Are Taxpayers Increasing the Buildup of Retirement Assets? Preliminary Results from a Matched File of Tax Year 1999 Tax Returns and Information Returns

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Historically, the Statistics of Income (SOI) Division has published numerous tabulations produced from individual income tax return data, but very little from information documents-- those numerous pieces of paper anyone with income from U.S. sources receives in January and February of each year. Part of the reason for the lack of tabulations is the complexity of editing and using documents from the Information Returns Program (IRP). Compared to tax return records, IRP records are often incomplete or inconsistent, sometimes containing duplicate documents representing the same taxpayer account and sometimes containing documents mislabeled as to name, address, or taxpayer identification information. In the revenue collection process, many of these problems are corrected by tax examiners before delinquency notices are sent to the taxpayers. However, these corrections do not get carried back to the computer files. Therefore, the SOI Division has had to devise its own correction strategies. We feel that, over the past several years, SOI's IRP-cleaning process has improved significantly. As a result, we are more comfortable with publishing data from these documents. Data on salaries and wages from Forms W-2 (*Wage and Tax Statement*) were published last winter in the *SOI Bulletin* (Sailer, Yau, and Rehula, 2002), and are now planned as an annual publication.

Sources of SOI Data on Retirement Assets

Some of the more interesting data that are contained in the IRP documents include information from Forms 5498 (*IRA Contribution Information*) and W-2 on the accumulations and size of many retirement assets. Table 1 shows the data items which SOI is able to draw upon in order to determine which taxpayers are participating some type of retirement plan. As is true of all tables in this paper, frequencies shown in Table 1 represent the number of taxpayers, not (as is usual in SOI tabulations) the number of returns. Both spouses on joint returns are included in the count of individuals if each participates in a retirement plan.

Alone among the tax forms used to produce Table 1, Forms W-2 are filed with and processed, not by the IRS, but by the Social Security Administration (SSA). An electronic version of the SSA-processed data is provided to IRS, and SOI subsequently matches the W-2 data to the tax returns in our various samples. Interestingly, but perhaps not surprisingly, not all of the information is transcribed or retained by SSA. Specifically, the SSA-processed data contain only a few items from "Box 13," which is used by employers to report up to18 different items of income, benefits, or deferrals, each identified by a letter code. Total deferred income is included on the SSA-processed file, but no detail on the type of plan under which the income was deferred. As a result, a few years ago, the Treasury Department's Office of Tax Analysis (OTA) asked SOI to

Table 1-- Sources of SOI Data on Retirement Plan Contributions and Assets by Number of Taxpayers and Amount of Contribution, Tax Year 1999

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

	Number of taxpayers	Amount of contribution ($1,000)
SSA/IRS-Processed W-2 Retirement Fields		
Box 13 - Total Deferred Compensation from box 13	37,021,114	116,453,846
Box 15 - Pension Indicator Box Checked	63,240,641	n/a
Government Pension Coverage		
Total	2,746,761	n/a
Box 15 - Pension Indicator Box Not Checked	1,041,906	n/a
Form 5498 Retirement Fields		
Box 1 - IRA Contributions (IRC ¶ 219(b))	6,500,430	11,306,112
Box 7 - SEP Contributions (IRC ¶ 408(k))	1,769,874	9,294,183
Box 8 - Simple IRA Contributions (IRC ¶ 408(p))	1,108,333	3,338,943
Box 9 - Roth IRA Contributions (IRC ¶ 408A(c))	6,194,357	10,788,183
Form 1040 Retirement Fields		
Line 23 - Deductible IRA	3,876,011	7,883,438
Line 29 - Self-employed Keogh, SEP, or SIMPLE deduction	1,403,967	11,928,242
Form 8606 Retirement Fields		
Primary, Nondeductible IRA	716,281	1,130,957
Secondary, Nondeductible IRA	363,918	646,184
W-2 Retirement Fields from edited subsample		
Box 13 - Total deferrals	36,412,000	117,527,612
Box 13 - Code D (401(k) elective deferrals)	28,926,000	93,058,670
Box 13 - Code E (403(b) elective deferrals)	4,956,000	15,526,656
Box 13 - Code F (408(k)(6) elective deferrals)	282,000	801,216
Box 13 - Code G (457(b) elective & nonelective deferrals)	2,510,000	6,676,092
Box 13 - Code H (501(c)18(D) elective deferrals)	56,000	102,582
Box 13 - Code S (408(p) elective deferrals)	548,000	1,362,396
Total taxpayers with deferrals for retirement plans *	75,952,679	n/a

n/a: Not available

* The total frequency is less than the sum of the column, because some taxpayers are in more than one category.

transcribe the W-2s that are appended to the tax returns submitted by taxpayers to the IRS for a subset of the annual SOI cross-sectional sample. These data are shown as "W-2 Retirement Fields from edited subsample" in Table 1.

Box 15 indicates whether a taxpayer is covered by some form of a pension plan and is used to determine the deductibility of an IRA contribution. In an ironic twist, we

noticed that some Federal government employees, whom we could identify by the employer name box on Form W-2, did not seem to be represented in the group of individuals who are covered by pensions. After further investigation, it appeared that, in some years, the W-2s received by IRS employees did not even have the pension box on the form. Since we were quite sure that Federal government employees do have pension coverage, we determined that they should be shown as "covered" in our tables, without regard to the entry in Box 15. This correction yielded over a million additional covered employees.

In addition to W-2 data, the IRP files contain data from Form 5498, which provides information on Individual Retirement Account (IRA), Simplified Employee Pensions (SEP), Savings Incentive Match Plan (SIMPLE) IRA, and Roth IRA contributions. As an extra bonus, it also provides a fair market value of those assets held by the individual. Data on fair market value are presented in a later section of this paper.

Form 1040 also provides some information on retirement deferrals as well. For 1999, Line 23 shows the deductible portion of any IRA contributions, and Line 29 provides information on the deductible portions of contributions to Keogh, SEP and SIMPLE IRA plans by self-employed individuals. Finally, Form 8606 (*Nondeductible IRAs*) provides information on nondeductible IRA contributions, although it is apparent that not all taxpayers contributing to nondeductible IRAs file Form 8606. This can be seen by examining the number of taxpayers with an IRA contribution on Form 1040, Line 23, and the number of primary and secondary taxpayers with a nondeductible IRA and comparing it with the number of taxpayers with an IRA contribution on the Form 5498.

When all of these sources of data about employment-related retirement plans were aggregated, we found that 76 million taxpayers were participants in some form of retirement savings plan during Tax Year 1999. By far the largest group was employees who participate in employer-sponsored retirement plans. When Federal government workers were included, there were 64 million taxpayers in this category.

Sources of Fair Market Value Reported for Form 5498

Now turning back to the data on fair market value: data from Form 5498 show that taxpayers, as of December 31, 1999, had an estimated $2.7 trillion in assets covered by retirement plans reported on Form 5498. This figure does not include the estimated $1.5 trillion in retirement assets held in 401(k)-type defined contribution plans (Purcell, 2002). It also has no bearing on future pensions which may be due to taxpayers under employer-provided defined benefit plans. It does represent retirement assets controlled by individual taxpayers. Table 2 shows the plans under which these assets were accumulated. By far the largest amount (over 91 percent of the total) was in traditional IRAs; new contributions to these plans could be made by any taxpayer under age 70 ½ who had earned income; for those not covered by employer-provided pension plans (such as 401(k)s), the contribution (up to a maximum of $2,000) was tax-deductible. In any case, the earnings in any IRA account are not taxable until withdrawn by the taxpayer. It should be noted that much of $2.4 trillion in IRA assets may have been accumulated, not

by the annual contributions of up to $2,000 per taxpayer, but by taxpayers taking lump-sum distributions from employer-provided pension plans and rolling them over into IRAs upon retirement or changes in employment.

Table 2--Fair Market Value from Form 5498 by Type of Plan, Tax Year 1999
(All figures are estimates based on samples--money amounts are in thousands of dollars)

	Number of taxpayers	Amount of contribution ($1,000)
Fair market value from Form 5498.....	43,063,085	2,651,203,109
Regular IRA plans.....	36,493,250	2,417,482,348
SEP plans from employers.....	3,199,784	146,078,814
Simple plans.....	1,151,763	7,067,511
Roth IRA plans.....	7,001,206	74,189,010
Education IRA plans.....	173,581	165,649
Roth Conversions/Recharacterizations.....	289,045	6,219,777

SIMPLE IRAs and SEPs were IRA-type accounts set up by employers, with all employees and the employer participating. Contributions to these plans were excluded from salaries and wages of the employees, or taken by the sole proprietor as an adjustment on his or her tax return. Roth IRAs, only in their second year of existence in 1999, already accounted for nearly 3 percent of the assets reported on Form 5498. These accounts are funded with after-tax income, but their earnings are non-taxable. Education IRAs accounted for only a minimal amount of the holdings of taxpayers and, while included on Form 5498, are not retirement assets. Roth Conversions and Recharacterizations are assets in transition from one plan to another.

Characteristics of Taxpayers with Retirement Assets

Table 3--Fair Market Value from Form 5498, by Age, Tax Year 1999
(All figures are estimates based on samples--money amounts are in thousands of dollars, averages are in whole dollars)

Age of taxpayer	Number of taxpayers	Fair market value ($1,000)	Average FMV ($1)
Total.....	43,063,085	2,651,203,109	61,566
Under 10.....	53,379	293,387	5,496
10 under 20.....	263,721	731,618	2,774
20 under 30.....	2,457,490	15,579,842	6,340
30 under 40.....	7,024,399	139,803,331	19,903
40 under 50.....	10,267,008	434,837,221	42,353
50 under 60.....	10,156,921	735,373,340	72,401
60 under 70.....	7,632,709	848,461,952	111,161
70 under 80.....	4,611,507	438,008,112	94,982
80 or more.....	595,950	38,114,305	63,956

Because SOI's file of information documents has been linked to tax returns as well as to age and gender information from SSA, it is possible to use this file to analyze

holders of retirement assets by many economic and demographic characteristics. Table 3 shows that, as one would expect, older taxpayers have larger fair market values than younger taxpayers. However, the average declines above age 70. This could be due to two factors: first, these taxpayers are probably drawing down their assets. Second, they may not have had much time during their working years to accumulate these types of assets, since many of the retirement plans did not exist during their prime earnings years.

Table 4--All Taxpayers and Taxpayers with Retirement Assets, by Size of Adjusted Gross Income, Tax Year 1999

(All figures are estimates based on samples--money amounts are in thousands of dollars, averages are in whole dollars)

Size of adjusted gross income	Total number of taxpayers	Taxpayers with retirement assets: Number of taxpayers	Percent of all taxpayers	Fair market value ($1,000)	Average FMV ($1)
Total	177,000,808	43,063,085	24.33	2,651,203,109	61,566
No adjusted gross income.....	1,491,601	239,428	16.05	11,304,527	47,215
$1 under $5,000.....	14,014,142	687,972	4.91	16,573,532	24,090
$5,000 under $10,000.....	14,330,007	1,097,277	7.66	31,787,485	28,969
$10,000 under $15,000.....	14,322,658	1,597,991	11.16	57,464,081	35,960
$15,000 under $20,000.....	14,555,120	2,101,509	14.44	69,169,597	32,914
$20,000 under $25,000.....	12,668,544	2,088,328	16.48	75,106,765	35,965
$25,000 under $30,000.....	10,923,609	2,026,969	18.56	68,194,238	33,643
$30,000 under $40,000.....	18,630,769	4,172,326	22.39	156,890,649	37,603
$40,000 under $50,000.....	15,259,351	3,956,132	25.93	158,979,604	40,186
$50,000 under $75,000.....	28,797,359	8,960,065	31.11	448,606,914	50,067
$75,000 under $100,000.....	14,292,830	5,978,066	41.83	368,805,629	61,693
$100,000 under $200,000.....	13,213,645	7,144,269	54.07	637,179,646	89,188
$200,000 under $500,000.....	3,483,598	2,307,128	66.23	371,767,543	161,139
$500,000 under $1,000,000.....	642,082	447,905	69.76	103,458,026	230,982
$1,000,000 or more.....	375,494	257,721	68.64	75,914,874	294,562

Table 4 shows the typical way of presenting Statistics of Income data: by size of adjusted gross income. Not surprisingly, both participation in pension plans and average fair market value rise strongly with income--the “No adjusted gross income” class, which includes all deficit returns, should be ignored for the purpose of this analysis, since it contains many rich people suffering temporary financial setbacks. It should also be noted that the $1 under $5,000 class contains many dependent children with small amounts of investment income and no earned income.

However, as can be seen from Table 5, even when the analysis is limited to those taxpayers who are between ages 25 and 64 and have earned income, the pattern of ownership of retirement assets is, if anything, accentuated. Very few low-income taxpayers have retirement assets, whereas 75 percent of individuals with incomes of $500,000 or more do have such assets.

Table 5--Taxpayers Ages 25 - 64 with Earned Income: All Taxpayers and Taxpayers with Retirement Assets, by Size of Adjusted Gross Income, Tax Year 1999
(All figures are estimates based on samples--money amounts are in thousands of dollars, averages are in whole dollars)

		Taxpayers with retirement assets			
	Total number of taxpayers	Number of taxpayers	Percent of all taxpayers	Fair market value ($1,000)	Average FMV ($1)
Size of adjusted gross income					
Total	111,863,899	28,731,488	25.68	1,463,722,763	50,945
No adjusted gross income.....	365,162	95,445	26.14	3,707,733	38,847
$1 under $5,000.....	3,100,498	149,856	4.83	3,565,701	23,794
$5,000 under $10,000.....	5,531,893	354,442	6.41	5,853,603	16,515
$10,000 under $15,000.....	6,636,937	560,918	8.45	13,237,899	23,600
$15,000 under $20,000.....	7,783,762	810,402	10.41	16,977,201	20,949
$20,000 under $25,000.....	7,841,439	1,063,268	13.56	24,178,220	22,740
$25,000 under $30,000.....	7,493,819	1,241,720	16.57	27,276,738	21,967
$30,000 under $40,000.....	13,359,589	2,703,658	20.24	70,709,869	26,153
$40,000 under $50,000.....	11,741,833	2,811,568	23.94	86,637,712	30,815
$50,000 under $75,000.....	22,931,219	6,586,411	28.72	251,604,615	38,201
$75,000 under $100,000.....	11,527,009	4,599,518	39.90	217,237,227	47,230
$100,000 under $200,000.....	10,496,843	5,604,188	53.39	416,802,110	74,373
$200,000 under $500,000.....	2,427,662	1,679,684	69.19	219,616,985	130,749
$500,000 under $1,000,000.....	406,734	304,702	74.91	60,612,032	198,922
$1,000,000 or more.....	219,500	165,707	75.49	45,705,119	275,819

Finally, Table 6 shows the fair market value data by the marital status and gender of the taxpayer. Table 6 reveals that males have on average a fair market value balance nearly twice that of females. Interestingly, single men and single women on average possess roughly the same account balances. Among married couples, on the other hand, the husband is overwhelmingly the owner of the retirement assets.

Table 6--Fair Market Value by Marital Status and Gender of Taxpayer, Tax Year 1999
(All figures are estimates based on samples--money amounts are in thousands of dollars, averages are in whole dollars)

Marital status and gender	Number of taxpayers	Fair market value ($1,000)	Average FMV ($1)
All returns, total.....	43,063,085	2,651,203,109	61,566
Men.....	21,920,387	1,775,539,926	80,999
Women.....	21,142,698	875,663,183	41,417
Non-joint returns, total.....	12,016,413	630,581,168	52,477
Men.....	5,112,827	260,287,153	50,909
Women.....	6,903,586	370,294,015	53,638
Joint returns, total.....	31,046,672	2,020,621,941	65,083
Men.....	16,807,560	1,515,252,773	90,153
Women.....	14,239,112	505,369,168	35,492

Increases in assets, 1989 – 1999

The title of this paper promises some information on the increase in retirement assets, and Table 7 sheds some light on this issue. The SOI Division began gathering information from Form 5498 in 1989, and has done so annually in recent years. In 1989, IRA plans (including SEP plans) had existed for 15 years, and total assets in these plans amounted to $546 billion. The total fair market value for 1999 of $2.7 trillion represents a 385 percent increase over 1989 in current dollars, and a 261 percent increase in constant (inflation adjusted) dollars. During this same period, total adjusted gross income rose by 80 percent in current dollars, and 34 percent in constant dollars. Contributing to the growth in assets were not only the increased popularity of the regular and SEP IRAs, but also the introduction of several new retirement plans, and rollovers into these plans from other retirement plans.

Table 7--Fair Market Value from Form 5498, by Type of Plan, Tax Years 1989, 1997, 1998, and 1999
(All figures are estimates based on samples--money amounts are in thousands of dollars)

Type of plan	1989 Number of taxpayers	1989 Amount	1997 Number of taxpayers	1997 Amount
Total fair market value	31,629,425	546,283,545	38,112,951	1,722,377,391
Regular IRA plans	n/a	n/a	36,435,890	1,637,049,259
SEP plans from employers	n/a	n/a	2,671,525	84,678,918
Simple plans	-	-	274,929	649,214
Roth IRA plans	-	-	-	-
Education IRA plans	-	-	-	-
Roth Conversions/Recharacterizations	-	-	-	-

Type of plan	1998 Number of taxpayers	1998 Amount	1999 Number of taxpayers	1999 Amount
Total fair market value	41,230,654	2,150,064,627	43,063,085	2,651,203,109
Regular IRA plans	36,258,284	1,974,967,739	36,493,250	2,417,482,348
SEP plans from employers	3,057,177	115,406,516	3,199,784	146,078,814
Simple plans	719,409	2,774,848	1,151,763	7,067,511
Roth IRA plans	4,256,181	44,181,058	7,001,206	74,189,010
Education IRA plans	118,602	67,676	173,581	165,649
Roth Conversions/Recharacterizations	4,224,829	12,666,790	289,045	6,219,777

n.a.: not available, - : not applicable

Future plans

SOI is just beginning to learn how to edit and interpret IRP retirement data. Given the aging of the "baby-boom" generation and the probable continued growth in these retirement assets, it is essential that SOI extend this research. Specifically, SOI plans to publish some of the data presented in this paper in an annual *SOI Bulletin* article and to develop prospective and retrospective panels that can shed light on the dynamics of retirement asset accumulation and expenditure.

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