CHAPTER 10

Saving, Public Policy, and Late-Life Inequality

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In the past two decades, the personal saving rate in the United States has declined dramatically, from 10.6% of disposable personal income in 1984 to a low of 1.0% in 2000 before rebounding somewhat in the first three quarters of 2001. There is considerable debate over the reasons for the decline in the saving rate, as well as about the usefulness of the rate as an indicator of saving. A wealth effect arising from stock market capital gains has been the primary suspect, but even this explanation has not been supported unanimously (e.g., Parker, 1999; Poterba & Samwick, 1995; Hassett, 2000). Some view the decline in personal saving as a harbinger of future financial distress (Bryant, 2001), while others have suggested that the focus on National Income and Product Accounts (NIPA) personal saving is too narrow and ignores important components of saving, such as capital gains, education, and durables (Gale and Sabelhaus, 1999; and others).

In this paper, we first make three general observations about the behavior of the saving rate and its usefulness as an indicator of the well-being of future retirees. The first is that stock market capital gains and losses are affecting the measured rate of personal saving. One pathway is the conventional wealth effect in which capital gains lead households to consume more. Conversely, stock market capital gains do not appear in NIPA income since the doubling of a stock’s price does not cause an increase in the measurable flow of income. Since the net effect of stock market wealth...
entirely excluded. From this measure of saving, capital gains are on stocks and so forth. From this measure, saving is measured. On this account, the NIPA accounts, "investments" are adjusted over households. The saving is the NIPA accounts, "investment" is adjusted over households. The saving is the NIPA accounts. The saving is the NIPA accounts. The saving is the NIPA accounts. The saving is the NIPA accounts.

Consumption includes government (plus private purchases). It includes, and C = Y - T + G + X - M

Theoretical Measurement of Saving

The saving is defined as the difference between income and consumption. C = Y - T + G + X - M

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Empirical Measurement of Saving

The empirical measurement of economic savings is based on consumption expenditures and saving, which are components of national income. Savings are the difference between income and consumption expenditures. The saving rate is calculated as the proportion of disposable personal income that is saved. Disposable income is the income available to households after taxes, social insurance contributions, and other deductions.

The saving rate is an important indicator of the overall economic health of a country. A high saving rate can suggest that households are preparing for the future by saving a significant portion of their income. Conversely, a low saving rate may indicate that households are spending more than they earn, which can lead to debt and financial instability.

Understanding the factors that influence saving behavior is crucial for policymakers. This includes examining income distribution, the level of income growth, and factors such as expectations of future income and wealth. Policies aimed at increasing saving rates can include measures such as tax incentives for saving, educational programs on financial planning, and promoting retirement savings plans.

Diagram: Figure 1.1

The diagram illustrates the relationship between disposable income and saving. The x-axis represents disposable income, and the y-axis represents the saving rate. The data points show how the saving rate changes as disposable income increases. The trend line suggests an inverse relationship between disposable income and the saving rate, indicating that as disposable income rises, the saving rate tends to decrease.
Two qualifications need to be made for these figures. First, in making wealth in the mid-1990s, we used the estimate of wealth in the mid-1990s. However, we do not know how much of this wealth is attributable to the mid-1990s, and we do not have a clear picture of the extent to which the wealth in the mid-1990s was due to the mid-1990s or to other factors. Second, the figures for wealth in the mid-1990s are based on the assumption that the wealth in the mid-1990s was due to the mid-1990s, and we do not have data on the extent to which the wealth in the mid-1990s was due to the mid-1990s or to other factors.

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The measurement of economic accounting.

How much of the change in economic activity is due to changes in wealth on consumption?

Changes in wealth on consumption have a significant impact on economic activity. An increase in wealth can lead to an increase in consumer spending, while a decrease in wealth can lead to a decrease in consumer spending. This is because changes in wealth affect the disposable income of households, which in turn affects their ability to consume.

Let's consider an example. Suppose the economy is initially in equilibrium, with real GDP at $1,000 billion and the money supply at $500 billion. If the central bank raises the money supply to $750 billion, the money multiplier effect will cause the real GDP to increase by $2,000 billion, assuming the interest rate remains constant.

However, if the central bank simultaneously raises taxes to offset the increase in money supply, the disposable income of households will decrease, leading to a decrease in consumer spending and a decrease in real GDP. This is because the increase in money supply did not lead to an increase in real GDP but instead led to an increase in the price level, which in turn led to a decrease in the real money supply and hence a decrease in real GDP.

In summary, changes in wealth on consumption have a significant impact on economic activity. The central bank must be careful to ensure that the increase in money supply does not lead to an increase in the price level, as this can have negative consequences on real economic activity.

The measurement of economic accounting.

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Let's consider an example. Suppose the economy is initially in equilibrium, with real GDP at $1,000 billion and the money supply at $500 billion. If the government increases its spending to offset the increase in money supply, the disposable income of households will increase, leading to an increase in consumer spending and an increase in real GDP. This is because the increase in money supply did not lead to an increase in real GDP but instead led to an increase in the disposable income of households, which in turn led to an increase in consumer spending and real GDP.

In summary, changes in economic accounting have a significant impact on economic activity. The government must be careful to ensure that the increase in spending does not lead to an increase in the price level, as this can have negative consequences on real economic activity.
The two bars in Figure 10.4 contrast the performance of retirement plans with and without NIPA accounts. The NIPA account, which includes contributions, interest, and dividends, is shown to perform better in almost every year from 1998 to 2000, with a peak in 1999 when it nearly doubled the performance of the NIPA saving plan. The NIPA saving plan would have been far better if it had included contributions, interest, and dividends.

Figure 10.3 illustrates the contribution of DB and RA plans compared to NIPA personal savings. The contribution of RA accounts is shown to be significantly higher than that of DB accounts, with the difference growing over time. This highlights the importance of contributions in personal savings.

Figure 10.4 shows the contribution to NIPA savings from DB and RA plans, with DB plans contributing a significant portion of the total.

Since the mid-1980s, contributions from DB plans have exceeded contributions from RA plans. The contribution of RA plans has been relatively stable, while DB plans have shown a steady increase. This suggests that DB plans are more effective in terms of contribution to NIPA savings.
The 90th percentile for the 20-year earnings decline (not shown) is 4.9%.

Source: Authors' calculations from the 1999 HRS wealth and lifetime earnings by lifetime earnings decile

**Figure 10.** The 10th, 99th, 30th, 70th, and 99th Percentiles of the Ratio of Total Lifetime Earnings to Accumulated Lifestyle Earnings

At least in the news media, the declining personal saving rate has been

**FINANCIAL SECURITY**

decline in aggregate saving.

Households in this "debt-driven" phase of the American economy are taking on
higher levels of debt relative to their net worth. This is partly due to the
increase in the amount of credit available to them. However, the overall
trend is that households are taking on more debt than they can afford.

The decline in saving is a significant concern for the future of the economy.

**IS RISING DEBT THE PROBLEM?**

in the story of wealth over time. In this section, we consider changes in wealth over time. We first do not include the capital gains on the equity in the housing market. How does the amount of wealth accumulation change?

Coffee, tea, and mutual funds are not included in the calculation of household wealth. However, these assets are considered to be part of the household's overall wealth. As a result, the 90th percentile for the 20-year earnings decline (not shown) is 4.9%.

**SAVING: PUBLIC POLICY AND LATE-LIFE INEQUALITY**

The second way, in which accumulating convoluted and pay capital gains, is that
1990 and 1996
Ratio of financial assets to income for households over age 50.

1998 and 1996
Mean ratio of net worth to income for households.

This suggests that a large fraction of the assets that have increased the past decade have increased in market wealth between 1992 and 1996. However, these results for market assets in Figure 10.2 are more striking. The results for financial assets in Figure 10.1 are more striking. The results for financial assets in Figure 10.1 are more striking. The results for financial assets in Figure 10.1 are more striking.

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population is noticeably better off in 1998 than in 1989—mostly as the result of capital gains. Of course, some of these gains were at least temporarily given back in the subsequent market downturn. Note also that about a fifth of the population (not necessarily the same persons over time) appear to have been unaffected by the behavior of the stock market. They saved little in 1989 and they save little in 1998, and account for little of aggregate personal saving in either year.

These “low savers” will be the principal focus of the remaining sections of this paper. However, before proceeding, we consider a few features of the “high savers” in Figures 10.5 and 10.6. As Hurst and Lusardi (2001) document, entrepreneurship is an important source of wealth for high savers. The proportion of entrepreneurs rises gradually as we move up the wealth distribution. While fewer than 10% of older households are (successful) entrepreneurs in the first two quintiles of the wealth distribution in the HRS, more than 80% of households are entrepreneurs in the top 3% of wealth distribution. Even though entrepreneurs are a very mixed group in terms of economic success, they account for a large share of wealth. Gentry and Hubbard (2001) and Hurst and Lusardi (2001) both report that entrepreneurs account for approximately 10 to 13% of the population but for close to 40% of total net worth. In the HRS, mean and median wealth holdings of the entrepreneurs are three to four times larger than non-entrepreneurs.

Why do entrepreneurs hold so much wealth? The fact that business families own more wealth has been interpreted as evidence of borrowing constraints: initial capital is needed to start a business and only those having enough wealth are in a position to start a business. There is an extensive literature that shows that wealth is associated with both being an entrepreneur and becoming an entrepreneur. Using different sources of data, Evans and Jovanovic (1989), Evans and Leighton (1989), Gentry and Hubbard (2001), and Holtz-Eakin, Joulfaian and Rosen (1994), among others, find that wealth (or proxies for wealth) constitute an important determinant of entrepreneurship. This finding is, however, controversial. First, a simple selection mechanism can be at work here so that only successful entrepreneurs survive and one only observes the upper tail of the distribution. Second, it is not obvious what wealth “measures.” It may proxy the presence of borrowing constraints or it may reflect special talents or abilities of entrepreneurs.

The reason why savings behavior of entrepreneurs and other very wealthy individuals is important is that unlike the vast majority of American households who save a relatively small portion of aggregate household saving, the savings behavior of entrepreneurs does matter for aggregate capital accumulation and the NIPA measure of aggregate saving. A better understanding of what motivates high-wealth households is critical to a better understanding of inequality of wealth among older households, but is beyond the scope of this paper (see Kenrick & Lusardi, 2001).

Are Households Saving Too Little for Retirement?

A number of studies have attempted to determine what is an “adequate” level of saving and wealth accumulation given the presence of Social Security and pension funds. One approach is to compare actual wealth with the amount of wealth deemed necessary to smooth consumption at retirement (Warshawsky & Ameriks, 2000; Moore & Mitchell, 2000; Gustman & Steinmeier, 1999). Generally, these studies find that about half of the population will not be able to preserve consumption levels after retirement. Of course, the key assumption in the replacement rate analyses in both types of studies is that households wish to maintain consumption levels into retirement, a question about which little is known.

A second approach is to test empirically the extent to which households suffer a decline in consumption at retirement. Most studies show a sharp drop, more than can be rationalized by explanations consistent with traditional models of saving, and/or extensions that take account of non-separabilities between expenditures, leisure, and work. Bernheim, Skinner, and Weinberg (2001), for example, find that even after instrumenting for endogenous retirement decisions, roughly one-third of retirees experienced a drop in consumption of more than 35 percentage points.

The Banks, Blundell, and Tanner (1998) study shows that when household heads turn age 65, there is an overall drop in consumption that is at least one percentage point larger than what can be attributed to other life cycle factors. This has been incorrectly interpreted by some observers (e.g., Engen, Gale, & Uccello, 1999) as suggesting that the decline in consumption during retirement is quite modest. The confusion arises because this one-percentage point decline is averaged over all households, including those who had already retired and those who have not yet retired. If the differential “spike” in retirement at age 65 is, say, an additional 5% of the population who choose to retire at age 65, then the implied decline in consumption for this group is a much larger 20 percentage points (i.e., one percentage point drop divided by the 5% of the population retiring at that age). If one further considers that households better prepared for retirement do not experience any drop in consumption at all (e.g., Bernheim, Skinner, & Weinberg, 2001), the implied decline in consumption for those less prepared is much larger.

There is other scattered evidence suggesting that households save too little and that resources may be inadequate to support a comfortable retirement or to deal with adverse circumstances. Venti and Wise (2001), and
Why Do Households Save? The role of financial security at least for some fraction of the population of financial assets, savings, and insurance is significant in determining their saving behavior. In contrast, the role of social security, a significant fraction of the population, is lower (2002). This is a problem because some compact social security schemes, such as simple matching contributions, improve the saving rates.
Of course, a key issue is whether the current saving programs increase 1996 $1,000, 1995 $1,000, 1994 $1,000, 1993 $1,000, 1992 $1,000, 1991 $1,000, 1990 $1,000, 1989 $1,000, 1988 $1,000, 1987 $1,000, 1986 $1,000, 1985 $1,000. Some programs are designed to enhance the retirement savings of workers of modest financial means. The DCPS program provides a defined contribution plan for employees of the federal government. The program is funded through regular contributions by the government, which amount to $50 per employee per month. The contributions are then invested in a variety of investment options, such as stocks, bonds, and mutual funds. The earnings on these investments are then added to the employee's retirement account. The program is designed to help employees save for retirement, and to encourage them to save more than they otherwise might. Overall, the program appears to be effective in helping employees save for retirement, and is widely regarded as a model for other employers to follow.
The CONCLUSION AND DISCUSSION section begins with a paragraph on the implications of the findings. It discusses the broader implications of the research for policy and practice, and highlights the need for further research to address gaps in the current understanding of the issues under study.
NOTES
REFERENCES

SAVING, PUBLIC POLICY, AND LATE-LIFE INEQUALITY

233

LUSSARDI, SITTERNER, AND VENTI

222


