

THE TAXPAYER USAGE STUDY: AN IMPORTANT TOOL FOR STUDYING TAX REFORM

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1988 was the first year that taxpayers filed returns under the new tax law written in 1986. As one would expect, there was a tremendous clamor for statistics on the actual effects of Tax Reform. Traditionally, the first statistics available on a given Tax Year are from the IRS's regular individual tax file. Preliminary statistics from the 1987 individual file, unfortunately, will not be available until sometime in December of 1988 with the final report being released sometime in the Fall or Winter of 1989. By using the Taxpayer Usage Study database, however, we were able to provide some preliminary statistics on the effects of the 1986 Tax Reform Act to the Commissioner of the Internal Revenue Service and the Office of Tax Analysis at the Treasury Department as early as June 15 of this year, only 2 months after the April 15th filing deadline.

This paper will discuss the Taxpayer Usage Study by first providing some background information about the study; this is followed in the next section by a brief description of the technology utilized to produce the sample file. In the third section, some of the results from the 1987 study are presented. Finally, the fourth section provides some general conclusions about the data and briefly describes some of the plans for improving the study in the coming year.

STUDY BACKGROUND

The study began in Tax Year 1969 and was used to provide statistics on IRS label usage, return preparer usage, line item and schedule usage. The primary customers of the Taxpayer Usage Study (TPUS) data at that time were IRS officials. Tax returns were sampled at the ten IRS service centers, photocopied and sent to the National Office here in Washington, DC. There, the data were manually transcribed from each return onto an edit sheet which were later entered into a database. The process was very labor intensive and difficult to alter or adjust once the program began.

Starting in 1986, however, TPUS jumped into the computer age and became the first SOI program to utilize an on-line editing process. Today, returns are still sampled and photocopied in the service centers, but they are not sent on to Washington. Instead, the returns are edited on-line directly into a database at each service center. The entire step of transcribing the data onto edit sheets has been eliminated. On-line editing has also added a tremendous amount of flexibility to the program. On-line data entry allows us to test the validity of each field at the time the editor enters the data and to check across fields for the consistency of the data. And perhaps most importantly, it enabled us to

greatly expand the scope of the program allowing us to provide economic statistics such as effective tax rates and average tax rates. This has made it possible for us to produce statistical tax data a full 6 months before preliminary IRS individual tax data are released.

TPUS PROCESSING TECHNOLOGY

The Taxpayer Usage Study is an annual systematic sample of Form 1040 individual income tax returns. The sample is drawn from a population that includes other tax forms and correspondence besides Form 1040 individual tax forms [1]. For 1987 and all prior years, the sample was only stratified by sampling site and time of year. The sample is later post-stratified by form type using IRS Form 1040 receipt counts. There are two reasons why we utilize this sampling design. First, it allows us to sample documents within hours of their receipt in the service center and; second, it also allows us to mechanically pull the sample which increases the accuracy of the sample and reduces cost.

Tax documents are received at the ten IRS service centers literally by the millions. The TPUS program begins when these documents are sorted into various classifications such as taxpayer correspondence, corporate returns, individual returns and other forms using a machine called the composite mail processing system, which reads the bar-coded information on IRS-provided envelopes and sorts them accordingly. These machines handle approximately 90 percent of all documents received by the IRS service centers between January and April of each year. This machine is also programmed to select every nth document for the TPUS sample. The selection is done prior to the sorting of the documents and thus guarantees a systematic sample of all documents received. Documents that are not current year Form 1040 individual income tax forms are counted as residuals and excluded from the sample. Photocopies of the sampled current-year Form 1040 returns are sent on to the TPUS editors while the original documents return to the regular IRS processing stream. As a result, the sampled documents are ready for regular IRS processing and TPUS processing within only a few hours of their arrival in the service center. Thus, TPUS sampling does not interfere with standard IRS processing at all.

Upon receipt of the sampled returns, the TPUS editors execute data entry programs on a computer system in each service center. In addition, validity checks which guarantee that only pre-determined valid entries can be entered by the editor are done. Next, tests are run to check the consistency of various fields with other fields, such as whether the

taxpayer claimed both itemized deductions and the standard deduction. If the editors make an error during the data entry phase, they are instructed to correct it. If the taxpayer made an error, the editors are instructed to retain the error and to note the error on an error resolution form. Taxpayer errors are retained in order to provide information that assists with forms design -- which was the original focus of the study. Both the validity checks and the consistency tests improve the quality of the edited data thus reducing measurement errors in later tabulations that are the result of data entry. The entire process of sampling, editing, and consistency testing one day's receipts takes less than 24 hours, with the exception of a few days around the 15th of April.

On Monday morning of each week during the filing season, each service center runs a program which tabulates the frequency of selected items of interest such as the usage of paid preparers, mailing labels and envelopes, IRA contributions, etc. The results of this program are then transmitted electronically to Washington to produce a weekly report showing frequencies of use for various items of interest. This report is then distributed throughout the country overnight. Therefore, data collected during one week is generally available on a nationwide basis for IRS and public use by Tuesday of the following week.

After the last Weekly Report is released in late April, the ten service center TPUS data bases are shipped to Washington for further detection and correction of errors. These procedures clearly do not correct the data to the extent that the regular Statistics of Income program does, but they do correct the more glaring errors which substantially increases the reliability of the data. Finally, an article is written summarizing the Tax Year as portrayed by the statistics from the study and tables are released in the Summer issue of the Statistics of Income Bulletin.

RESULTS

As noted above, the 1987 Taxpayer Usage Study provided the first data on the effects of the Tax Reform Act of 1986. TPUS tabulations show that the average tax decreased from \$3,267 for 1986 to \$3,190 for 1987. Additionally, tax as a percentage of adjusted gross income (AGI) fell from 13.7 percent for Tax Year 1986 to 12.7 percent for Tax Year 1987, the most dramatic decline occurring in the \$100,000 and over AGI class (see Figure A). This decline was due almost entirely to the broadened definition of AGI contained in the 1986 act. The only income class which experienced an increase in the effective tax rate (total income tax as a percentage of AGI) was the \$1 under \$5,000 AGI class. The increase in this class was largely attributable to the increase in the number of taxpayer dependents filing their own tax returns for the first time as a result of new filing requirements under the Tax Reform Act [2].

Traditionally, statistics on individual income tax returns are presented by size of AGI. However, it should be noted that AGI is an imperfect tool for comparing data for Tax Years 1986 and 1987, since it underwent a substantial redefinition under the new law. Under the Tax Reform Act, many statutory adjustment items, including employee business expenses and contributions to individual retirement arrangements (IRA's), were limited or repealed. Therefore, when the effective tax rates are recomputed using total income (defined as the sum of all of the sources of income before the subtraction of these adjustments), tax as a percentage of total income dropped less dramatically than tax as a percentage of AGI--from 13.2 percent for Tax Year 1986 to 12.6 percent for Tax Year 1987 (see Figure B).

However, the total income concept is not immutable, either; it, too, was altered as a result of the same act. For instance, for 1986, taxpayers enjoyed three income exclusions: the exclusion of the first \$100 of dividend income (\$200 for married couples filing a joint return); the 60 percent exclusion of long-term capital gains in excess of short-term capital losses; and the exclusion of unemployment compensation for most taxpayers with total incomes under \$12,000 (\$18,000 if married filing jointly). These income exclusions were eliminated for 1987. In addition, depreciation schedules for many types of businesses were changed, and taxpayers were no longer allowed to offset "earned income" with "passive losses" [3].

It is not feasible to recompute depreciation or passive loss deductions from the 1986 data. However, Figure C shows the effects of adding back excluded amounts of dividend, capital gain, and unemployment compensation income to total income for 1986. When this is done, the effective tax rate actually increased slightly, from 12.5 percent for 1986 to 12.6 percent for 1987. When the data are viewed by income class, there is still a moderate increase in the effective tax rate for the \$1 under \$5,000 class; on the other hand, as a group, taxpayers with incomes \$50,000 and over saw an increase in their effective tax rates.

Due to the substantial changes in the tax laws under the Tax Reform Act, taxpayers were required to complete a new Form W-4 (Employee's Withholding Allowance Certificate) for Tax Year 1987; however, they were not required to file it until October 1, 1987. Thus, taxpayers may have claimed an incorrect number of withholding allowances for a large part of 1987. There was serious concern as to whether withholding would be as accurate as in prior years, or whether more taxpayers would be significantly under- or overwithheld. For 1986, 70.7 million taxpayers indicated that they should receive a refund, which averaged \$900. This compares with 1987 figures of 72.1 million and \$878 respectively. For 1986, the number of taxpayers with tax due at time of filing was 19.4 million, and the average tax due was \$2,240. For 1987, the

Figure A.—All Returns: Adjusted Gross Income and Total Income Tax, by Size of Adjusted Gross Income, Tax Years 1986 and 1987

[All figures are estimates based on samples—numbers of returns are in thousands, amounts are in millions of dollars]

| Tax year, income and tax items | Total | Number of returns or amounts by size of adjusted gross income | | | | | | | | |
|--|-------------|---|-------------------|------------------------|-------------------------|-------------------------|-------------------------|-------------------------|--------------------------|-------------------|
| | | Less than \$1 | \$1 under \$5,000 | \$5,000 under \$10,000 | \$10,000 under \$15,000 | \$15,000 under \$20,000 | \$20,000 under \$30,000 | \$30,000 under \$50,000 | \$50,000 under \$100,000 | \$100,000 or more |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Tax Year 1987: | | | | | | | | | | |
| All returns, total..... | 98,569 | 606 | 14,834 | 14,953 | 12,829 | 10,737 | 15,807 | 17,948 | 9,398 | 1,457 |
| Amount of adjusted gross income ¹ | \$2,474,879 | \$ - 15,807 | \$37,939 | \$111,865 | \$159,296 | \$186,876 | \$391,848 | \$693,939 | \$607,511 | \$301,412 |
| Amount of total income tax ² | 314,410 | *59 | 731 | 3,853 | 9,078 | 14,483 | 37,310 | 76,805 | 93,485 | 78,605 |
| Tax as a percentage of adjusted gross income..... | 12.7% | N/A | 1.9% | 3.4% | 5.7% | 7.7% | 9.5% | 11.1% | 15.4% | 26.1% |
| Tax Year 1986³: | | | | | | | | | | |
| All returns, total..... | 96,737 | 814 | 14,523 | 15,062 | 12,943 | 10,418 | 16,119 | 17,934 | 7,625 | 1,299 |
| Amount of adjusted gross income..... | \$2,305,401 | \$ - 15,502 | \$38,221 | \$111,969 | \$161,076 | \$181,744 | \$398,006 | \$691,731 | \$484,730 | \$253,426 |
| Amount of total income tax ² | 316,034 | *131 | 403 | 4,353 | 10,774 | 15,558 | 40,680 | 86,454 | 80,205 | 77,476 |
| Tax as a percentage of adjusted gross income..... | 13.7% | N/A | 1.1% | 3.9% | 6.7% | 8.6% | 10.2% | 12.5% | 16.5% | 30.6% |

¹ Total income tax is computed as the sum of income tax after credits and alternative minimum tax, less earned income credit.

² Data for Tax Year 1986 are revised estimates.

* Estimate should be used with caution because of the small number of sample returns on which it is based.

N/A Not applicable.

NOTE: Detail may not add to totals because of rounding. All data are based on returns filed through April.

Figure B.—All Returns: Total Income and Total Income Tax, by Size of Total Income, Tax Years 1986 and 1987

[All figures are estimates based on samples—numbers of returns are in thousands, amounts are in millions of dollars]

| Tax year, income and tax items | Total | Number of returns or amounts by size of adjusted gross income | | | | | | | | |
|---|-------------|---|-------------------|------------------------|-------------------------|-------------------------|-------------------------|-------------------------|--------------------------|-------------------|
| | | Less than \$1 | \$1 under \$5,000 | \$5,000 under \$10,000 | \$10,000 under \$15,000 | \$15,000 under \$20,000 | \$20,000 under \$30,000 | \$30,000 under \$50,000 | \$50,000 under \$100,000 | \$100,000 or more |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Tax Year 1987: | | | | | | | | | | |
| All returns, total..... | 98,569 | 551 | 14,783 | 14,835 | 12,764 | 10,660 | 15,699 | 18,229 | 9,536 | 1,513 |
| Amount of total income ¹ | \$2,501,484 | \$ - 15,629 | \$37,847 | \$110,774 | \$158,443 | \$185,394 | \$389,283 | \$705,746 | \$618,217 | \$311,409 |
| Amount of total income tax ² | 314,410 | *1 | 592 | 3,784 | 8,901 | 14,243 | 36,477 | 77,094 | 93,851 | 79,467 |
| Tax as a percentage of total income..... | 12.6% | N/A | 1.6% | 3.4% | 5.6% | 7.7% | 9.4% | 10.9% | 15.2% | 25.5% |
| Tax Year 1986³: | | | | | | | | | | |
| All returns, total..... | 96,737 | 764 | 14,396 | 14,817 | 12,670 | 10,147 | 15,617 | 17,974 | 8,816 | 1,535 |
| Amount of total income ¹ | \$2,396,244 | \$ - 15,365 | \$37,778 | \$110,096 | \$157,333 | \$176,774 | \$385,385 | \$694,569 | \$562,928 | \$286,745 |
| Amount of total income tax ² | 316,304 | *368 | 368 | 4,114 | 10,295 | 14,729 | 38,017 | 81,441 | 85,002 | 81,970 |
| Tax as a percentage of total income..... | 13.2% | N/A | 1.0% | 3.7% | 6.5% | 8.3% | 9.9% | 11.7% | 15.1% | 28.6% |

¹ Total income is computed as the sum of all the sources of income before subtracting statutory adjustments.

² Total income tax is computed as the sum of income tax after credits and alternative minimum tax, less earned income credit.

³ Data for Tax Year 1986 are revised estimates.

* Estimate should be used with caution because of the small number of returns on which it is based.

N/A—Not applicable

NOTE: Detail may not add to totals because of rounding. All data are based on returns filed through April.

Figure C.—All Returns: Total Income (1987 Definition) and Total Income Tax, by Size of Total Income, Tax Years 1986 and 1987

[All figures are estimates based on samples—numbers of returns are in thousands, amounts are in millions of dollars]

| Tax year, income and tax items | Total | Number of returns or amounts by size of adjusted gross income | | | | | | | | |
|--|-------------|---|-------------------|------------------------|-------------------------|-------------------------|-------------------------|-------------------------|--------------------------|-------------------|
| | | Less than \$1 | \$1 under \$5,000 | \$5,000 under \$10,000 | \$10,000 under \$15,000 | \$15,000 under \$20,000 | \$20,000 under \$30,000 | \$30,000 under \$50,000 | \$50,000 under \$100,000 | \$100,000 or more |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Tax Year 1987: | | | | | | | | | | |
| All returns, total..... | 98,569 | 551 | 14,783 | 14,835 | 12,764 | 10,660 | 15,699 | 18,229 | 9,536 | 1,513 |
| Amount of total income ¹ | \$2,501,484 | \$ - 15,629 | \$37,847 | \$110,774 | \$158,443 | \$185,394 | \$389,283 | \$705,746 | \$618,217 | \$311,409 |
| Amount of total income tax ² | 314,410 | *1 | 592 | 3,784 | 8,901 | 14,243 | 36,477 | 77,094 | 93,851 | 79,467 |
| Tax as a percentage of total income..... | 12.6% | N/A | 1.6% | 3.4% | 5.6% | 7.7% | 9.4% | 10.9% | 15.2% | 25.5% |
| Tax Year 1986³: | | | | | | | | | | |
| All returns, total..... | 96,737 | 764 | 14,396 | 14,817 | 12,670 | 10,147 | 15,617 | 17,974 | 8,816 | 1,535 |
| Amount of total income (1987 concept) ¹ | \$2,522,389 | \$ - 13,090 | \$39,682 | \$113,646 | \$160,917 | \$180,099 | \$391,186 | \$706,243 | \$584,220 | \$359,490 |
| Amount of total income tax ² | 316,304 | *368 | 368 | 4,114 | 10,295 | 14,729 | 38,017 | 81,441 | 85,002 | 81,970 |
| Tax as a percentage of total income..... | 12.5% | N/A | 0.9% | 3.6% | 6.4% | 8.2% | 9.7% | 11.5% | 14.5% | 22.8% |

¹ For 1986, total income was recomputed by adding excluded capital gain, dividends, and unemployment compensation to total income as shown on the return. However, total income as shown on the return was still used as the classifier.

² Total income tax is computed as the sum of income tax after credits and alternative minimum tax, less earned income credit.

³ Data for Tax Year 1986 are revised estimates.

* Estimate should be used with caution because of the small number of sample returns on which it is based.

N/A Not applicable

NOTE: Detail may not add to total because of rounding. All data are based on returns filed through April.

corresponding figures were 20.8 million taxpayers and \$2,012. In other words, the revised withholding system appears to have worked about as well as the old one did.

Filing Patterns

Data presented in this paper are estimates based on a sample of returns filed by April 15 drawn in each of the 10 Internal Revenue service centers. As is shown in Figure D, returns filed by April 15 have, in recent years, represented between 92.7 and 94.6 percent of all returns filed during the processing year. Based on Internal Revenue Service (IRS) projections of the number of returns to be filed during Processing Year 1988, it appears that a somewhat smaller percentage (92.6) of all taxpayers filed returns by April 15 this year, possibly due to the additional time required by taxpayers and tax preparers to adjust to the new provisions contained in the 1986 Act [4]. Prior experience suggests that the late-filed returns will, on the average, have significantly more income and be much more complex than the returns filed by April 15 tabulated for this article [5].

Adjusted Gross Income

As is shown in Figure E, AGI increased by \$169 billion, or 7.4 percent. The source of income showing the largest increase was salaries and wages, which went up by \$78.5 billion (4.1 percent). The largest decrease occurred in the area of sales of capital assets (net gain less loss), which decreased by \$124.3 billion (62.7 percent). However, because of the abolition of the capital gains exclusion, net capital gains less losses in AGI decreased by only \$6.6 billion (8.2 percent).

Several developments contributed to the decrease in net capital gains less losses. Most importantly, it should be noted that the amount of capital gains realized in 1986 represented a 94.6 percent increase over the comparable figure for 1985--due in part to favorable developments in the stock market, but largely to sales of capital assets made in 1986 in anticipation of the elimination of the capital gains exclusion for 1987. In addition, the 1987 decline in the stock market may have caused a larger than usual number of taxpayers to realize losses. Finally, it should be noted that returns with substantial amounts of capital gains and losses tend to arrive well after the April filing deadline. Given the projected increase in late filers for 1987, it may be too early to draw any major conclusions about sales of capital assets.

Unemployment Compensation

For Tax Year 1986, unemployment compensation was partially taxable, with the amount taxed depending on the taxpayer's filing status and AGI [6]. For 1986, about 7.4 million returns showed unemployment compensation as a source of income, but only 4.7 million of them showed

amounts subject to tax (see Figure F). Under the Tax Reform Act of 1986, unemployment compensation became fully taxable as an ordinary source of income beginning with Tax Year 1987. A total of 7.0 million returns showed this source of income for 1987. There was a net increase of 2.3 million in the number of returns with unemployment compensation subject to tax for 1987; returns with adjusted gross incomes under \$15,000 alone accounted for an increase of 2.1 million (see Figure F).

Individual Retirement Arrangements

The Tax Reform Act of 1986 placed substantial limitations on the amount taxpayers could deduct from total income for contributions made to an IRA. For example, starting with Tax Year 1987, a single taxpayer who made \$35,000 or more and was covered by a private pension plan was no longer able to deduct any of the contribution he or she made to an IRA (although non-deductible contributions were still allowed). As a result, the number of taxpayers claiming an adjustment for an IRA declined dramatically, from 14.9 million for Tax Year 1986 to only 7.1 million for Tax Year 1987. Furthermore, the average IRA adjustment for returns with an IRA adjustment fell from \$2,422 per return for 1986 to \$1,910 per return for 1987.

Itemized Deductions

The percentage of Forms 1040 showing itemized deductions declined sharply to 50.7 percent from 59.3 percent for 1986 (see Figure G). This was primarily the result of the Tax Reform Act, which eliminated certain deductions, such as for the general sales tax, and limited others, such as miscellaneous deductions to 2 percent of AGI and personal interest to 65 percent of the amount paid. In addition, under provisions of the Act, taxpayers who were age 65 or over or blind received a larger standard deduction than the rest of the population. This provision would have made it advantageous for many taxpayers in such groups to claim the standard deduction instead of itemizing deductions.

Paid Preparers

For Tax Year 1987, the use of paid tax-return preparers increased by 1.7 percentage points, from 45.6 for 1986 to 47.3 for 1987 (see Figure H). This increase was less than increases experienced after other recent tax law changes. For example, use of tax preparers increased by 3.6 percentage points for 1984, and by 2.8 percentage points for 1982. There was an increase in paid-preparer use for all three tax form types for 1987, the most dramatic occurring for Forms 1040A, which increased to 24.6 percent of the total, up from 21.7 percent for 1986.

CONCLUSIONS AND FUTURE PLANS

The Tax Reform Act of 1986 resulted in major changes in income and tax distributions from

Figure D.—Number of Returns Filed, Tax Years 1982–1987

[Number of returns in thousands]

| Returns filed | Tax Year | | | | | |
|--|----------|--------|--------|---------|---------|----------------------|
| | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Returns filed through April of the filing year | 89,964 | 90,407 | 92,611 | 95,307 | 96,737 | 98,569 |
| Returns filed through December of the filing year | 95,609 | 95,564 | 99,579 | 102,800 | 103,424 | 106,469 ¹ |
| Returns filed through April as a percentage of returns filed through December | 94.1% | 94.6% | 93.0% | 92.7% | 93.5% | 92.6% ² |

¹ The figure for Tax Year 1987 is a projected total by the IRS Research Division of Forms 1040, 1040A, and 1040EZ.

² Estimated on the basis of projections for Tax Year 1987.

Figure E.—Selected Sources of Income, Statutory Adjustments, Tax Years 1986 and 1987

[Number of returns in thousands; amounts in millions of dollars]

| Source of Income | Tax year | | Difference | Percentage difference |
|--|-------------|-------------|------------|--------------------------|
| | 1987 | 1986 | | |
| | (1) | (2) | | |
| All returns..... | 98,569 | 96,737 | 1,832 | 1.9% |
| Adjusted gross income..... | \$2,474,879 | \$2,305,401 | \$169,478 | 7.4 |
| Salaries and wages: | | | | |
| Number of returns..... | 84,302 | 83,248 | 1,054 | 1.3 |
| Amount..... | \$1,974,431 | \$1,895,909 | \$78,522 | 4.1 |
| Dividends before exclusion: | | | | |
| Number of returns..... | 19,967 | 19,624 | 343 | 1.7 |
| Amount..... | \$50,974 | \$54,466 | \$-3,492 | -6.4 |
| Dividends included in AGI: | | | | |
| Number of returns..... | 19,967 | 14,963 | 5,004 | 33.4 |
| Amount..... | \$50,974 | \$47,259 | \$3,715 | 7.9 |
| Unemployment compensation, total: | | | | |
| Number of returns..... | 7,045 | 7,369 | -324 | -4.4 |
| Amount..... | \$13,554 | \$13,103 | \$451 | 3.4 |
| Unemployment compensation included in AGI: | | | | |
| Number of returns..... | 7,045 | 4,716 | 2,329 | 49.4 |
| Amount..... | \$13,554 | \$8,306 | \$5,248 | 63.2 |
| Sales of capital assets, net gain less loss, total: | | | | |
| Number of returns..... | 13,148 | 12,898 | 250 | 1.9 |
| Amount..... | \$73,892 | \$198,143 | \$-124,251 | -62.7 |
| Sales of capital assets, net gain less loss included in AGI: | | | | |
| Number of returns..... | 13,148 | 12,898 | 250 | 1.9 |
| Amount..... | \$73,892 | \$80,501 | \$6,609 | -8.2 |
| Total statutory adjustments: | | | | |
| Number of returns..... | 10,296 | 35,922 | -25,626 | -71.3 |
| Amount..... | \$25,610 | \$92,057 | \$-66,447 | -72.2 |

NOTE: All data are based on returns filed through April.

Figure F.—Returns With Unemployment Compensation, by Size of Adjusted Gross Income, Tax Years 1986 and 1987

[Number of returns in thousands, amounts in millions of dollars]

| Size of adjusted gross income | Tax Year 1987 | | | Tax Year 1986 | | | Percentage change | | |
|-------------------------------|----------------------|----------------------|----------|----------------------|----------------------|------------------|----------------------|----------------------|------------------|
| | Number of returns | Taxable benefits | | Number of returns | Taxable benefits | | Number of returns | Taxable benefits | |
| | | Number of returns | Amount | | Number of returns | Amount | | Number of returns | Amount |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| All returns, total | 7,045 | 7,045 | \$13,554 | 7,369 | 4,716 | \$8,306 | -4.4% | 49.4% | 63.1% |
| No adjusted gross income..... | *29 | *29 | *51 | *65 | *9 | (¹) | -55.4 | 222.2 | (²) |
| \$1 under \$5,000..... | 301 | 301 | 351 | 552 | *52 | 100 | -45.5 | 478.9 | 251.0 |
| \$5,000 under \$10,000..... | 1,184 | 1,184 | 1,909 | 1,261 | 130 | 298 | -6.1 | 810.8 | 540.6 |
| \$10,000 under \$15,000..... | 1,118 | 1,118 | 2,080 | 976 | 376 | 338 | -14.6 | 197.3 | 515.4 |
| \$15,000 under \$20,000..... | 817 | 817 | 1,518 | 897 | 656 | 1,091 | -8.9 | 24.5 | 39.1 |
| \$20,000 under \$25,000..... | 853 | 853 | 1,702 | 874 | 874 | 1,638 | -2.4 | -2.4 | 3.9 |
| \$25,000 under \$30,000..... | 706 | 706 | 1,300 | 732 | 732 | 1,563 | -3.6 | -3.6 | -16.8 |
| \$30,000 under \$50,000..... | 1,671 | 1,671 | 4,137 | 1,547 | 1,574 | 2,711 | 8.0 | 6.2 | 52.6 |
| \$50,000 under \$75,000..... | 290 | 290 | 410 | 299 | 299 | 477 | -3.0 | -3.0 | -14.0 |
| \$75,000 under \$100,000..... | *68 | *68 | *88 | *23 | *23 | *75 | 195.7 | 195.7 | 17.3 |
| \$100,000 or more..... | *8 | *8 | *8 | *18 | *18 | *39 | -55.5 | -55.5 | -79.5 |

¹ Less than \$500,000.

² Not computed.

*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. All data are based on returns filed through April.

Figure G.--Percentage of Returns With Itemized Deductions, Tax Years 1979-1987

| Tax Year | All Returns | Form 1040 Returns |
|-----------|-------------|-------------------|
| 1979..... | 28.9% | 49.6% |
| 1980..... | 30.6 | 51.7 |
| 1981..... | 31.1 | 52.7 |
| 1982..... | 34.9 | 57.4 |
| 1983..... | 36.0 | 58.3 |
| 1984..... | 40.7 | 65.1 |
| 1985..... | 37.8 | 59.4 |
| 1986..... | 38.4 | 59.3 |
| 1987..... | 32.6 | 50.7 |

NOTE: All data are based on returns filed through April.

1986 to 1987. Some of these changes are, however, more apparent than real. For example, adjusted gross income, which increased by 7.6 percent between 1986 and 1987, did so largely as a result of the disallowance of a number of exclusions and adjustments under the Tax Reform Act. When a more consistent measure of income is used--for example, total income plus excluded capital gains, dividends, and unemployment compensation--the data show a 0.8 percent decrease between the 2 years. However, even this statistic must be interpreted cautiously, since the decline is, to a large extent, a reflection of the extraordinary activity in the capital gains area in 1986, much of which was undertaken in anticipation of

Figure H.--Returns with Paid-Preparer Signature, Tax Years 1985-1987

[Number of returns in thousands]

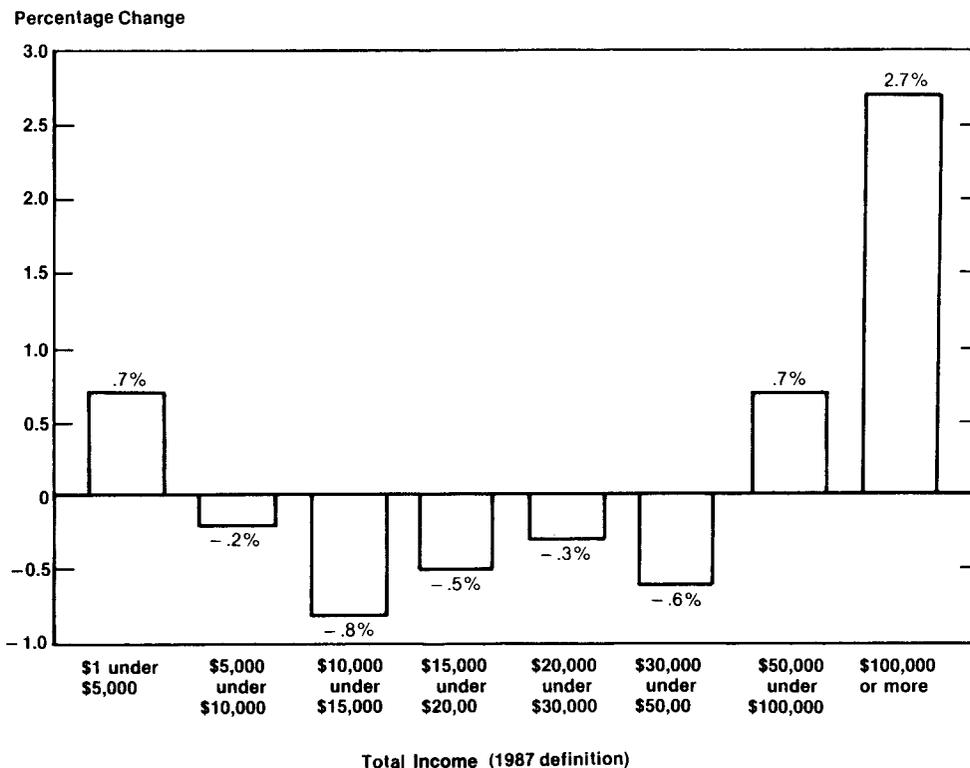
| Item | Tax Year | | |
|---|----------|--------|--------|
| | 1985 | 1986 | 1987 |
| | (1) | (2) | (3) |
| Returns with paid-preparer signature, total.. | 43,030 | 44,082 | 46,635 |
| Form 1040..... | 37,878 | 39,687 | 41,595 |
| Form 1040A..... | 4,409 | 3,794 | 4,199 |
| Form 1040EZ..... | 744 | 601 | 841 |

NOTE: All data are based on returns filed through April.

higher effective tax rates on capital gains in 1987.

In spite of these and other cautionary notes given throughout the article, it is possible to draw some broad conclusions from the data about the real effects of the Tax Reform Act of 1987. Particularly notable are the increase in the effective tax rate for taxpayers with total incomes of \$50,000 or more, as well as those with incomes under \$5,000 (see Figure I). The latter increase reflects the many dependents who had to file their own returns, on which they could claim no exemptions and only a limited standard deduction.

Figure I
Change in Effective Tax Rates 1986-1987



Total Income (1987 definition)

Our experience with the 1987 filing season has shown us that the Taxpayer Usage Study can be a useful tool for producing early economic estimates, particularly estimates on how tax law changes affected tax rates and withholding patterns by income classes. However, if we are to use TPUS for this purpose in the future, we will have to institute a number of changes to assure the accuracy of the data. First, we plan to edit all the major income and tax items on the Form 1040 as opposed to just a few, so that we can test the data more rigorously to eliminate data entry errors and the more extreme taxpayer errors. Second, within the framework of our systematic sampling design, we plan to stratify the sample based on AGI. Essentially, we will have two sampling rates: one for high income returns, defined as returns with AGI greater than 100,000, and one for returns with less than 100,000. Initial estimates indicate that this will increase the number of high income returns in the TPUS sample from 253 for 1987 to approximately 1,000 for 1988. This is necessary due to the previously unstratified nature of the TPUS sample design (with respect to income) and the always intense interest in high income returns. Finally, TPUS will be extended through August instead of only through April. This will allow us to sample returns that are filed after April 15. Again, this will be particularly helpful in strengthening the upper income portion of the TPUS sample due to the fact that many high income returns, particularly those with large amounts of capital gains, are filed after April 15.

ACKNOWLEDGMENTS

The author would like to thank Peter Sailer for his guidance and direction on this study and in writing this paper. Thanks are also due to Steve Libster for his programming and systems support.

NOTES AND REFERENCES

[1] For a discussion of the sampling rates, see the section entitled Data Sources and Limitations in "Individual Income Tax Returns for 1987: Selected Characteristics from the Taxpayer Usage Study," by Michael Weber, *SOI Bulletin*, Summer 1988, Vol. 8, No. 1, Department of the Treasury,

Internal Revenue Service.

- [2] Examination of Figure A shows only an increase of 311,000 returns in the \$1 under \$5,000 AGI class. However, since 1981 this class has experienced an average decline in the number of returns of 381,000 per year. Thus, this year's increase in the number of returns in this class represents a significant reversal of this trend.
- [3] Passive losses are those resulting from the conduct of any trade or business in which the taxpayer does not materially participate.
- [4] As of June 1, 1988, the IRS projected that 106.5 million individual income tax returns for Tax Year 1987 will be filed by the end of 1988. Because of year-to-year changes in the percentage of returns that are filed by April 15, it may be difficult to project total frequencies and amounts for the year from the data presented in this article. However, comparisons of ratios and averages from the 1986 and 1987 TPUS reports should hold up reasonably well when compared with final data for those 2 years.
- [5] Taxpayers can legitimately file after April 15 if:
- they were out of the country on April 15;
 - they filed a Form 4868 for an automatic extension of filing deadline, paying any balance due; or
 - they filed a Form 2688 for additional extension of filing deadline.
- [6] For 1986, unemployment compensation was nontaxable if the taxpayer's total income was less than \$12,000 for unmarried taxpayers, or less than \$18,000 for married taxpayers filing joint returns. For married persons filing separately, the income exclusion was zero if they had lived together at any time during the year. One-half of the excess of total income over the income exclusion, up to the total amount of unemployment compensation, was subject to tax.