For most of its 90-year existence, the Statistics of Income (SOI) Division of the Internal Revenue Service and its predecessor organizations have used data provided by taxpayers on Forms 1040 to fulfill the legal mandate to produce statistics on the operation of the individual income tax system. It was not until Tax Year 1989 that SOI started using the Information Returns Master File (IRMF), which contains electronic documents filed by the payers of income to individuals, to add further details to the tax return information. To date, the SOI Bulletin has featured articles on the distribution of salaries and wages from Forms W-2 and the accumulation of assets in Individual Retirement Accounts from Forms 5498, based on this rich source of administrative data. In this paper, the authors make a modest proposal for another set of statistics that could be produced from the IRMF which would shed light not only on the operation of the individual income tax and the Social Security tax systems, but also on the interaction of the two systems. The paper illustrates some of the analysis that could be produced with this file.

COMPONENTS OF THE SOCIAL SECURITY IMPACT

Figure 1 starts from the total income of everybody touched by the Social Security system, either as a payer of FICA or SECA taxes, or a recipient of Social Security benefits. The first line shows their total income, which, for filers of tax returns, is the sum of all sources of income as shown on line 22 of Form 1040, or the equivalent lines of Forms 1040-A and 1040-EZ. For the purpose of this chart, the taxable portion of Social Security benefits has been excluded. One of the advantages of working with information documents is that they enable SOI to show information on individuals who have not filed (and may never file) income tax returns for a given year. For these individuals, total income can be computed by adding salaries and wages from Forms W-2, gambling winnings from Forms W-2G, and nonemployee compensation, unemployment compensation, rents, royalties, interest, dividends, and pension distributions from various Forms 1099. For 2003, total income

<table>
<thead>
<tr>
<th>Amount</th>
<th>($1,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total income before Social Security</td>
<td>6,743,571,198</td>
</tr>
<tr>
<td>Additions, total</td>
<td>385,787,734</td>
</tr>
<tr>
<td>Gross Social Security Benefits</td>
<td>384,037,692</td>
</tr>
<tr>
<td>Income tax reduction due to SECA</td>
<td>236,808</td>
</tr>
<tr>
<td>Excess FICA credit</td>
<td>1,513,234</td>
</tr>
<tr>
<td>Subtractions, total</td>
<td>541,579,465</td>
</tr>
<tr>
<td>FICA tax (employer's portion)</td>
<td>246,016,712</td>
</tr>
<tr>
<td>FICA tax (employee's portion)</td>
<td>246,016,712</td>
</tr>
<tr>
<td>Self-employment tax</td>
<td>29,278,008</td>
</tr>
<tr>
<td>Social Security tax on tips</td>
<td>148,273</td>
</tr>
<tr>
<td>Repayments of SS Benefits</td>
<td>1,728,716</td>
</tr>
<tr>
<td>Tax on taxable benefits</td>
<td>18,391,044</td>
</tr>
<tr>
<td>=Total income after Social Security</td>
<td>6,587,779,467</td>
</tr>
</tbody>
</table>

Figure 1 also shows the details of the additions and subtractions. The $386 billion in additions are almost entirely the Social Security pensions and survivor benefits paid out by SSA, plus two small technical adjustments--self-employed individuals who pay their own Social Security taxes (instead of having them withheld and matched by employers) are able to deduct one-half of their so-called “self-employment tax” from their total incomes on their tax returns. This, of course reduces their regular income tax by, roughly, that amount times the marginal tax rate. So, taxpayers in the 33-percent tax bracket for 2003 got back on their income tax form roughly one-sixth of the self-employment tax they paid into Social Security (33 percent of one-half the tax). In this tabulation, only that

part of the self-employment tax that relates to retirement and survivor benefits, also known as SECA, is shown. Medicare taxes and payments are not part of this analysis.

Another technical adjustment was needed for individual taxpayers who overpaid their FICA taxes because they worked for more than one employer in the course of a tax year. If the total amount of their salaries and wages from the two employers exceeded the maximum subject to the FICA tax ($87,000 for Tax Year 2003), the excess FICA tax over $5,349 could be shown as a tax payment on the tax return. This overpayment amounted to $1.5 billion for 2003.

The largest subtraction from total income caused by the Social Security system is, obviously, the FICA tax, half of which is deducted from each employee’s salary or wage, and half of which, at least legally, is paid by the employer. If it is true, as economic theory holds, that employees eventually get paid what their marginal utility determines them to be worth, then the employer’s portion of Social Security taxes truly is a reduction in employees’ salaries; for that reason, it is shown as a subtraction from income in Figure 1. In any case, it does represent amounts going into the Social Security system.

FICA tax data come from Forms W-2 filed by each employer. The self-employment tax is computed on Schedule SE of Form 1040. This is the Social Security tax paid by self-employed individuals. For purposes of this chart, the Medicare portion of this tax, also computed on Schedule SE, was not included.

Social Security taxes on tip income that had not been collected by the employer, and that the waiter or other employee with tip income was supposed to report on his or her income tax return, represent a very small subtraction from total income.

Since the additions include all payments of Social Security benefits, the small amount that was paid out in error (usually because the taxpayer earned too much money in some quarter to qualify), and had to be repaid by the recipient, is shown here as a subtraction. Finally, an $18 billion subtraction is shown in Figure 1 because some Social Security benefits are subject to the individual income tax. The amount of taxes thus raised is moved from the general fund to the Social Security trust fund, and thus, these taxes do, in fact, go into the Social Security system.

**IMPACT OF SOCIAL SECURITY TAXES AND THE INDIVIDUAL INCOME TAX**

Figure 2 shows the impact of the Social Security tax (both FICA and SECA) on workers and self-employed individuals at various income levels. For comparison purposes, the average income tax for these same individuals is shown as well. While income taxes keep rising with income, Social Security taxes level off at just over $13,000 per taxpaying unit when total income reaches $160,000. At the very lowest income levels, Social Security taxes actually tend to be higher than income taxes.

When the same data are displayed showing total income tax and Social Security taxes as a percent of total income, as is done in Figure 3, it becomes dramatically clear that the income tax is a progressive tax (although not as progressive as it used to be), while Social Security taxes are (and always have been) regressive.

For purposes of Figure 3, married couples filing jointly are shown as a single taxpaying entity. It was easier to combine the FICA and SECA taxes for the two taxpayers than it would have been to try to attribute some portion of the income tax to each of them. On
the other hand, each non-filer is shown as a separate unit, whether married or not, since the information documents do not reveal any information on marital connections. In the case of nonfilers, the proxy for total Federal income tax is Federal income tax withheld; since they had not filed by the end of the following year, tax withheld was, in fact, the total amount they had paid to the Federal Government.

**DISTRIBUTION OF SOCIAL SECURITY BENEFITS**

It was noted previously that the impact of the FICA and SECA tax was highest on those in the lower-income classes—at least in proportion to income. Figure 4 shows that the distributions of Social Security benefits are also highest for lower-income individuals. Retirees with incomes greater than zero but under $10,000 derive 96 percent of their incomes from Social Security benefits. The percentage drops to 50 just under the $20,000 income level, and drops below 5 percent around the $400,000 income level.

**OVERALL IMPACT OF THE SOCIAL SECURITY SYSTEM**

Figure 6 shows two income distributions: The first (the blue one) is based on total income without any Social Security benefits included or Social Security taxes taken out; the second income distribution (shown in red) subtracts from total income all the Social Security taxes (including income taxes paid on Social Security benefits), and adds in all the Social Security benefits. It is evident that the Social Security system does keep many people out of the abject poverty.
of the “Under $5,000” class. The “with Social Security” distribution shows just over 20 million reporting units in this class, as opposed to over 35 million in the “without Social Security” distribution. On the other hand, the “with Social Security” distribution shows significantly more filing units in the $10,000 to $50,000 income area than does the “without Social Security” distribution. Between $50,000 and $70,000, the “with Social Security” line runs just very slightly above the “without Social Security” line, and, after $70,000, it runs very slightly below the “without Social Security” line.

IMPACT OF THE SOCIAL SECURITY SYSTEM BY AGE OF TAXPAYER

SOI’s merged file of tax returns and information documents contains data on the age of the participants. For the purpose of Figure 7, Social Security benefits and Social Security taxes are combined into one variable, with benefits shown as positive amounts and taxes as negative amounts. The averages of these positive and negative amounts are shown for each age group (in 5-year increments). Figure 7 shows that the Social Security system has a positive impact on the very youngest children who come into contact with it, because they are getting survivor benefits. In the 15 under 20 age group, the effect turns negative, as people start working and paying Social Security taxes. During the peak earnings years of 35 to 55, participants tend, on average, to put between $4,500 and $5,000 into the system every year. Then, the average starts rising until it reaches positive territory for the 60 to 65 age group, and peaks just shy of the $11,000 mark for the 80 to 85-year-olds.

SOCIAL SECURITY TAXES AND OTHER FORMS OF RETIREMENT SAVINGS

SOI’s merged file of tax returns and information documents contains data on other forms of retirement savings—Forms W-2 show payments into 401(k) plans and similar programs in the Government and non-profit sectors; Forms 5498 show payments into Individual Retirement Accounts, including Traditional and Roth IRA plans. Unfortunately, IRS does not have information on how much is being placed into defined benefit plans by various employers. The only evidence we have for those contributions is a check-mark in a box on the W-2. Therefore, the following analysis is confined to those taxpayers who do not have employer-provided defined benefit plans.

Figure 8 shows that, for the lowest income taxpayers—those with earned incomes under $25,000—Social Security taxes represented the vast majority of their set-asides for retirement. For example, in the $20,000 under $25,000 earned income class, Social Security taxes (again, counting both the employer and employee portions of FICA) amounted to 12.2 percent of earned income. Contributions to other types of retirement plans amounted to only 1 percent of earned income. Nonetheless, this means that these individuals were having 13.2 percent of their earned incomes set aside for retirement purposes, which is actually a pretty respectable proportion, considering that the highest percentage shown in this chart is 15.1 percent, which applies to the $80,000 under $85,000 earned income class.

FUTURE STEPS

At SOI, we have started to collect these data for a panel
of taxpayers beginning in 1999. In addition, we have been saving population data from the Information Returns Master File going back to 1995. So, if we combine 4 years of data selected retrospectively with prospective data from one of our 1999-base panels, we will have a data set with which we can follow participants in the Social Security system for 10 years; if we keep building on that, the panel will be available for analyzing equitable methods of adjusting the Social Security and income tax systems to keep Social Security solvent for future generations.

REFERENCES


Note

The views in this paper are those of the authors and are not the official positions of the Internal Revenue Service. Any errors are solely the responsibility of the authors.