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Measuring Personal Saving: A Tale of American Profligacy

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The United States appears to be a nation of spendthrifts.[1] Official measures suggest that personal saving has been declining and some believe that we're not saving enough for our own retirements, given longer life expectancy and rapidly growing out-of-pocket medical costs (Bernheim 1992; Skinner 2007). And because we're not saving as much, we're not doing as much to provide resources for investment, which is financed by personal, government, and business savings and borrowing from abroad. Investment adds to our capital stock, which helps increase worker productivity and, ultimately, the wages and living standards of current and future generations. Relative to our incomes, we are not leaving as much to our children as our parents left to us.

Just how little are we saving? The answer is not obvious. There are two different prominent measures of the saving rate—the National Income and Products Account (NIPA) measure and the Flow of Funds (FOF) measure. Both suggest a rapid decline in saving over the past 20 years, but neither exactly conforms to what most households probably think of as saving. Moreover, other, less prominent ways of looking at saving imply Americans are less profligate.

National Income and Products Account Measure

The measure of saving receiving the most publicity comes from the National Income and Product Accounts (NIPA), which defines the personal saving rate as personal saving divided by personal disposable income. Personal saving is defined as what's left out of personal disposable income after spending on consumption, non-mortgage interest, and donations to charities, nonprofits, and other entities. Disposable personal income is defined as personal income after all taxes are paid. But, at a closer look, what the NIPA considers personal income is different from what an ordinary household might consider income.

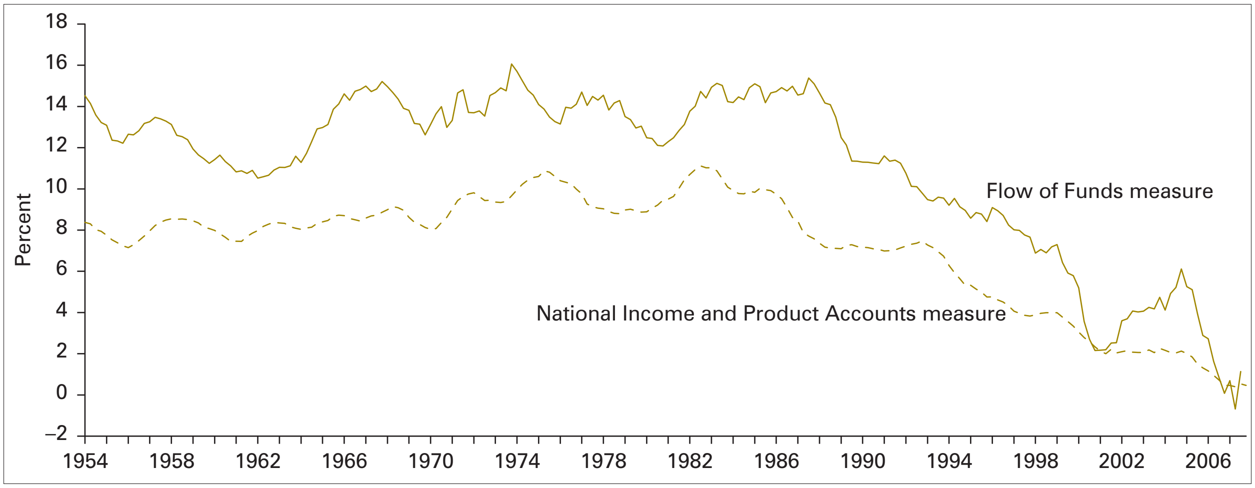
For one thing, the NIPA measure of saving does not include capital gains on assets, such as stocks and bonds or housing. Certainly a household that enjoys a capital gain would think of it as income and, if the money isn't spent, the household would think of it as savings. The experts who compile the NIPA do not count capital gains because they are interested in the resources available for investment. If you sell a stock that has appreciated $100, the person buying it has to dip into his or her savings $100 more than if the capital gain had not occurred. Therefore, the capital gain brings no net increase in national saving and no extra resources for investment. However, the capital gain has certainly made the seller better off.

Although capital gains are not included in personal income, taxes paid on realized capital gains are deducted from before-tax income to get disposable personal income. This seems odd to say the least.[2]

The treatment of pensions is also controversial. Employer contributions to defined contribution and defined benefit plans are considered compensation. The contributions are, therefore, included in personal income, as are the interest and dividends earned on pension accounts.[3] Pension accounts, however, cannot be accessed until age 59 or older without paying a tax penalty. Thus, households may not regard pension contributions and earnings as personal income until then because that money is not as accessible. Households may be more likely to consider pension account withdrawals as income, and would likely regard any money that is not spent as saving. Even though withdrawals are not considered income by the NIPA, taxes paid on withdrawals do reduce disposable personal income.

Guidolin and La Jeunesse (2007) argue that the treatment of defined contribution plans is

FIGURE 1. Personal Saving as a Percent of Disposable Personal Income, 1954–2008



Source: Federal Reserve Board and Bureau of Economic Analysis.

Note: The Flow of Funds measure of savings includes consumption of durable goods as savings while the NIPA measure does not. Disposable personal income is from NIPA.

logically consistent, but they question the logic of treating defined benefit pensions in the same manner. With a defined benefit plan, the employer makes all investment decisions and takes all investment risk. If the defined benefit plan earns a surplus, that surplus is not passed on to employees but nevertheless shows up in employee personal income when it is earned. Later, the employer may reduce contributions because of past surpluses, and this would show up as a reduction in the employee's compensation. The employee very probably ignores these ups and downs in measured personal income and is only interested in the expected present value of his pension, which is relatively constant.

It may be preferable to ignore defined benefit contributions and earnings when they occur and, instead, to add them to disposable income when they are received. However, the authors point out that doing so would have a negligible effect on the measured NIPA saving rate.[4]

Purchases of durable goods, such as automobiles, are not included in saving. Including them net of depreciation would raise the net saving rate by about 10 percentage points, but it would also raise investment. Therefore, it would not ease concern about Americans' failure to finance current investment levels.[5]

The NIPA measure of personal saving is not very accurate. Personal saving is estimated as the difference between two very large numbers—disposable personal income and personal outlays. Very small proportionate errors in measuring these two items can lead to huge proportionate errors in measuring personal saving. As a result, personal saving estimates are often revised by large amounts as the NIPA measure is refined with more accurate measures of disposable personal income and personal outlays.

Flow of Funds Measure

The second measure of saving is derived from the Flow of Funds (FOF) tables published by the Federal Reserve Board of Governors. Annual household saving is measured by the net acquisition of real and financial assets minus the increase in household liabilities. The Board of Governors provides two measures—one that includes net investments in consumer durables and one that does not. Conceptually, the measure that does not include consumer durables should lead to the same result as the NIPA measure. However, significant discrepancies arise because the two measures are compiled using different data sources and there are minor definitional differences. The FOF measure includes changes in pension reserves and thus has the same problem as the NIPA in treating defined benefit pensions.

Neither the NIPA nor the FOF measure paints a happy picture. Personal saving, according to both measurements, has plummeted over the past three decades. In 2005 and 2006, the personal saving rate fell to well below 1 percent—the lowest level ever. In the third quarter of 2005, it actually became negative. Because capital gains are omitted in both measures, a negative saving rate does not necessarily mean that households are borrowers on average. The extremely low saving rate of 2005 and 2006 is sometimes explained by the huge capital gains in housing in those years. The resulting increase in household wealth may have made people feel easier about lowering their saving rate. It may also have encouraged borrowing by refinancing mortgages or by increasing other forms of consumer debt.

To some degree, the fall in personal saving has been offset by an increase in borrowing from abroad. This helps maintain investment levels and the rate of growth of productivity and wages, but we end up sending interest and dividends to nonresidents. Our standard of living is not increased as much as it would be if the same level of investment were financed domestically.

An Alternative View

The NIPA and FOF saving measures create the impression that households have become less prudent over the past two decades. However, the Federal Reserve produces another data series that provides a very different view. That series tracks household net worth by estimating the difference between the value of a household's assets and its liabilities. Except for bond holdings that are valued at cost, assets are valued at market prices. Hence, changes in the net worth of households reflect capital gains on assets, and those changes in net worth can be defined as saving.

When the changes in net worth are divided by disposable income, the ratio jumps around erratically from year to year—probably partly because of measurement problems and partly because the numerator includes capital gains while the denominator does not—but no discernable trend has emerged over the past 50 years.

Does that mean that we really have no saving problem? It depends on how the saving problem is defined. Net worth is a measure of well-being. The fact that net worth has been growing quite steadily along with income implies that people are better prepared for retirement and for medical and other emergencies than is suggested by the NIPA and FOF saving measures.

This more sanguine view of saving is due largely to the inclusion of capital gains. Although capital gains add to household purchasing power, they do not provide new resources for investment. For that, you need greater saving as measured by the NIPA and the FOF.

It should also be noted that capital gains can quickly evaporate, as they did when the recent housing bubble burst. Some also worry that as baby boomers retire, asset sales will rise rapidly and cause asset values to fall. But this worry is probably overstated. Retirees tend to be careful regarding dissaving and to the extent assets are sold, they will be sold into a world capital market that, with hope, continues to be buoyed by very large saving rates in emerging economies (Poterba 2004).

Conclusions

The NIPA and FOF measures of saving paint a dismal picture. The rapid decline over the past 20 years means we are not devoting sufficient resources to investment. To the extent that investment levels have been maintained, it is because the necessary financing has been found outside the United States, but that means that a portion of future interest and dividends will have to be paid to investors abroad instead of raising the living standards of Americans.

Nevertheless, Americans continue to be better and better off as measured by their net worth. Much of this improvement stems from capital gains on old assets. Those capital gains cannot be used to finance new investment, but they do provide purchasing power to households for retirement or economic emergencies. Indeed, there is probably a causal relation between the healthy state of household balance sheets and the lack of saving as traditionally measured. Households may not be inclined to sacrifice and save more when asset values are accumulating anyway.

Recent problems in housing and financial markets may test this proposition.

Notes

1. This paper leans heavily on the analysis of Guidolin and La Jeunesse (2007).
2. Paid estate taxes are not considered as deductions in computing disposable personal income. Estate taxes are defined as a capital transfer. Treating capital gains taxes in the same way may have some merit.
3. Payments for the administrative costs of plans are considered to be personal outlays.
4. The effect may become more significant as baby boomers start to retire and begin drawing their pensions.
5. Several other measurement issues are not discussed here, including transfers between households and charitable and nonprofit institutions, the use of nominal rather than real interest rates in measuring the income from wealth, whether education expenditures should be regarded as an investment, and the treatment of stock options. For a discussion of these issues, see Reinsdorf (2005) and Guidolin and La Jeunesse (2007).

References

Bernheim, B. Douglas. 1992. "Is the Baby Boom Generation Preparing Adequately for Retirement?" Summary Report. Princeton, NJ: Merrill Lynch.

Guidolin, Massimo, and Elizabeth A. La Jeunesse. 2007. "The Decline in the U.S. Personal Saving Rate: Is It Real and Is It a Puzzle?" *Federal Reserve Bank of St. Louis Review* 89(6): 491–514.

Poterba, James M. 2004. "Population Aging and Financial Markets." NBER Working Paper #W10581. Cambridge, MA: NBER.

Reinsdorf, Marshall B. 2005. "Saving, Wealth, Investment, and the Current-Account Deficit." Washington, DC: Bureau of Economic Analysis. http://www.bea.gov/scb/pdf/2005/04April/PersonalSavingBox.pdf. (Accessed March 26, 2008.)

Skinner, Jonathan. 2007. "Are You Sure You're Saving Enough for Retirement?" *Journal of Economic Perspectives* 21(3): 59–80.

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