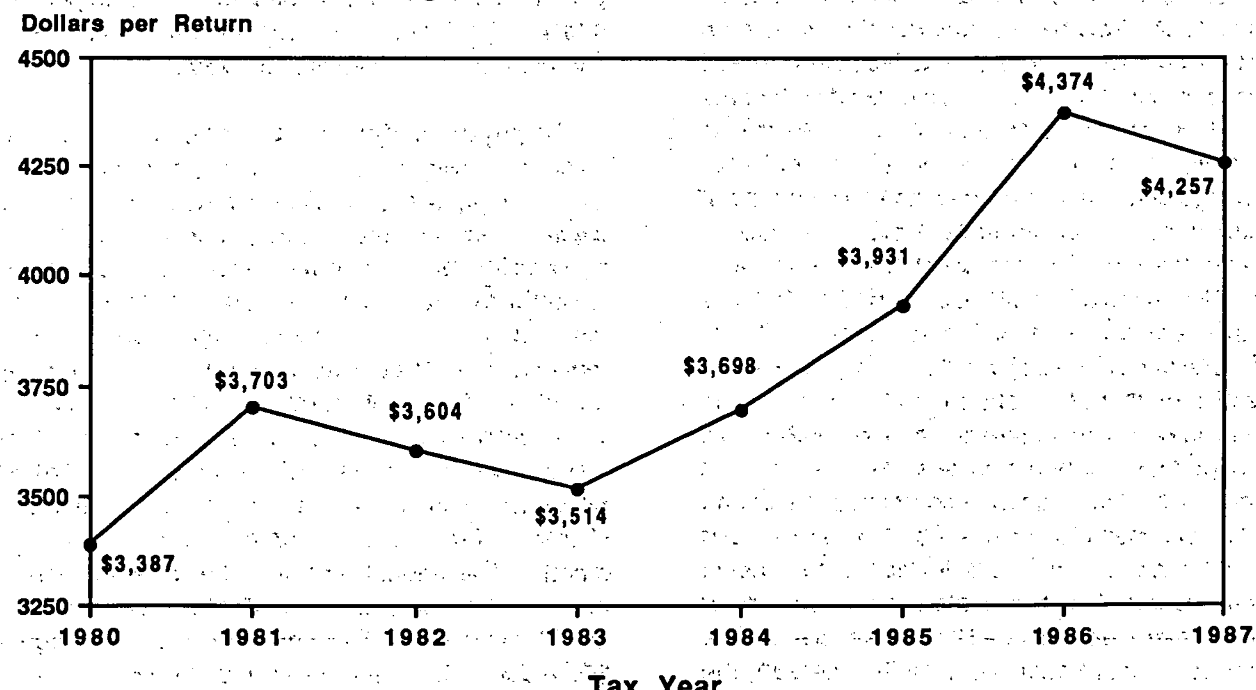
[1] These statistics are based on AGI recomputed to reflect the Tax Year 1979 concept to allow valid comparisons of average tax rates to be made.

eliminating many special provisions. All other things being equal, this redefinition of AGI, by making AGI larger, would make the average tax rate smaller. Figure A shows both unadjusted average tax rates (which show the expected decrease between 1986 and 1987) and adjusted figures. These adjusted figures are derived by refiguring AGI for 1986 and 1987 according to the AGI concept in use for Tax Year 1979 and using this refigured AGI to recompute the average tax rates for these years [2]. The average tax rates before and after tax reform based on the common AGI concept differed little, falling from 13.59 percent for 1986 to 13.49 percent for 1987, revealing that the difference in the unadjusted numbers resulted mostly from the differing definitions of AGI. Figure C presents average tax statistics for the years 1980 (the year prior to the enactment of ERTA) through 1987. For returns that showed an income tax liability, or "taxable returns," average tax for 1987 was $4,257, a decrease of $117 from 1986. (For further information on the number of returns, income tax and average tax by size of AGI, see Table 3 of the Selected Historical Data section of this issue.)

ERTA phased in steadily decreasing tax rates over the period 1981 through 1984, and established indexing of tax rates for the effects of inflation for years after 1984. For Tax Year 1986, the last year for which ERTA was in effect, a bracket structure with 15 or 16 brackets (depending on the

Figure C

Taxable Returns: Average Total Income Tax, Tax Years 1980-1987



filing status) was in effect. When all filing statuses are considered together, there were no fewer than 26 distinct rates applicable to taxable income for 1986, and a top marginal rate of 50 percent [3]. Key elements of the 1986 Act were a simpler tax rate structure with just two statutory and three actual marginal rates (beginning in 1988), a lower top marginal rate, an increased standard deduction, a larger personal exemption, and the broadening of the tax base through the reduction or elimination of many special provisions. The 1986 Act provided a transitional, five-bracket rate structure with a top marginal rate of 38.5 percent for 1987, leading to the new two statutory and 3 actual bracket rate structure with a top marginal rate of 28 percent starting with 1988 [4]. The new law also limited or rescinded certain itemized deductions, ended the favored treatment of capital gains and established limitations on the deductibility of losses from "passive" sources to discourage tax shelter activity [5, 6].

Under the 1986 Act, all capital gains were to be treated as ordinary income, although for 1987, net long-term capital gains were taxed at a maximum rate of 28 percent. In addition, investment income (such as interest or dividends) in excess of $1,000 on returns filed for dependents was taxed as if it were their parents' income when this resulted in a larger tax liability. Also, 1987 featured the beginning of a phase-in of a variety of provisions including those limiting losses and tax credits stemming from passive activities.

TAX RATES FOR 1987

Figure D compares the computation of taxable income for 1987 and 1986. Taxable income was the amount on which income tax before credits (not including special taxes) was computed [7]. For 1987, taxable income equalled AGI less the personal exemption amount and less either the standard deduction (including the additional amounts for age and blindness) for taxpayers who did not itemize deductions or total allowable itemized deductions for all other taxpayers. This represented a change from 1986. For 1986, taxable income was defined as AGI less the personal exemption amount (including the additional amounts for age and blindness), and less either total allowable itemized deductions (the total amount in excess of the "zero bracket amount") for those who itemized or allowable charitable deductions for non-itemizers. As a result of the Tax Reform Act of 1986, charitable contributions were no longer deductible after 1986 unless the taxpayer itemized his or her deductions. Also, the former "zero bracket amount" (i.e., income "taxed" at a rate of zero percent), or ZBA, that had been in effect since 1977, was replaced by a more generous standard deduction. Unlike the ZBA, the increased standard deduction was not incorporated into

Figure D.—Computation of Taxable Income from Adjusted Gross Income

	1986	1987
Adjusted Gross Income	X	X
LESS: Itemized Deductions (for those who itemize)	X[1]	X
Charitable Contributions (for nonitemizers)	X	
Standard Deduction	([2])	X[3]
Total Exemptions times Exemption amount	X[4]	X[5]
EQUALS: Taxable Income	X	X

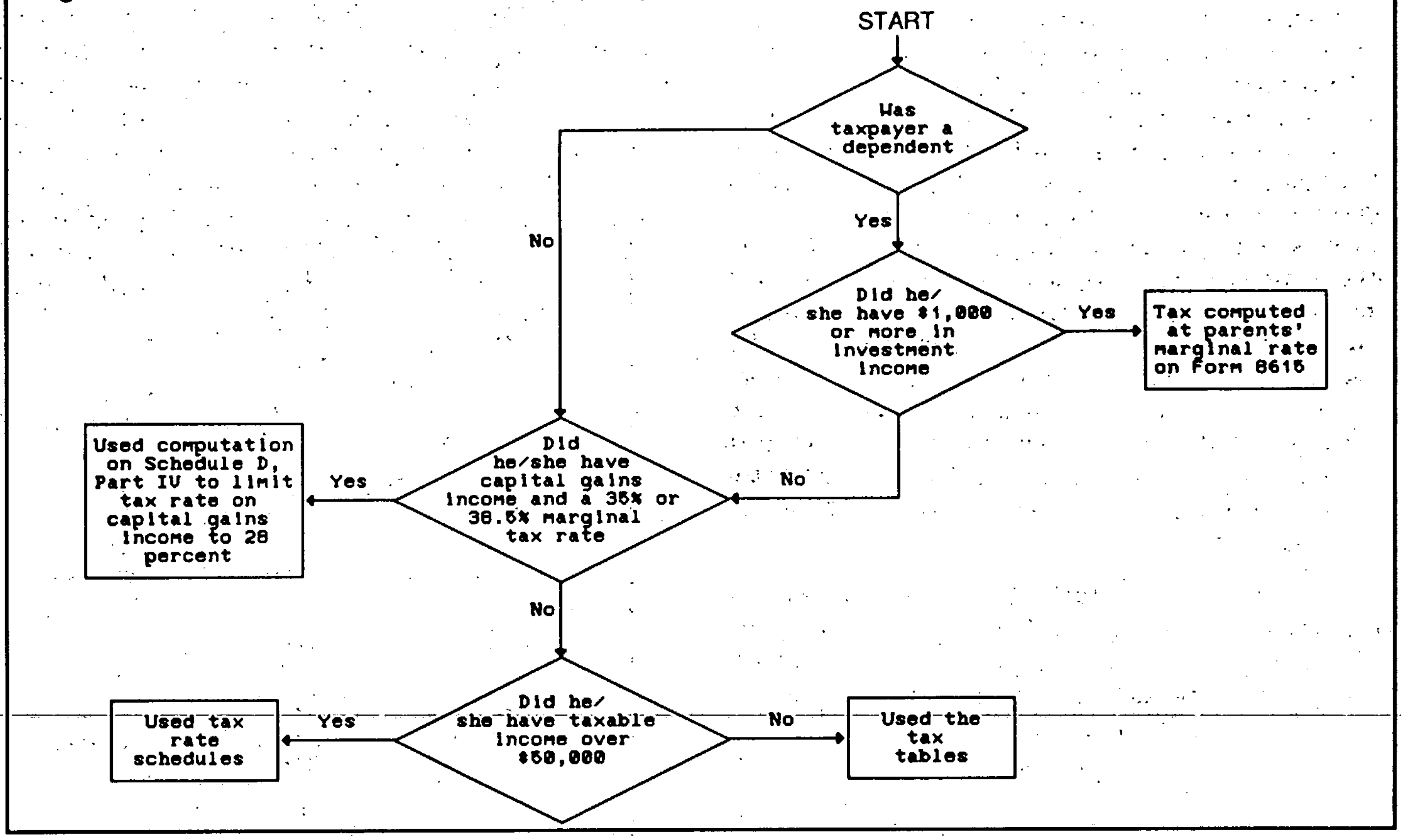
[1] Reduced by the zero bracket amount included in the tax tables and tax rate schedules for 1986.
[2] The standard deduction for 1986 was incorporated into the tax tables and tax rate schedules as a "zero bracket amount;" that is, an amount of income on which no tax was levied. This amount varied with several filing status groups.
[3] With repeal of the "zero bracket amount" for 1987, the standard deduction entered explicitly into the calculation of taxable income. The basic standard deduction varied with filing status and was larger for taxpayers who were blind, or age 65 or over. In addition, taxpayers who were age 65 or over or blind received additional allowances for age and blindness. This replaced additional personal exemptions previously allowed to taxpayers who were blind or age 65 or over.
[4] The exemption amount for 1986 was $1,080. Extra exemptions were given to taxpayers who were blind or age 65 or over; these were eliminated in 1987 and replaced by an increased standard deduction.
[5] The exemption amount for 1987 was $1,900.

the tax tables and tax rate schedules, but instead had to be specifically deducted in computing taxable income. Also, as already indicated, taxpayers who were blind or who were age 65 or over received increased standard deductions for 1987 rather than extra exemption amounts; hence, no corresponding adjustments were made for those who itemized deductions.

Taxes were calculated on taxable income according to tax rate schedules that varied with taxpayer filing status. There were separate rates for single persons, married persons filing joint returns, married persons filing separate returns from their spouses, and heads of household [8, 9]. The 1987 rates for each filing status ranged from 11 to 38.5 percent; for 1986, they ranged from 11 to 50 percent. (In addition, for 1986, a zero percent rate applied to taxable income less than or equal to the ZBA.)

Taxpayers used one of four methods when figuring their initial tax liability (Figure E). If they did not have income from net long-term capital gains (reduced by net short-term capital losses) and were not dependents under 14 years of age with investment income in excess of $1,000, they used either the tax tables or the tax rate schedules to determine tax. Taxpayers with taxable income under $50,000 were required to use the tax tables, which simplified the calculation of tax. Those with taxable income of $50,000 or more were required to use the tax rate schedules. Although taxpayers did not have a choice between using the tax table or tax rate schedules, the two methods could produce slightly different results for the same taxable income amount. The amounts shown in the tax tables were based on the same computation as the tax rate schedules, but used the midpoints of "taxable income brackets" (generally $50 wide) as the basis for deriving the tax. In addition, tax tables rounded the resulting tax to the nearest whole dollar.

Figure E.--Determination of Method For Computing Tax



Since the highest marginal income tax rate used in the tax tables was 38.5 percent and the tax table brackets were no wider than $50, and the tax was calculated on the midpoint of the bracket, the maximum deviation in tax between the tax tables and the tax rate schedules was $9.63. In most cases the deviation was substantially less. The tax liability from the tax tables could be either higher or lower than that from the tax rate schedules [10].

If taxpayers had income from a net long-term capital gain (reduced by a net short-term capital loss) and had taxable income subject to a marginal rate greater than 28 percent (i.e., income over $27,000 for single taxpayers, over $38,000 for heads of households, over $45,000 for married couples filing jointly, or over $22,500 for married taxpayers filing separately), then they used a different computation to figure their tax. This method of tax computation (in effect for 1987 only) restricted the tax rate on that portion of taxable income from net long-term capital gains to no more than 28 percent [11]. Income from other than net long-term capital gains over the above dollar limits was still taxed at the appropriate rate (either 35 or 38.5 percent). For 1986, the law had excluded 60 percent of long-term capital gains from taxation, effectively limiting the marginal tax rate on such capital gains to a maximum of 20 percent.

If a taxpayer were a dependent under age 14 and had over $1,000 of investment income, he or she computed tax still another way, using Form 8615, Computation of Tax for Children Under Age 14 Who Have Investment Income in Excess of $1,000. This assured that the investment income of these taxpayers was taxed as if it were the income of their parents if this resulted in a higher tax. In this case, the actual tax liability of the child could have been calculated using any of the three methods described previously, depending on the particular circumstances of the parents, the child, and any other children who were required to file Form 8615.

MARGINAL TAX RATES

When tax is calculated, different portions of taxable income may be taxed at different rates. For example, the first $1,800 of taxable income on a return was taxed at 11 percent for 1987. If the taxpayer had more than $1,800 in taxable income, then the next $15,000 was taxed at 15 percent. In general, the tax rate that applied to the last dollar of income (given certain assumptions about the order in which income-earning opportunities were undertaken) is called the "marginal tax rate" for that return. Since tax rates increase with income (from 11 to 38.5 percent for

1987), the marginal tax rate of a return is the highest rate applied to any amount of income on that return.

Tables 1 and 2 present 1987 marginal tax rate data. These data are based on those items of income which were subject to tax, generally those included in AGI. Some forms of economic income may have had portions (such as the portion of interest income which represented tax-exempt interest on obligations of State and local Governments) which were not taxable, and thus were not included in AGI. The nontaxable portions of these income items were not included in income for purposes of determining marginal tax rates in Tables 1 and 2. It was possible, however, for the receipt of some forms of tax-exempt income to influence the taxability of other income (such as social security). When this occurred, the income which was made taxable by the receipt of other forms of nontaxable income was included in AGI and in the determination of marginal tax rates.

All returns included in Tables 1 and 2 had some amount of taxable income. Of the 106,996,270 individual tax returns filed for 1987, there were 86,723,796 that had taxable income, while 20,272,494 did not. The pie charts in Figure F show (a) the proportions of returns with taxable income by marginal rate, (b) the proportion of "modified" taxable income contained on returns per marginal rate, and (c) the proportion of total tax contained on returns at each marginal rate. ("Modified" taxable income differs only slightly from taxable income on the tax return; it is explained in the "Definitions" section below.)

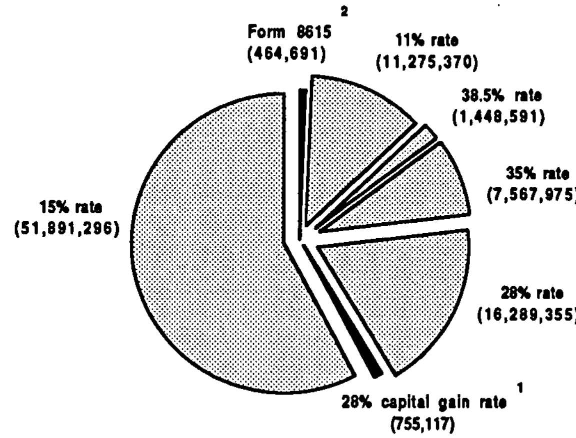
Two of the marginal tax rate classifications deserve special explanation. Returns were classified as "28 percent capital gains" if the tax computation on Form 1040, Schedule D, Part IV was used to limit the tax rate on net long-term capital gains to 28 percent and if no other income was taxed at a rate higher than 28 percent. Returns were classified as "Form 8615" if they were returns of dependents under age 14 with more than $1,000 in investment income, Form 8615 was used to compute the tax on their investment income as if it were their parents' income, and this resulted in a higher tax liability than if the income had been taxed as the dependent's own.

Returns were classified by two different methods in Table 1. In columns 1 through 9, 13 through 21, 25 through 33, 37 through 45, and 49 through 57, a return was classified according to the marginal tax rate used in computing the tax reported. For example, column 1 shows that there were 51,891,296 returns for which the marginal tax rate was 15 percent. Columns 5 and 6 show that, for these returns, the amount of tax generated at the 11 through 15 percentage rates totaled $85.3 billion, of which $71.6 billion of tax was generated solely at the 15 percent marginal rate.

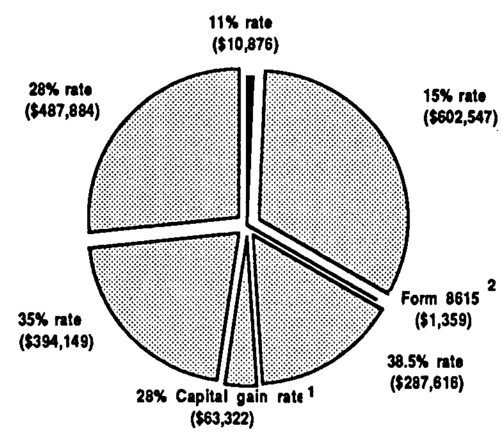
Figure F

Tax Generated, Modified Taxable Income, and Number of Taxable Returns Classified by Marginal Tax Rate, Tax Year 1987

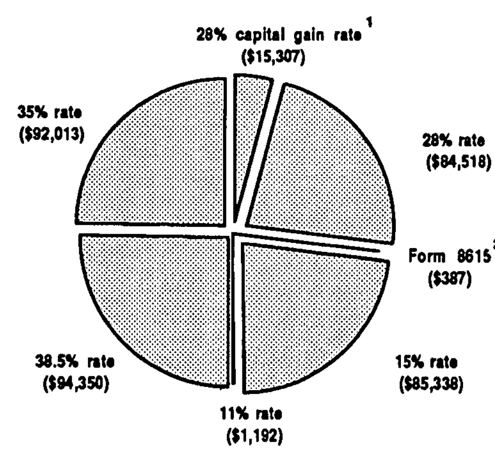
[Money amounts are in millions]



Number of Taxable Returns (Total: 89,692,395)



Modified Taxable Income (Total: $1,847,753)



Tax Generated (Total: $373,102)

[1] Net long-term capital gains taxed at the maximum rate of 28 percent, and no income taxed at a higher rate.
[2] Filed by dependents with more than $1,000 in investment income to ensure that their income was taxed as if it were that of their parents.

In columns 10 through 12, 22 through 24, 34 through 36, 46 through 48, and 58 through 60, a return was classified by each rate that generated a tax. For example, columns 10, 11, and 12 show that 77,958,663 returns had *some* income taxed at the 15 percent rate; the modified taxable income taxed at this rate was $1.03 trillion and the tax generated by the rate was $154.9 billion.

The amount of tax generated by each specific tax rate, from 11 to 38.5 percent, as well as the corresponding number of returns and the amount of taxable income classified by size of AGI, are presented in Table 2. For example, column 1 shows that 4,899,861 returns with taxable income showed an AGI between $14,000 and $16,000; column 3 shows that these returns had modified taxable income of $39.2 billion, on which $5.5 billion of tax was generated. Column 8 shows that 4,622,267 of these returns had a portion of income taxed at the 15 percent rate; column 9 shows that these returns had $28.2 billion of modified taxable income subject to the 15 percent rate, and column 10 shows that $4.2 billion of tax was generated from these returns at this rate.

DERIVATION OF TAX

Regular Tax

Table 1 includes two amounts of income tax: "tax generated" and "income tax after credits." Both were used to determine the total income tax amount. Tax generated was the initial tax computed when tax rates were applied to taxable income. Column 5 in Table 1 shows that approximately $373 billion of tax was generated by applying tax rates to taxable income. For most taxpayers, tax generated was equal to income tax before credits. For others, income tax before credits was derived by adding to the tax generated from the tax rate schedules, the special taxes on accumulation distributions of trusts and lump-sum distributions from qualified retirement plans when the special 10-year averaging method was used. Income tax after credits was derived by subtracting, in the following order, the credits for child and dependent care, the credit for care for the elderly or permanently and totally disabled, the foreign tax credit, the general business credit, and the earned income credit (to the extent that its application did not reduce tax below zero; this amount therefore excludes the refundable portion of the credit). Income tax after credits on returns with modified taxable income, shown in column 7 of Table 1, amounted to more than $367 billion.

Figure G shows the derivation of aggregate income tax for 1987. Total income tax, used in Figures A and B but not shown in Tables 1 and 2, is the sum of income tax after credits and the alternative minimum tax (AMT) [12]. Tax

Figure G.—Derivation of 1987 Tax as Shown in Statistics of Income

	TAX
TAX GENERATED FROM TAX RATE SCHEDULES OR TAX TABLE	**$373.1 billion**
PLUS: Taxes from special computations, total	$0.8 billion
—Tax on accumulation distribution of trusts	
—Tax on lump-sum distributions from qualified retirement plans	
EQUALS:	
INCOME TAX BEFORE CREDITS	**$373.9 billion**
LESS: Tax credits, total	$6.3 billion
—Child-care credit	
—Foreign tax credit	
—General business credit	
—Elderly or disabled credit	
—Earned income credit (limited to the amount needed to reduce total tax to zero)	
EQUALS:	
INCOME TAX AFTER CREDITS	**$367.5 billion**
PLUS: Alternative minimum tax	$1.7 billion
EQUALS:	
TOTAL INCOME TAX	**$369.2 billion**

attributable to the alternative minimum tax, which was computed on a different base from that used for the statistics in these two tables, is excluded from Tables 1 and 2. Nearly 140,000 returns reported $1.7 billion of alternative minimum tax for 1987.

Alternative Minimum Tax

For 1987, the alternative minimum tax (AMT) was revised in a continuing attempt to ensure that taxpayers with substantial "economic income" could not avoid some tax liability [13]. The starting point for calculating the "alternative minimum taxable income" (AMTI) was changed for 1987 from AGI to "taxable income." Figure H shows the 1986 and 1987 methods of deriving AMTI. For 1986, the taxpayer started with AGI and subtracted only those deduction items which were allowable for AMT purposes; for 1987, the taxpayer started with "taxable income" and those deduction items not allowable for AMT were added back. This represented a purely mechanical change; it is important to note that both computations still proceeded to add back specific "tax preference" items to arrive at AMTI. (Tax preferences are income and expense items accorded beneficial tax treatment under the Internal Revenue Code.)

In addition to this change in the starting point for computing AMTI, there were several changes in the treatment of its components. For 1987, the net operating loss deduction (representing the business net losses of other years that were offset against the current-year business income) was replaced in AMTI by an alternative net operating loss deduction (which was limited to a maximum of 90 percent of the AMTI). Also, several items were added to account for changed depreciation rules. A single item for 1986 was replaced by two for 1987, one for accelerated depreciation under the Accelerated Cost Recovery System (ACRS) rules

Figure H.--Calculation of Alternative Minimum Taxable Income for 1987

Taxable Income

PLUS: **Net operating loss deduction**

PLUS: *Adjustments*

- Standard deduction from Form 1040
- The lesser of allowable Medical and dental expense or 2.5 percent AGI
- Miscellaneous itemized deductions subject to the 2 percent of AGI limitation
- State and local income, real estate, and other taxes
- The deductible portion of personal interest
- Other interest adjustments[1]
- Excess of depreciation on property placed in service after 1986 over less generous methods allowed for alternative minimum tax purposes (straight-line or 150% declining balance depending on type of property)
- Excess of mining exploration and development costs over the allowable amortization had they been capitalized
- Excess of circulation and research and experimental expenditures paid or incurred after 1986 over the allowable amortization had they been capitalized
- Accrued income from long-term contracts entered into after 1986
- Excess of rapid amortization of pollution control facilities placed in service after 1986 over otherwise allowable depreciation
- Adjustment to disallow the installment sales method of accounting for sales of certain types of property
- Adjustment of basis of property disposed of in 1987 the basis of which was affected by accelerated depreciation or rapid amortization which was reduced for alternative minimum tax purposes (may be negative)
- Adjustment for refigured loss from activities in which allowable losses are limited, taking into account alternative minimum tax adjustments and preference items (may be negative)
- Adjustment for refigured tax shelter farm losses, taking into account alternative minimum tax adjustments and preference items
- Passive activity loss (no phase-in of the passive activity loss limitations are allowed for alternative minimum tax purposes)
- Income distribution deduction for beneficiaries of estates and trusts

PLUS: *Tax Preference Items*

- Excess of accelerated depreciation of real property placed in service before 1987 over straight-line
- Excess of accelerated depreciation of leased property placed in service before 1987 over straight-line
- Excess of rapid amortization of pollution control facilities placed in service before 1987 over allowable depreciation
- Excess of appreciated property charitable deduction over the basis of the property
- Excess of shares' market value over option price when an incentive stock option has been exercised
- Amount by which excess of intangible drilling costs over allowable amortization on these costs had they been capitalized exceeds 65 percent of taxpayer's income from oil, mineral, and geothermal properties
- Tax-exempt interest from private activity bonds issued after August 7, 1986
- Excess depletion of mineral reserves over adjusted basis
- Excess of reserves for losses on bad debts of financial institutions deduction over the allowable deduction had the institution maintained a reserve that accurately reflected the incidence of bad debts

MINUS: **Alternative tax net operating loss deduction**

EQUALS: **Alternative minimum taxable income**

[1]Includes interest attributable to the amount in excess of the remaining balance of a mortgage loan, when that loan has been refinanced for an amount greater than the remaining balance, and when that excess amount was not used for home improvements. Also includes the difference between investment interest expense on Form 4952 and interest from Form 4952 refigured for alternative minimum tax purposes.

Figure H.--Calculation of Alternative Minimum Taxable Income for 1986

Adjusted gross income

LESS: *Adjustments*

- — Medical and dental expenses reduced by 10 percent of AGI
- — Charitable contributions
- — Casualty and theft losses
- — Qualified interest on property used as a residence
- — The smaller of Net investment income or Other interest[1,2]
- — Gambling losses to the extent of gambling income
- — Estate tax allowable under Code section 691(c)
- — Charitable deduction and Income distribution deduction for estates and trusts

PLUS: *Tax Preference Items*

- — Dividend exclusion
- — 60 percent capital gains exclusion
- — Excess of accelerated depreciation on real property over less generous methods required to be used for alternative minimum tax purposes (the method varies with type of property)
- — Excess of accelerated depreciation on leased property over less generous methods required to be used for alternative minimum tax purposes (the method varies with type of property)
- — Excess of rapid amortization of certified pollution control facilities over otherwise allowable depreciation
- — Excess of mining, exploration, and development costs over allowable amortization had these cost been capitalized
- — Excess of circulation and research and experimental expenditures over allowable amortization had these expenditures been capitalized
- — Reserves for losses on bad debts of financial institutions
- — Excess of depletion over basis of property
- — Excess of shares' market value over option price when an incentive stock option has been exercised
- — Excess of intangible drilling costs over taxpayer's net income from oil, gas, and geothermal properties

EQUALS: **Alternative minimum taxable income (AMTI)**

[1] Investment income is defined as interest, dividends, rents, royalties not derived in a trade or business, and capital gains from the sale or exchange of property held for investment.
[2] Other interest is defined as any interest paid other than that paid on property used as a residence.

in effect prior to 1987, and one for depreciation calculated under the Modified ACRS (MACRS) rules in effect after 1986. Depreciation was then recomputed using a less-generous method (either straight-line or 150 percent declining balance). The difference between the accelerated depreciation and the less generous depreciation was a tax preference that was added into AMTI. Further, tax-exempt interest from "private activity bonds" issued after August 7, 1986 was another new "preference" included in AMTI. In addition, for 1987, income earned but not yet received under long-term contracts entered into after 1986 was included in AMTI, as was an adjustment disallowing the installment method of accounting for sales of certain kinds of property; no such addition or adjustment was made for 1986. Since the 60 percent capital gains exclusion and the $400 dividend exclusion amounts were eliminated as tax preferences starting with 1987, they were eliminated from the 1987 computation. Other conceptual changes introduced starting with 1987 included an adjustment reducing the deduction for any non-cash charitable contribution to the extent that the contribution included the appreciated value of the property in excess of its cost or "adjusted basis." Finally, several new items related to deductible passive losses and to tax shelter rules were added for 1987. These included an adjustment of passive activity losses to reduce them by the amount of any deduction recognized in calculating AMTI, and the adding back of tax shelter farm losses to the extent that they were previously limited due to the use of tax preference items adjusted in calculating AMTI.

The alternative minimum tax was computed from AMTI using the following steps. First, AMTI was reduced by an exemption amount. For both 1986 and 1987, the AMTI exemption for single filers was $30,000; for joint filers the amount was $40,000. For 1987, the exemption was phased out above certain levels of AMTI. For single (joint) filers, the phaseout began at $112,500 ($150,000) of AMTI and ended at 232,500 ($310,000) of AMTI. In contrast, for 1986, there was no phaseout. For 1986, after reducing AMTI by the exemption amount, the result was subjected to a 20 percent tax rate; for 1987, the rate was increased slightly to 21 percent. For 1986, income tax after credits from Form 1040 was also subtracted from the 20 percent tax; for 1987, income tax *before* credits (reduced by the foreign tax credit) was subtracted from the tax. For both years, a recomputed foreign tax credit was used for this purpose. The net tax remaining for each year was the alternative minimum tax.

Although it may appear that there is considerable difference in the treatment of tax credits between the 2 years, many of the credits involved were reduced or disallowed at the income levels where taxpayers became subject to the alternative minimum tax. One significant difference in the treatment of credits was the limitation of the alternative minimum foreign tax credit for 1987 to 90 percent of the alternative minimum tax prior to application of the credit. This change alone would have resulted in more taxpayers being subject to the AMT.

Figure I provides a summary of data from Form 6251, Alternative Minimum Tax for Individuals.

DEFINITIONS

Brief definitions of the major tax concepts discussed in this article follow. For more extensive definitions, see *Statistics of Income--1987, Individual Income Tax Returns.*

Adjusted Gross Income--Adjusted gross income (AGI) is computed by subtracting statutory adjustments (primarily business, investment or employee-related deductions, such as payments to a Keogh retirement plan) from total income recognized under the tax code. Total income includes, for example, salaries and wages, taxable interest, dividends, and the net amounts from sources such as business income, rents and royalties, and capital and ordinary gains from asset sales. For 1987, it included the full amount of capital gains and dividends (each of which had had an excludable portion for 1986), and included some social security and pension benefits, among other items.

Marginal Tax Rate--The marginal tax rate presented in this article is the highest tax rate that applied to the last dollar of income included in taxable income on a given return. Returns where a special tax computation (from Form 1040, Schedule D, Part IV) was used to limit the tax rate on net long-term capital gains to 28 percent and where the taxpayer had no income taxed at a rate above 28 percent are shown separately in the tables [14]. Returns of dependents with a Form 8615 attached are also shown separately when the use of Form 8615 resulted in the taxation of the dependent's income as if it were that of his or her parents.

Taxable Income--For 1987, taxable income was AGI less the sum of personal exemption amounts and either the standard deductions for non-itemizers or total itemized deductions for all others.

Modified Taxable Income--For 1987, modified taxable income equals taxable income for all returns (included in the sample on which the these statistics were based) which were filed for Tax Year 1987, plus an estimated amount for returns filed in 1988 (the year in which returns for Tax Year 1987 were due) but actually covering tax years prior to

Figure I.--Selected Data from Alternative Minimum Tax Computation, by Size of Adjusted Gross Income, Tax Year 1987
[Money amounts are in thousands of dollars]

Size of adjusted gross income	Taxable income 1/		Total adjustments		Total tax preferences	
	Number of returns	Amount	Number of returns	Amount	Number of returns	Amount
	(1)	(2)	(3)	(4)	(5)	(6)
All returns	3,294,526	$291,595,222	3,291,920	$57,444,968	1,255,281	$6,497,976
Less than zero	53,334	-4,838,122	53,696	4,285,878	21,611	266,994
Zero under $10,000	113,646	-223,576	114,551	678,632	17,392	19,927
$10,000 under $20,000	155,850	876,015	154,463	866,906	56,649	90,286
$20,000 under $30,000	164,302	2,258,851	164,302	1,173,318	52,133	120,669
$30,000 under $40,000	223,392	5,429,192	223,392	1,504,497	78,541	218,951
$40,000 under $50,000	337,711	10,716,607	337,711	2,454,132	112,264	145,207
$50,000 under $75,000	853,702	37,671,639	853,552	6,661,778	306,610	532,736
$75,000 under $100,000	464,785	28,718,805	463,957	5,298,634	177,422	405,423
$100,000 under $200,000	584,446	60,772,690	583,321	10,944,678	248,556	1,257,839
$200,000 or more	343,358	150,213,123	342,975	23,576,516	184,103	3,439,944

Size of adjusted gross income	Alternative minimum taxable income		Form 1040 income tax 2/		Alternative minimum tax	
	Number of returns	Amount	Number of returns	Amount	Number of returns	Amount
	(7)	(8)	(9)	(10)	(11)	(12)
All returns	3,295,911	$351,624,109	3,118,016	$84,893,648	125,251	$1,496,434
Less than zero	53,810	-2,687,602	–	–	6,752	141,181
Zero under $10,000	114,551	325,985	46,781	11,032	1,921	25,418
$10,000 under $20,000	155,850	1,724,892	129,936	127,745	1,524	4,502
$20,000 under $30,000	164,302	3,528,756	156,418	342,413	7,009	16,244
$30,000 under $40,000	223,392	6,885,321	220,050	913,644	7,225	35,907
$40,000 under $50,000	337,711	13,210,654	332,977	1,979,488	6,650	30,092
$50,000 under $75,000	853,702	44,623,178	847,568	7,789,157	17,172	67,010
$75,000 under $100,000	464,785	34,319,158	462,164	6,887,280	14,128	80,423
$100,000 under $200,000	584,446	72,901,799	581,099	17,068,912	34,182	310,853
$200,000 or more	343,362	176,791,970	341,023	49,773,977	28,688	784,003

1/ Includes alternative net operating loss deduction.
2/ Income tax before credits from Form 1040, minus the foreign tax credit.

1987. Each year, a small number of returns for prior tax years are filed during the period in which the SOI sample for the current tax year is being selected. A few of these returns are selected for the SOI sample, and act as proxies for returns for the current tax year which will be filed during a later filing period. The tax on these returns is based on a previous year's tax law (which reflects different tax rates and income concepts). For purposes of the statistics, taxable income is adjusted to equal an amount necessary to generate, using current-year rates, the tax actually shown on the return. This estimated amount is used to represent the taxable income for these returns.

Taxable Returns--For 1987, a return was considered "taxable" if it showed an amount of income tax after tax credits or if it had "total income tax" (which included the "alternative minimum tax"). The following taxes were not recognized in this computation of tax: self-employment tax; tax on recapture of prior years' investment credits; social security tax on certain tip income; and the penalty tax on premature distributions from, and excess contributions to, Individual Retirement Arrangements (IRA's).

Tax Generated--This was the tax calculated from the tax rate schedules (or tax tables) on taxable income, along with tax generated from Form 8615 and Form 1040, Schedule D, Part IV (described above, under "marginal tax rates"). It did not take into account the alternative minimum tax or the effect of tax credits. For most returns (those without one of the "taxes from special computations" described under "taxable returns" above), tax generated equalled income tax before credits.

Total Income Tax--Total income tax was the sum of income tax after credits and the alternative minimum tax.

DATA SOURCES AND LIMITATIONS

These statistics are based on a sample of individual income tax returns (Forms 1040, 1040A, and 1040EZ) filed with the Internal Revenue Service in 1988. Returns in the sample were stratified based on the larger of total income or total loss; size of business plus farm receipts; the presence or absence of Schedule C, Profit (or Loss) from Business or Profession; and Schedule F, Farm Income and Expenses. Returns were selected at rates ranging from 0.03 percent (for the more numerous smaller size returns) to 100 percent (for the relatively few returns with large income amounts), resulting in 125,887 returns being selected from a population of 107,173,061.

Because the data presented in this article are estimates based on a sample, they are subject to sampling, as well as nonsampling, error. To make proper use of the statistical data provided, the magnitude of the potential sampling error needs to be known. Figure J presents approximate coefficients of variation (CV's) for frequency estimates. The approximate CV's shown here are intended only as a general indication of the reliability of the data. For a number other than those shown, the corresponding CV's can be estimated by interpolation. The reliability of estimates based on samples, the use of coefficients of variation for evaluating the precision of sample estimates, and nonsampling error considerations are discussed in the methodological Appendix at the back of this issue of the *Bulletin*.

Figure J.—Coefficients of Variation for Frequency Estimates, 1987

Estimated number of returns	Approximate coefficient of variation
5,620,600	0.018
4,552,700	0.020
728,400	0.050
182,100	0.100
45,500	0.200
20,200	0.300
14,900	0.350
7,300	0.500

NOTES AND REFERENCES

[1] For purposes of this article, the marginal tax rate for a return is defined as the highest rate at which any amount of income on the return was taxed. For a more general discussion of marginal tax rates see Appendix I.

[2] Details of the recalculation of AGI to match the 1979 concept may be found in *Statistics of Income--1987, Individual Income Tax Returns,* p. 8, and in *Statistics of Income--1986, Individual Income Tax Returns*, p. 4.

[3] For a description of the changes in tax rates contained in the Economic Recovery Tax Act of 1981, see Labate, John and Holik, Dan, "Individual Income Tax Rates, 1986," *Statistics of Income Bulletin,* Spring 1989, Volume 8, Number 4.

[4] In addition to the 15 percent and 28 percent brackets, a 5 percent surtax on taxable income between $71,900 and $149,250 for joint filers and on taxable income between $43,150 and $89,560 for single filers was included in the rate structure which was effective for 1988. This surtax resulted in a 33 percent effective marginal tax rate for taxpayers in these income ranges. This surtax effectively phased out the benefits taxpayers received by having some income taxed at a 15 percent rate rather than at a 28 percent rate. The income cutoff points for subsequent years were to be adjusted through indexing for the effects of inflation. In addition to the surtax on income in the above-mentioned intervals, a 5 percent surtax was imposed on income above these intervals in order to phase out the benefits of personal exemption for taxpayers and their dependents. Once the value of the personal exemptions was phased out, the taxpayer's marginal tax rate returned to 28 percent.

The surtax was eliminated by the Revenue Reconciliation Act of 1990, beginning for tax year 1991, in favor of a 31 percent tax bracket, a phaseout of the personal exemption amounts for taxpayers and dependents with income above certain thresholds, and a reduction in the itemized deduction of taxpayers with AGI above certain thresholds. For 1991, the 31 percent rate applied to amounts of taxable income over $78,400 for married persons filing jointly, over $67,200 for heads of household, to taxable income over $47,050 for single filers, and over $39,200 for married persons filing separately. Personal exemptions were phased out for single taxpayers with AGI over $100,000, for heads of household with AGI over $125,000, for taxpayers filing joint returns with AGI over $150,000, and for married taxpayers filing separately with AGI over $75,000. Two percent of the exemption amount was disallowed for each $2,500 or fraction thereof of AGI on a taxpayer's return in excess of these threshold amounts. The reduction on itemized deductions applied to taxpayers with amounts of AGI in excess of $100,000 ($50,000 for married taxpayers filing separately). Itemized deductions were reduced by the lesser of 3 percent of the amount of AGI in excess of the threshold, or 80 percent of allowable itemized deductions excepting medical expenses, casualty losses, investment interest, and allowable gambling losses.

[5] For more information, see Hostetter, Susan and Bates, Jeffrey, "Individual Income Tax Returns," *Statistics of Income Bulletin,* Spring, 1989, Volume 8, Number 4.

[6] A source of income is defined as passive if it is a trade or business in which the taxpayer does not "materially participate," or if it is a rental real estate activity. A taxpayer "materially participates" in an activity if he or she is involved on a regular, continuous, and substantial basis in the operations of the activity. In general, the Tax Reform Act of 1986 limited the deductibility of passive losses, allowing such deductions only to offset passive income. This provision was to be phased in starting with Tax Year 1987. Only 65 percent of losses from passive activities other than rental

real estate entered into prior to October 23, 1986, could be used to offset income from non-passive sources for Tax Year 1987.

The Act made an exception to the general rule for rental real estate activities. For taxpayers with AGI less than $100,000, up to $25,000 in rental real estate losses was allowed to offset non-passive income. For taxpayers with AGI in excess of $100,000, this $25,000 exception amount was reduced by 50 percent of the amount of their AGI in excess of $100,000; this effectively eliminated the $25,000 exception for taxpayers with AGI of $150,000 or more. All rental real estate losses in excess of the exception amount were subject to the same limitations on their deductibility as other passive losses.

For more information on limitations on the deductibility of passive losses, see Hostetter, Susan and Bates, Jeffrey, "Individual Income Tax Returns, Preliminary Data, 1987," *Statistics of Income Bulletin*, Spring, 1989, Volume 8, Number 4; Middough, Joseph H., "Partnership Returns, 1987," *Statistics of Income Bulletin*, Volume 9, Number 3; Nelson, Susan and Petska, Tom, "Partnerships, Passive Losses, and Tax Reform," *Statistics of Income Bulletin*, Winter 1989-1990, Volume 9, Number 3; and Nelson, Susan and Petska, Tom, "Partnerships and Tax Shelters: An Analysis of the Impact of the 1986 Tax Reform," *1990 Proceedings of the American Statistical Association, Section on Survey Research,* 1991 (in preparation at the time this article was written). For further information on the Tax Reform Act of 1986, see U.S. Congress, Joint Committee on Taxation, *General Explanation of the Tax Reform Act of 1986* (H.R. 3838, 99th Congress, Public Law 99-514), May 4, 1987.

[7] For returns included in the sample on which the 1987 statistics were based which represented prior-year tax periods, the taxable income necessary to generate the amount of tax on these returns under the 1987 rate structure was estimated for the statistics, thus the term "modified taxable income" used in Tables 1 and 2. See also, "modified taxable income" under Definitions.

[8] The 1987 tax rate schedules were published in the Instructions for Preparing Form 1040; they are reproduced in *Statistics of Income--1987, Individual Income Tax Returns.*

[9] A taxpayer who did not remarry after the death of a spouse, and who had a dependent living with him or her, was allowed to use "qualifying widow(er) with dependent child" as his or her filing status if his or her spouse had died within 2 years prior to Tax Year 1987. Those who qualified could use the married filing jointly tax rates when calculating their 1987 tax.

[10] Figure K demonstrates the slightly different amounts of tax derived from tax rate schedules and tax tables for a single taxpayer with an AGI of $25,000, one exemption, the standard deduction, and $20,560 of taxable income.

Figure K.--Example of the Income Tax Calculation for a Single Taxpayer who used the Standard Deduction, Tax Year 1987

Adjusted gross income	$25,000.00
Exemption amount	-1,900.00
Standard deduction amount	-2,540.00
Taxable income	$20,560.00
Tax Based on 1987 Tax Rates for Single Taxpayers	
First $1,800 of taxable income taxed at 11%	$198.00
Next $15,000 of taxable income taxed at 15%	2,250.00
Next $3,760 of taxable income taxed at 28%	1,052.80
Tax on $20,560 of taxable income based on tax rate schedule for single taxpayers	$3,500.80
Tax Based on 1987 Tax Table	
Tax on $20,560 of taxable income from the 1987 tax table	$3,505.00
Difference	$4.20

[11] This calculation is contained in Form 1040, Individual Income Tax Return, Schedule D, Part IV. For more information on the treatment of capital gains, see Hostetter, Susan and Bates, Jeffrey, *op. cit.*, p. 7.

[12] Total income tax did not include certain other taxes reported on the individual income tax return, such as self-employment tax (social security tax for self-employed persons), the social security tax on certain tip income, and tax from recapture of prior-year investment credit. These taxes were included in "total tax liability," which is also shown in *Statistics of Income--1987, Individual Income Tax Returns.* For Tax Year 1987, total tax liability equalled $384.5 billion, and was reported on 88,551,492 returns.

[13] Of the 107.0 million returns filed, only approximately 3.3 million (3.1 percent) included Form 6251, and only 139,779 of these (0.1 percent of the total number of returns) reported an alternative minimum tax liability.

[14] The limitation of the rate on net long-term capital gains had two effects. One was to broaden the 28 percent tax bracket for taxpayers with net long-term capital gains who used Schedule D, Part IV, to limit the tax rate on net long-term capital gains to 28

percent. The second was to provide taxpayers who had net long-term capital gains as well as some income taxed at a rate higher than 28 percent two different marginal rates, one on net long-term capital gains and the other on all other income. In some cases, this may have influenced their economic behavior, causing them to prefer activities which generated long-term capital gains to other opportunities.

APPENDIX I: GENERAL DEFINITION OF MARGINAL TAX RATE

This article defines the marginal tax rate for a return as the highest rate applied to any amount of income on that return. The definition used in this article is not the only one possible. In general, the calculation of a marginal tax rate for a given return depends upon: (1) the type(s) of income (e.g., salaries and wages, long-term capital gains, or investment income on a dependent's return) reported on the return, which affects the type of tax computation used (e.g., tax tables or tax rate schedules; the Form 1040, Schedule D, Part IV computation used to limit the maximum tax rate on long-term capital gains; or Form 8615, used by dependents under age 14 with over $1,000 in investment income or alternative minimum tax), and the order in which income was assumed to be "stacked." In cases where one considers different types of income, some of which may be only partially subject to tax, or which may be taxed at different rates, it is necessary to make some assumptions about which dollar was earned "last" in order to calculate the tax rate on the income earned from having taken advantage of the marginal or "last" opportunity. This calculation of the marginal rate may be complicated further by the payment of an alternative minimum tax. The addition of alternative minimum tax liability generated by taking advantage of the marginal income-earning opportunity over the "regular" tax generated by income from this opportunity may increase the effective marginal rate.

For example, consider a single, non-dependent taxpayer taking the standard deduction with salary and wage income of $27,000, interest income of $3,000, and a long-term capital gain of $3,000. One might make the assumption that the decision to earn salary and wage income was made first, that the taxpayer next decided to earn interest income, and that his or her final decision concerned realizing a long-term capital gain. This would make the rate paid on long-term capital gains, 28 percent, the taxpayer's marginal tax rate; that is, the taxpayer chose last to realize a capital gain. This decision may have been influenced not by the 35 percent rate which he would have faced on another dollar of salary and wage or interest income, but by the 28 percent rate on long-term capital gains. On the other hand, one might make the alternative assumption that the taxpayer decided some time ago to invest in an opportunity which would produce long-term capital gains, then decided how much to invest in interest bearing securities and accounts, and decided last whether to earn extra salaries and wages (say, through working overtime). The taxpayer's marginal tax rate would then be 35 percent, the rate applicable to the salaries and wages. This decision to earn extra salary and wage income would not be affected by the 28 percent rate faced on long-term capital gains.

Rather than adopt a particular set of beliefs about the order in which taxpayers undertake income-earning activities, SOI stacks income in a behavior-neutral fashion, choosing to consider the amount taxed at the highest rate to contain the last dollar earned. Each return is classified by examining the types and amounts of income earned to determine the highest rate to which any of this income was subject. When the 28 percent tax bracket was "widened" through the use of the Form 1040, Schedule D, Part IV, calculation to limit the tax rate on long-term capital gains to 28 percent, and no income was taxed at a rate higher than 28 percent, then SOI considered that the capital gain was the marginal amount, and the return was classified in the "28 percent capital gains" category. Returns were classifed as "Form 8615" if they were returns of dependents under age 14 with more than $1,000 in investment income, Form 8615 was used to compute the tax on their investment income as if it were their parents' income, and this resulted in a higher tax liability than if the income were taxed as the dependents' own.

Table 1. —Returns With Modified Taxable Income: Taxable Income and Tax Classified by Both the Marginal Rate and Each Rate at Which Tax was Computed

(All figures are estimates based on samples—money amounts are in thousands of dollars)

All returns

Tax rate classes	Classified by the highest marginal rate at which tax was computed: Number of returns	Adjusted gross income	Modified taxable income: At all rates	Modified taxable income: At marginal rate	Tax generated: At all rates	Tax generated: At marginal rate	Income tax after credits: Total	Income tax after credits: As a percent of adjusted gross income	Income tax after credits: As a percent of modified taxable income	Classified by each rate at which tax was computed: Number of returns	Income taxed at rate	Income tax generated at rate [1]
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
All rates	**89,692,395**	**2,736,044,210**	**1,847,753,421**	**852,699,709**	**373,102,475**	**195,383,348**	**367,466,562**	**13.4**	**19.9**	**89,692,395**	**1,847,753,421**	**373,142,380**
11 percent	11,275,370	73,486,705	10,875,666	10,875,666	1,190,653	1,196,323	917,495	1.2	8.4	89,687,333	203,286,554	22,361,521
15 percent	51,891,296	1,050,234,451	602,547,415	477,057,595	85,337,811	71,558,639	82,350,139	7.8	13.7	77,958,663	1,032,425,068	154,863,760
28 percent	16,289,355	674,713,112	487,883,905	100,053,592	84,518,459	28,015,006	83,757,568	12.4	17.2	25,777,593	235,708,808	65,998,466
28 percent capital gains	755,117	80,181,701	63,321,582	41,032,935	15,306,664	11,489,222	15,169,538	18.9	24.0	3,238,231	94,773,600	26,536,615
35 percent	7,567,975	509,838,911	394,149,359	83,631,194	92,012,522	29,270,918	91,623,293	18.0	23.2	9,016,568	141,509,355	49,528,274
38.5 percent	1,448,591	345,975,800	287,616,194	138,952,350	94,349,736	53,496,655	93,286,735	27.0	32.4	1,448,593	138,953,657	53,497,158
Form 8615	464,691	1,613,530	1,359,300	1,096,377	386,629	356,585	361,794	22.4	26.6	464,691	1,096,377	356,585

Joint returns and returns of surviving spouses

Tax rate classes	Classified by the highest marginal rate at which tax was computed: Number of returns	Adjusted gross income	Modified taxable income: At all rates	Modified taxable income: At marginal rate	Tax generated: At all rates	Tax generated: At marginal rate	Income tax after credits: Total	Income tax after credits: As a percent of adjusted gross income	Income tax after credits: As a percent of modified taxable income	Classified by each rate at which tax was computed: Number of returns	Income taxed at rate	Income tax generated at rate [1]
	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
All rates	**42,377,012**	**1,899,882,806**	**1,282,875,175**	**574,782,979**	**267,086,911**	**138,011,531**	**263,447,474**	**13.9**	**20.5**	**42,377,012**	**1,282,875,175**	**267,105,414**
11 percent	2,667,140	33,762,252	4,081,636	4,081,636	447,648	448,980	317,611	0.9	7.8	42,377,012	123,211,252	13,553,238
15 percent	23,663,572	658,962,629	366,270,150	295,279,434	52,089,606	44,291,915	50,518,190	7.7	13.8	39,709,872	696,436,934	104,465,540
28 percent	9,865,575	492,159,919	347,905,007	71,668,907	60,314,024	20,067,294	59,642,575	12.1	17.1	15,880,869	171,950,350	48,146,098
28 percent capital gains	468,482	58,416,572	45,870,799	29,579,992	11,083,294	8,282,398	10,968,704	18.8	23.9	2,265,629	70,952,620	19,866,741
35 percent	4,686,665	377,264,762	287,297,130	61,019,005	67,090,997	21,356,652	66,790,568	17.7	23.2	5,712,243	107,170,015	37,509,505
38.5 percent	1,025,578	279,316,671	231,450,452	113,154,004	76,061,342	43,564,292	75,209,827	26.9	32.5	1,025,578	113,154,004	43,564,292
Form 8615	—	—	—	—	—	—	—	—	—	—	—	—

Separate returns of husbands and wives

Tax rate classes	Classified by the highest marginal rate at which tax was computed: Number of returns	Adjusted gross income	Modified taxable income: At all rates	Modified taxable income: At marginal rate	Tax generated: At all rates	Tax generated: At marginal rate	Income tax after credits: Total	Income tax after credits: As a percent of adjusted gross income	Income tax after credits: As a percent of modified taxable income	Classified by each rate at which tax was computed: Number of returns	Income taxed at rate	Income tax generated at rate [1]
	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)
All rates	**1,329,375**	**30,066,888**	**20,753,457**	**9,954,023**	**4,526,070**	**2,527,119**	**4,450,963**	**14.8**	**21.4**	**1,329,375**	**20,753,457**	**4,526,679**
11 percent	114,970	586,743	79,335	79,335	8,657	8,727	8,463	1.4	10.7	1,329,375	1,900,943	209,104
15 percent	745,780	9,729,733	5,578,868	4,460,198	791,723	669,030	788,512	8.1	14.1	1,214,405	10,318,011	1,547,702
28 percent	276,321	6,798,603	4,952,627	1,084,133	867,117	303,557	866,322	12.7	17.5	465,996	2,662,291	745,442
28 percent capital gains	10,462	1,249,631	961,257	782,287	249,494	219,040	247,874	19.8	25.8	48,909	1,654,026	463,126
35 percent	152,059	6,218,066	4,712,747	1,121,192	1,112,151	392,417	1,098,994	17.7	23.3	181,842	1,791,309	626,958
38.5 percent	29,783	5,484,111	4,468,623	2,426,877	1,496,928	934,348	1,440,798	26.3	32.2	29,783	2,426,877	934,348
Form 8615	—	—	—	—	—	—	—	—	—	—	—	—

Footnote(s) at end of table.

Table 1.—Returns With Modified Taxable Income: Taxable Income and Tax Classified by Both the Marginal Rate and Each Rate at Which Tax was Computed—Continued

(All figures are estimates based on samples—money amounts are in thousands of dollars)

Tax rate classes	Returns of heads of households											
	Classified by the highest marginal rate at which tax was computed									Classified by each rate at which tax was computed		
	Number of returns	Adjusted gross income	Modified taxable income		Tax generated		Income tax after credits			Number of returns	Income taxed at rate	Income tax generated at rate [1]
			At all rates	At marginal rate	At all rates	At marginal rate	Total	As a percent of adjusted gross income	As a percent of modified taxable income			
	(37)	(38)	(39)	(40)	(41)	(42)	(43)	(44)	(45)	(46)	(47)	(48)
All rates	**7,695,124**	**160,553,716**	**95,140,178**	**54,612,893**	**15,991,463**	**9,825,271**	**14,370,533**	**9.0**	**15.1**	**7,695,124**	**95,140,178**	**15,995,167**
11 percent	1,170,516	10,251,095	1,417,580	1,417,580	155,333	155,934	18,002	0.2	1.3	7,695,124	17,729,100	1,950,201
15 percent	5,589,906	102,856,090	57,413,026	43,438,261	8,050,240	6,515,739	6,689,992	6.5	11.7	6,524,608	62,599,652	9,389,948
28 percent	717,485	27,546,508	20,415,265	3,913,110	3,498,902	1,095,671	3,438,588	12.5	16.8	924,054	6,888,300	1,928,724
28 percent capital gains	25,047	2,326,295	1,907,522	1,238,800	456,773	346,864	449,367	19.3	23.6	63,490	2,086,627	584,256
35 percent	162,852	10,658,485	8,208,766	1,769,038	1,918,986	619,163	1,900,728	17.8	23.2	192,170	3,000,394	1,050,138
38.5 percent	29,318	6,915,243	5,778,019	2,836,105	1,911,228	1,091,900	1,873,856	27.1	32.4	29,318	2,836,105	1,091,900
Form 8615	—	—	—	—	—	—	—	—	—	—	—	—

Tax rate classes	Returns of single persons											
	Classified by the highest marginal rate at which tax was computed									Classified by each rate at which tax was compuped		
	Number of returns	Adjusted gross income	Modified taxable income		Tax generated		Income tax after credits			Number of returns	Income taxed at rate	Income tax generated at rate [1]
			At all rates	At marginal rate	At all rates	At marginal rate	Total	As a percent of adjusted gross income	As a percent of modified taxable income			
	(49)	(50)	(51)	(52)	(53)	(54)	(55)	(56)	(57)	(58)	(59)	(60)
All rates	**38,290,884**	**645,540,800**	**448,984,611**	**213,349,815**	**85,498,030**	**45,019,427**	**85,197,593**	**13.2**	**19.0**	**38,290,884**	**448,984,611**	**85,515,120**
11 percent	7,322,744	28,886,615	5,297,116	5,297,116	579,015	582,683	573,420	2.0	10.8	38,285,822	60,445,260	6,648,979
15 percent	21,892,038	278,685,999	173,285,370	133,879,702	24,406,241	20,081,955	24,353,445	8.7	14.1	30,509,778	263,070,471	39,460,571
28 percent	5,429,974	148,208,082	114,611,006	23,387,442	19,838,415	6,548,484	19,810,082	13.4	17.3	8,506,674	54,207,867	15,178,203
28 percent capital gains	251,126	18,189,203	14,582,004	9,431,855	3,517,104	2,640,919	3,503,593	19.3	24.0	860,203	20,080,327	5,622,492
35 percent	2,566,399	115,697,597	93,930,716	19,721,959	21,890,388	6,902,686	21,833,004	18.9	23.2	2,930,313	29,547,637	10,341,673
38.5 percent	363,912	54,259,775	45,919,100	20,535,364	14,880,238	7,906,115	14,762,254	27.2	32.1	363,914	20,536,671	7,906,618
Form 8615	464,691	1,613,530	1,359,300	1,096,377	386,629	356,585	361,794	22.4	26.6	464,691	1,096,377	356,585

[1] Because of how the data were processed, income tax generated at rate does not add to tax generated at all rates.
NOTE: Detail may not add to total because of rounding.

Table 2.—Returns With Modified Taxable Income: Tax Generated by Rate and by Size of Adjusted Gross Income

(All figures are estimates based on samples—money amounts are in thousands of dollars)

Size of adjusted gross income	Number of returns	Taxable income	Modified taxable income	Tax generated at all rates [1]	Tax generated at specified rate: 11 Percent: Number of returns	11 Percent: Modified taxable income	11 Percent: Tax generated at rate	15 Percent: Number of returns	15 Percent: Modified taxable income	15 Percent: Tax generated at rate	28 Percent: Number of returns	28 Percent: Modified taxable income	28 Percent: Tax generated at rate
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Total	**89,692,395**	**1,850,213,466**	**1,847,753,421**	**373,102,475**	**89,687,333**	**203,286,554**	**22,361,521**	**77,958,663**	**1,032,425,068**	**154,863,760**	**25,777,593**	**235,708,808**	**65,998,466**
Under $2,000	1,748,122	641,987	641,987	88,001	1,746,303	553,375	60,871	—	—	—	—	—	—
$2,000 under $4,000	2,540,044	2,244,053	2,156,120	283,000	2,538,225	1,810,539	199,159	155,863	85,137	12,771	—	—	—
$4,000 under $6,000	3,816,545	5,674,534	5,437,779	689,854	3,816,545	4,261,213	468,733	1,124,241	996,749	149,512	—	—	—
$6,000 under $8,000	4,619,450	11,446,864	11,149,129	1,390,673	4,619,450	7,258,353	798,419	3,149,890	3,826,931	574,040	—	—	—
$8,000 under $10,000	4,807,720	18,483,311	18,097,789	2,382,445	4,807,720	8,354,022	918,942	3,880,351	9,696,604	1,454,491	—	—	—
$10,000 under $12,000	5,207,412	25,691,676	25,358,942	3,428,810	5,207,412	9,527,427	1,048,017	4,040,425	15,787,164	2,368,075	—	—	—
$12,000 under $14,000	5,236,664	33,881,591	33,526,012	4,602,634	5,236,664	10,984,897	1,208,339	4,527,514	22,473,857	3,371,079	—	—	—
$14,000 under $16,000	4,899,861	39,483,089	39,186,179	5,454,048	4,899,861	10,923,005	1,201,531	4,622,267	28,184,631	4,227,695	*3,638	*1,277	*358
$16,000 under $18,000	4,503,887	43,965,771	43,625,267	6,130,513	4,503,887	10,281,612	1,130,977	4,357,373	33,342,724	5,001,409	*2,296	*931	*261
$18,000 under $20,000	4,244,291	48,020,911	47,818,952	6,786,040	4,244,291	9,903,768	1,089,414	4,156,341	37,828,054	5,674,208	74,932	87,130	24,396
$20,000 under $25,000	8,967,574	126,032,289	125,696,804	18,467,794	8,967,574	21,865,775	2,405,235	8,905,484	100,044,715	15,006,707	2,102,006	3,786,314	1,060,168
$25,000 under $30,000	7,467,130	133,894,920	133,670,864	20,755,482	7,467,130	19,123,236	2,103,556	7,442,145	103,226,873	15,484,031	2,253,612	11,260,168	3,152,847
$30,000 under $40,000	11,578,336	270,912,746	270,722,479	43,480,588	11,576,953	31,151,300	3,426,643	11,557,553	209,862,088	31,479,313	3,861,875	24,915,354	6,976,299
$40,000 under $50,000	7,849,461	242,712,736	242,638,683	41,824,079	7,849,461	22,157,618	2,437,338	7,839,680	175,979,267	26,396,890	5,816,567	35,722,028	10,002,168
$50,000 under $75,000	8,099,602	347,978,968	347,971,052	70,281,139	8,099,602	23,340,979	2,567,508	8,094,986	193,084,203	28,962,630	7,723,485	97,248,871	27,229,684
$75,000 under $100,000	2,060,924	129,661,321	129,707,724	31,404,121	2,060,924	5,950,760	654,584	2,059,690	49,425,877	7,413,882	1,997,156	31,674,018	8,868,725
$100,000 under $200,000	1,508,025	153,927,487	154,085,169	43,524,894	1,508,025	4,312,658	474,392	1,507,578	35,876,284	5,381,443	1,438,534	22,957,564	6,428,118
$200,000 under $500,000	427,751	100,643,807	100,798,819	32,853,303	427,751	1,215,763	133,734	427,738	10,119,819	1,517,973	403,844	6,461,807	1,809,306
$500,000 under $1,000,000	74,892	42,794,638	42,922,515	14,698,589	74,853	212,662	23,393	74,853	1,771,268	265,690	69,401	1,112,201	311,416
$1,000,000 or more	34,704	72,120,769	72,541,155	24,576,469	34,702	97,589	10,735	34,691	812,823	121,923	30,247	481,144	134,720

Size of adjusted gross income	Tax generated at specified rate—continued: 28 Percent Capital Gains: Number of returns	28 Percent Capital Gains: Modified taxable income	28 Percent Capital Gains: Tax generated at rate	35 Percent: Number of returns	35 Percent: Modified taxable income	35 Percent: Tax generated at rate	38.5 Percent: Number of returns	38.5 Percent: Modified taxable income	38.5 Percent: Tax generated at rate	Form 8615: Number of returns	Form 8615: Modified taxable income	Form 8615: Tax generated at rate
	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
Total	**3,238,231**	**94,773,600**	**26,536,615**	**9,016,568**	**141,509,355**	**49,528,274**	**1,448,593**	**138,953,657**	**53,497,158**	**464,691**	**1,096,377**	**356,585**
Under $2,000	—	—	—	—	—	—	—	—	—	229,117	88,612	27,928
$2,000 under $4,000	—	—	—	—	—	—	—	—	—	147,724	260,443	72,272
$4,000 under $6,000	—	—	—	—	—	—	—	—	—	47,709	179,817	73,481
$6,000 under $8,000	—	—	—	—	—	—	—	—	—	*11,341	*63,845	*20,422
$8,000 under $10,000	—	—	—	—	—	—	—	—	—	*5,884	*47,163	*11,318
$10,000 under $12,000	—	—	—	—	—	—	—	—	—	*5,456	*44,350	*15,274
$12,000 under $14,000	—	—	—	—	—	—	—	—	—	*5,455	*67,257	*25,704
$14,000 under $16,000	—	—	—	—	—	—	—	—	—	*5,886	*77,266	*26,824
$16,000 under $18,000	—	—	—	—	—	—	—	—	—	—	—	—
$18,000 under $20,000	—	—	—	—	—	—	—	—	—	—	—	—
$20,000 under $25,000	—	—	—	—	—	—	—	—	—	—	—	—
$25,000 under $30,000	*5,534	*36,566	*10,240	19,215	24,022	8,408	—	—	—	—	—	—
$30,000 under $40,000	215,657	908,708	254,433	1,212,603	3,743,551	1,310,243	—	—	—	*4,580	*141,478	*38,833
$40,000 under $50,000	203,642	1,166,572	326,641	899,366	7,613,198	2,664,619	—	—	—	—	—	—
$50,000 under $75,000	1,018,970	7,171,813	2,008,111	3,192,009	26,480,505	9,268,177	106,942	595,731	229,356	*1,047	*48,950	*18,599
$75,000 under $100,000	717,804	7,566,270	2,118,557	1,820,128	33,174,347	11,611,021	121,841	1,885,874	726,061	*391	*30,578	*11,703
$100,000 under $200,000	742,333	19,244,571	5,388,484	1,380,282	49,998,200	17,499,370	758,101	21,693,842	8,352,129	*50	*2,050	*1,024
$200,000 under $500,000	256,816	18,956,559	5,307,837	394,942	16,367,362	5,728,577	367,574	47,677,508	18,355,841	—	—	—
$500,000 under $1,000,000	51,270	10,780,729	3,018,604	68,114	2,860,798	1,001,279	65,174	26,156,398	10,070,213	*39	*28,458	*7,978
$1,000,000 or more	26,205	28,941,812	8,103,707	29,909	1,247,373	436,581	28,961	40,944,304	15,763,557	*12	*16,110	*5,224

[1] Because of how the data were processed, income tax generated at rate does not add to tax generated at all rates.
* Estimate should be used with caution because of the small number of sample returns on which it is based.
NOTE: Detail may not add to total because of rounding.