Estimates of Unreported Asset Income in the Survey of Consumer Finances and the Relative Importance of Social Security Benefits to the Elderly

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Introduction

Throughout the 1990s and the early 2000s, the Social Security Administration's publication Income of the Population 55 or Older has reported a decline in the proportion of the elderly receiving asset income and a corresponding rise in the proportion of the elderly receiving all of their income from Social Security. The decrease in receipt of asset income is puzzling because greater numbers of people were participating in a booming financial market. Thus one would expect that a greater proportion of the elderly would have asset income and a smaller proportion would receive all of their income from Social Security. Because retirement income ideally is composed of multiple sources of income (savings, pensions, and Social Security), the elderly receiving all of their income from any single source of income are deemed to be economically vulnerable. The Social Security Administration is thus particularly concerned about beneficiaries whose only source of income is their Social Security benefits.

The question arises of whether receipt of asset income is actually declining among the elderly or whether some asset income is merely unreported. After addressing that question, the article attempts to ascertain how unreported asset income affects our under-

standing of how many of the elderly receive income only from Social Security. The Income of the Population 55 or Older is based on the Current Population Survey (CPS). Ideally, this analysis would examine the asset holdings of those reporting no asset income in the CPS. but data on asset holdings are not collected in the CPS. Consequently, this analysis uses the Federal Reserve Board's Survey of Consumer Finances (SCF), which collects detailed data on asset holdings. Both surveys show a drop of 10 percentage points over the 1990s in the receipt of any asset income by the population aged 65 or older and a corresponding increase in the proportion of the elderly receiving all of their income from Social Security.

This analysis uses the SCF from 1992 to 2001 to examine the financial asset holdings of the elderly not reporting asset income to determine if they in fact hold assets that are likely to generate income during the given year. Income from interest is also estimated for savings and money market accounts as well as certificates of deposit, bonds, and mutual funds. Finally, estimates of asset income are used to determine what proportion of the elderly would have received all of their income from Social Security if estimated asset income had been reported.

Ownership of Financial Assets Among Elderly Individuals

The first question is whether respondents not reporting asset income have financial assets. Of those aged units 65 or older not reporting asset income in the 2000 SCF, 87 percent reported holding one or more assets. ^{2,3} The aged unit is chosen as the unit of observation because the trends in declining reports of asset income and rising reports of all income coming from Social Security are evident in the *Income of the Population 55 or Older*, which has primarily used the aged unit as the unit of observation. ^{4,5} This analysis focuses

solely on the importance of unreported asset income, making it important to keep as constant as possible other factors affecting the relative importance of Social Security, including the unit of observation.

Holding assets without reporting asset income is less pronounced for 1991 than for 2000; 77 percent of those not reporting asset income held one or more assets in 1991 compared with 87 percent in 2000. Table 1 separates elderly aged units into groups based on whether or not they reported asset income. The table reports the percentage of units in each group that own a particular type of asset.⁶ For example, 39 per-

Table 1.

Ownership of assets among units aged 65 or older, by type of asset and reported receipt of asset income, 1991 and 2000 (in percent)

	Reported any inco from assets in 199		Reported any income from assets in 2000?	
Type of asset	Yes	No	Yes	No
Held one or more assets?				
Yes	98	77	100	87
No	2	23	0	13
Had a checking account?				
Yes	96	76	99	82
No	4	24	1	18
Had a savings account?				
Yes	39	24	53	36
No	61	76	47	64
Owned certificates of deposit (CDs)?				
Yes	50	11	44	23
No	50	89	56	77
Had a money market account?				
Yes	24	3	21	4
No	76	97	79	96
Owned savings bonds?				
Yes	19	6	17	8
No	81	94	83	92
Owned other bonds?				
Yes	12	2	8	1
No	88	98	92	99
Owned stock?				
Yes	29	1	35	6
No	71	99	65	94
Owned a mutual fund?				
Yes	21	4	34	5
No	79	96	66	95
Had a trust and/or managed investment?				
Yes	5	0	7	2
No	95	100	93	98

SOURCES: Author's calculations using the 1992 and 2001 Survey of Consumer Finances.

cent of elderly units who reported asset income had a savings account in 1991, but 61 percent of elderly units who reported asset income did not have one; in contrast, 24 percent of elderly units who did not report receiving asset income had a savings account, while 76 percent of elderly units who did not report receiving asset income did not have one. Likewise in 2000, 53 percent of elderly units who reported income from assets had a savings account, but 47 percent did not; 36 percent of elderly units who did not report receiving asset income had a savings account, but 64 percent did not. Although not all of the assets reported would necessarily distribute income in the survey year because of maturities or possible losses, savings accounts and money market accounts generally would. The increase in the proportion of elderly units that reported no asset income but had savings and/or money market accounts suggests that an increasing proportion of units are not reporting asset income that they most likely received.

Estimates of Income from Financial Assets

Given that such a large fraction of individuals who do not report asset income do report holding assets, we would like to know the amount of asset income that could be reasonably expected from those assets. Asset income is estimated using market interest rates for units not reporting any asset income based on their asset holdings; this procedure is particularly suggested for those with lower levels of assets. However, the procedure may introduce some distortion because

some respondents will have invested at rates higher or lower than the market rate, but the estimates of asset income should be closer to reality than zero asset income reported in the survey. Those units with lower levels of assets, say in savings accounts, may not notice the interest being "directly deposited" into their accounts. In addition, respondents may simply assume that low levels of asset income under \$50 or \$100 are not significant enough to report. Table 2 shows the rates of return assumed for different asset types. Because of variability, returns were not estimated for stocks or trusts. These restrictions should produce a somewhat conservative estimate of the asset income received.

The estimates of income from assets were derived for those who held assets but reported receiving no asset income. Because estimates of asset income are sensitive to which assets are assumed to generate income, two estimates for asset income are computed. The first is a lower-bound estimate, which imputes only interest for savings and money market accounts using the rates in Table 2. These assets almost surely provide interest during the time in which they are held. The second estimate not only imputes this same asset income from savings and money market accounts but also assumes asset income from certificates of deposit (CDs), savings bonds, other bonds, and mutual funds, using the rates in Table 2. Savings bonds, CDs, and other bonds are financial instruments with a specified term, which raises the question of whether interest should be accounted for as it accrues or when the

Table 2.
Estimated rates of return, by type of asset (in percent)

Type of asset	1991	2000	Basis of estimate
Savings accounts	5	1.75	Industry average ^a
Money market accounts	5.25	2	Industry average ^a
Certificates of deposit (CDs)	5.9	6	Average of Federal Reserve rates for 1-, 3-, and 6-month CDs, and industry average of 6-month and 1-year CDs ^a
Savings bonds	6.488	6.261	Average of Treasury 2-year yield
Other bonds	7.808	6.694	Average of returns for state and local Aaa and Baa bonds, municipal bonds, and corporate Aaa and Baa seasoned bonds
Mutual funds ^b		6	CNN/Money (article), December 2000 29(13). (7 percent top yields for money market funds)

SOURCES: See "Basis of estimate" in table.

NOTE: -- = not available.

- a. Industry averages obtained from Bankrate.com.
- b. Estimates for mutual funds used the rate from 2000.

Table 3.

Comparison of the reported and estimated percentage of elderly units receiving positive asset income, selected years 1991–2000

		Estimated	
		With imputed	
		savings and	With all
		money market	imputed
Year	Reported	interest	interest
1991	61	71	75
1994	56	69	72
1997	50	70	76
2000	51	69	77

SOURCES: Author's calculations using the 1992–2001 Survey of Consumer Finances.

financial instrument is cashed out. For example, tax on the interest on long-term Treasury notes can be paid either over the life of the note or upon redemption.

After constructing estimates for asset income for those who did not report receipt of such, the proportion of all aged units receiving asset income increased from 61 percent to 75 percent in 1991 and from 51 percent to 77 percent in 2000, as reported in Table 3.8 These estimates suggest that nearly one-fifth (14/75) of units receiving asset income in 1991 did not report such income; the proportion of units receiving, but not reporting, asset income rose to approximately one-third (26/77) in 2000.9 Charts 1 and 2 provide the percentage distribution of reported and estimated asset income among all elderly units in 1991 and 2000, respectively. As illustrated in the charts, the majority of the difference between reported and estimated asset income occurs for aged units reporting less than \$750 in 1991 and less than \$2,000 in 2000.10

When asset income is estimated only from savings and money market accounts, the rate of receipt of such income hovers around 70 percent from 1991 to 2000. These lower-bound distributions resemble the estimated distributions for all asset income values under \$250 and are similar to the reported asset income distribution above \$1,000 (Charts 1 and 2).

Impact of Estimated Asset Income on the Relative Importance of Social Security

One important implication of estimated asset income is how it affects the relative importance of Social Security income for elderly units. After including estimated asset income from the broader range of assets, the proportion of aged units receiving all of their income from Social Security fell from 15 percent to 11 percent in 1991 and dropped from 18 percent to 10 percent in 2000. Because most small amounts of estimated asset income are generated by savings or money market accounts, the lower-bound estimates restricted to savings and money market accounts do not differ much from the estimates including the wider range of assets. Table 4 conveys the growing difference between the reported proportion of elderly units receiving all of their income from Social Security and the two estimates.

Other thresholds for the relative importance of Social Security are those units who receive almost all of their income (90 percent or more) and those who receive a majority of their income (50 percent or more) from Social Security. The omission of small amounts of asset income is more likely to affect the measurement of the proportion of the elderly receiving all of their income from Social Security than measures of the proportion of the elderly receiving at least 50 percent

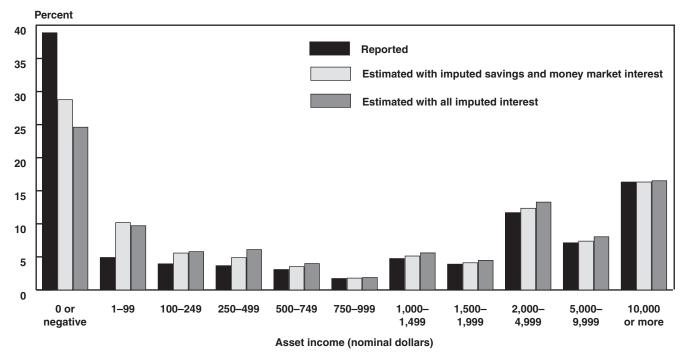
Table 4.

Percentage of aged units with given proportion of income from Social Security, 1991–2000

		Estimated			
		With imputed			
		savings and	With all		
		money market	imputed		
Year	Reported	interest	interest		
100 percent of income					
	from Social Security				
1991	15.1	12.4	11.1		
1994	16.9	13.4	12.2		
1997	21.9	14.0	11.2		
2000	18.2	11.4	10.1		
90 percent or more of income					
	from Social Security				
1991	25.8	25.5	24.7		
1994	24.4	24.3	23.6		
1997	27.3	27.1	25.2		
2000	24.7	23.9	22.7		
50 percent or more of income					
	from Social Security				
1991	57.7	57.4	57.2		
1994	53.5	53.4	53.1		
1997	52.2	52.0	51.3		
2000	51.4	50.9	50.3		

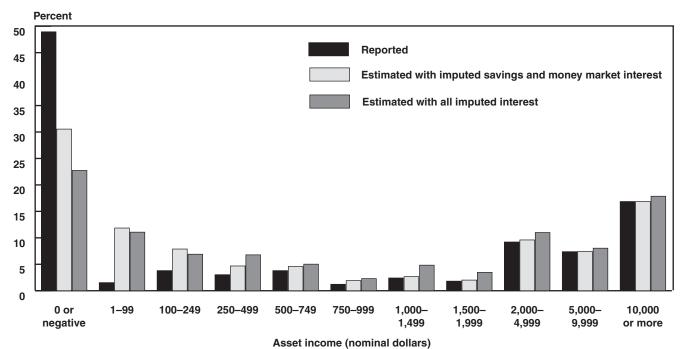
SOURCES: Author's calculations using the 1992–2001 Survey of Consumer Finances.

Chart 1. Percentage distribution of reported and estimated asset income among all elderly units, 1991



SOURCE: Author's calculations using the 1992 Survey of Consumer Finances.

Chart 2. Percentage distribution of reported and estimated asset income among all elderly units, 2000



SOURCE: Author's calculations using the 2001 Survey of Consumer Finances.

or 90 percent of their income from Social Security. The differences between the reported proportions of the elderly receiving at least 50 percent or 90 percent of their income from Social Security and the estimates using imputed asset income are smaller than 2 percentage points. The trends in the reported proportions of the elderly receiving at least 50 percent or 90 percent of their income from Social Security are echoed by the imputed asset income estimates. Because the 90 percent measure is less affected by unreported asset income, it would be a more reliable measure of economic vulnerability than the proportion of elderly receiving all of their income from Social Security.

Conclusion

This brief analysis suggests two things. First, some asset income—particularly smaller amounts—appears to go unreported in surveys. Second, the proportion of respondents receiving asset income but not reporting it in the survey appears to have increased over time. Of all units expected to report asset income, approximately one-fifth did not report such income for 1991 and approximately one-third did not report it for 2000. Including estimates of asset income from available data on asset holdings could be a useful tool for identifying, imputing, and correcting for low reporting levels of asset income. As a result of including estimated asset income, the proportion of elderly aged units with positive asset income holds relatively steady or increases slightly from 1991 through 2000. In contrast, without the inclusion of estimated asset income for nonreporters, the proportion of elderly aged units with reported asset income decreases over time.

As a result of the growth in unreported asset income, the estimates of the proportion of aged units receiving all of their income from Social Security appear to have grown over the 1990s. After adjusting for unreported asset income, however, a smaller proportion of aged units received all of their income from Social Security in 2000 than in 1991. Because smaller amounts of asset income are more likely to go unreported, estimates of the proportion of units receiving 90 percent or more of their income from Social Security are affected to a lesser extent. This result suggests that the proportion of aged units receiving 90 percent or more of their income from Social Security would be a more consistent measure to follow over time.

Further work is planned with Internal Revenue Service (IRS) administrative data on interest and dividends matched to Census surveys. These data would provide actual amounts of asset income, rather than the estimates used here, that are based on market rates.¹¹

Notes

- ¹ See the Federal Reserve Board's tabulations of the 1989–2004 Survey of Consumer Finances at http://www.federalreserve.gov/pubs/oss/oss2/2004/bulletin.tables.int.nominal.xls. The tabulations in Table 5 of that report indicate that the percentage of families holding any financial assets increased from 88.9 percent in 1989 to 93.8 percent in 2004.
- ² Asset income in the Survey of Consumer Finances may have been reported as any of the following: interest; dividends; net gains or losses from the sale of stocks, bonds, or real estate; or net rent, trusts, or royalties. Asset income reported in *Income of the Population 55 or Older* does not include net gains or losses from the sale of stocks, bonds, or real estate.
 - ³ All tabulations are weighted.
- ⁴ An aged unit consists of a nonmarried individual aged 65 or older or a married couple aged 65 or older. The age of the married couple is the age of the husband if he is 55 or older; otherwise, the age of the couple is that of the wife. The Survey of Consumer Finances, however, provides information on primary economic units (PEUs). A PEU contains the financially dominant person in the household and persons in the household who are financially interdependent with him or her; assets are reported for the PEU as a whole and not assigned to a specific person in the PEU. Most elderly PEUs consist solely of a married couple or nonmarried individual and as such can also be considered aged units. Approximately 10 percent of PEUs containing aged units 65 or older also contain other individuals in the household. These PEUs are excluded to prevent counting income from assets of nonaged individuals. Those omitted tended to have higher total income than the aged-only units.
- ⁵ These numbers and later estimates of reliance on Social Security income are not directly comparable with those in *Income of the Population Aged 55 or Older*, which are derived from the Current Population Survey. Since the CPS reports data on all individuals in the household, noneconomically dominant units are represented in the CPS, while the Survey of Consumer Finances has only a few variables for members of a household who are not in the primary economic unit (PEU). The SCF generally reports higher median incomes for PEUs aged 65 or older than does the CPS for all aged units 65 or older.
- ⁶ Breakdowns of asset holdings in 1994 and 1997 are consistent with the general trend from 1991 through 2000 of increasing asset ownership by respondents with no reported asset income.
- ⁷ Arthur Kennickell, project director of the Survey of Consumer Finances, suggested "imputing" interest income from asset holdings using market interest rates of return.

He gives two reasons. First, the SCF is primarily concerned with the measurement of assets and liabilities, with measurement of income by source of secondary importance. Second, he cites Tom Juster's work on underreporting of asset income in the Health and Retirement Study (correspondence dated December 3, 2003).

⁸ Interest from checking accounts was not calculated because of variability in interest rates and required minimum balances for interest-bearing accounts. According to Bankrate.com, the average required minimum balance to avoid fees in October 2003 was approximately \$2,258. Using \$2,200 as the benchmark for whether checking accounts would accrue interest, the estimate of 75 percent of units receiving asset income in 1991 may be revised upward to 77 percent to reflect those respondents without estimated asset income who have more than the average minimum

amount in their checking accounts. Likewise in 2000, the estimated percentage of units receiving asset income would increase from 77 percent to 80 percent.

⁹ These figures were obtained by dividing the difference between the percentage of units with reported and imputed asset income receipt by the percentage of units with imputed or reported asset income receipt; for 1991, this was calculated as (75–61)/75.

¹⁰ All dollar estimates are in nominal dollars.

¹¹ Although these administrative data would generally provide more accurate amounts of asset income received, they would not necessarily provide data on interest below \$10 or interest accrued on financial instruments taking longer than 1 year to mature. Further, these administrative data would not be able to be matched to all units in a survey.