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TRENDS AND ISSUES

Do People Save Enough for Retirement?

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EXECUTIVE SUMMARY

This report looks at how much income individuals need in retirement and summarizes results from economic studies on the adequacy of individuals' retirement savings. It also discusses how housing equity should be considered as part of retirement wealth, and the impact of reductions in Social Security benefits and the shift from defined benefit plans to defined contribution plans on Americans' preparedness for retirement. Highlights of the report include:

- Middle-class households need about 65 to 75 percent of pre-retirement income to maintain their standard of living in retirement.
- Economic studies found that generally, about half of the baby boomers are on track to accumulate enough retirement wealth to main their pre-retirement living standards.
- When considering housing equity as part of retirement wealth, including a portion of home equity (say, 50 percent) seems reasonable.
- The future looks grimmer because Social Security will decline relative to pre-retirement income even under the current law, and the decline could be even greater if benefit cuts are part of the solution to the program's financing problems.
- Moreover, the shift from defined benefit plans to defined contribution plans has not produced expected levels of retirement saving.

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INTRODUCTION

No issue could be more important for an aging population than whether people will be adequately prepared for retirement. Yet no topic generates more disparate claims. The popular press describes "The Looming Retirement Disaster" *(Pensions and Investments 4-18-05),* while a recent academic paper concludes that "fewer than 20 percent of households have less wealth than their optimal targets."[1] But even within the economics profession, there is a lot of disagreement. What is going on here? Are we in good shape or not?

The answer to this puzzle rests on two issues. The first is whether we are talking about today's retirees or those who are going to retire in the future. Today's retirees are probably in better shape than their future counterparts. The second is whether or not people consider the equity in their house as a source of income in retirement. Calculations that include housing equity generally show that most people are adequately prepared, but the question is whether and to what extent it should be counted.

To put these issues in perspective, this article first looks at how much income people need in retirement. It then summarizes what economists have concluded about the saving adequacy of today's retirees. It then turns to the complicated issue of how to think about housing equity, which for many people is their major non-pension asset. The final section focuses on changes in the retirement system – namely, the decline in Social Security benefits relative to pre-retirement earnings scheduled under current law and the impact of the shift from defined benefit to 401(k) plans. Both these developments will make it harder for people to have a secure retirement in the future.

HOW MUCH DO WE NEED IN RETIREMENT?

The only clear answer is that people need less than their full pre-retirement income to maintain their standard of living once they stop working. How much less is not so clear.

One big difference before and after retirement is the extent to which income is taxed. When people are working, their earnings are subject to both Social Security payroll taxes and federal personal income taxes. After retirement, they no longer pay Social Security taxes, and they pay lower federal income taxes because only a portion of Social Security benefits is taxable. Under current law, individuals with less than $25,000 and married couples with less than $32,000 of "combined income" do not have to pay taxes on their Social Security benefits.[2] Above those thresholds, recipients must pay taxes on either 50 or 85 percent of their benefits (Table 1).

Table 1. Percent of Social Security Benefits Subject to Personal Income Taxation

Family Type	*"Combined" Income Limits*	*Percent*
Individual	Less than $25,000	0
	$25,000 – $34,000	50
	Above $34,000	85
Couple	Less than $32,000	0
	$32,000 – $44,000	50
	Above $44,000	85

Source: Committee on Ways and Means, 2000

A second reason why retirees need less than their full pre-retirement income is that they no longer need to save a portion of that income for retirement. In addition to contributing to 401(k) plans, many households try to pay off their mortgage before they retire. In retirement, these households no longer need to save and, in fact, can draw on their accumulated reserves. Thus, a greater share of their income is available for spending.

A final factor often mentioned is that work-related expenses, such as clothing and transportation, are either no longer necessary or are much reduced. Although this factor often tops many analysts' lists, it is relatively small compared to taxes and saving.

While all analysts cite the same factors for why retirees need less than their full pre-retirement income, they employ different approaches to calculating precisely how much less. The RETIRE Project at Georgia State University has been calculating required replacement rates – that is, retirement income as a percent of pre-retirement earnings – for decades. For an array of pre-retirement earnings levels, they calculate federal, state, and local income taxes and Social Security taxes before and after retirement. They also use the Bureau of Labor Statistics *Consumer Expenditure Survey* to estimate consumer savings and expenditures for different earnings levels. As of 2001, the Project estimated that a couple with an income of $50,000 needed 76 percent of pre-retirement earnings to maintain its standard of living (Table 2). The same was true for couples earning $90,000. Couples earning $20,000 needed a higher replacement rate (83 percent), because they save very little before retirement and enjoy less in the way of tax savings.

Table 2. Percent of Pre-Retirement Salary Required to Maintain Living Standards

Pre-retirement salary	*Couples*	*Single workers*
$20,000	83%	78%
$50,000	76	74
$90,000	75	82

Source: Bruce A. Palmer. 2001. "2001 GSU/AON RETIRE Project Report." Research Report Series No. 01-1 (June).

Another way to determine adequate savings rates is to look at survey data to explore the relationship between replacement rates and retirement satisfaction. A perfect vehicle for doing this is the Health and Retirement Study. This is a nationally representative panel of individuals aged 51-61 in 1992, and their spouses of any age, who have been interviewed every two years through 2004.[3] It contains detailed information on labor force participation, income, assets, and retirement well-being. In particular, the survey asks retirees:

"All in all, would you say that retirement has turned out to be: very satisfying, moderately satisfying, or not satisfying at all?"

Among retired couples in the second and third quartiles of the income distribution, those who answered "very satisfied" or "somewhat satisfied" had an average replacement rate of about 65 percent while those who said that their retirement was "not at all satisfying" had a much lower 49 percent average replacement rates.

Looking at real people is, of course, very messy. One question is what to use as a measure of pre-retirement earnings. Unlike the simulated earnings of the RETIRE Project, real people have irregular work patterns once they reach their mid-fifties. As a result, comparing retirement income with earnings immediately prior to retirement produces many implausible replacement rates. The above calculations therefore used earnings between ages 50 and 55, which for many households tend to be their highest earnings years. To the extent that people's earnings decline as they approach retirement, replacement rates relative to earnings immediately prior to retirement would be higher.

Nevertheless, the upshot of the range of studies that have examined the issue is that middle class people need between 65 and 75 percent of their pre-retirement earnings to maintain their life style once they stop working.

ECONOMISTS' VIEWS OF PREPAREDNESS

In the last decade, economists have undertaken a number of studies looking at the preparedness of the baby boom generation for retirement.[4] The studies assume that people want to maintain a fairly constant standard of living throughout their lives and plan to replace a percentage of their pre-retirement income when they stop working. That is, the studies assess preparedness against a similar standard as the replacement rate measures discussed above.

Here is a sampling of the results. One set of studies from the early 1990s reported that people were saving on their own – that is, outside Social Security and pensions – only 36 percent of what they needed to maintain their consumption levels in retirement, assuming they retired at age 65 and stayed in their homes.[5] Another researcher found these results too pessimistic because they assumed modest returns on assets and excluded home equity.[6] Correcting for these "flaws," the second study concluded that one third of baby boomer households were saving adequately for retirement by any measure, another third was saving adequately by some standards but not others, and the remaining third was in trouble. These latter results have been echoed in a number of other studies.

A comprehensive 1998 study, using the Health and Retirement Study, developed estimates of household wealth (including defined benefit pensions, Social Security, and home equity) for pre-boomers approaching retirement.[7] The study defined adequacy as the extent to which an inflation-adjusted joint and survivor annuity purchased with the household's accumulated wealth would replace pre-retirement income. Using that criterion, households in the middle of the lifetime earnings distribution had a replacement rate of 52 percent. For one quarter of the population, the real replacement rate was 33 percent or lower. Of course, many in the sample were still working so they could add to their savings and continue to accrue pension benefits. On the other hand, the researchers included the full value of housing equity in the annuitized wealth, which tends to make the situation look significantly better.

Two studies used financial planning software to gauge whether people were prepared for retirement. One applied Quicken Financial Planner to data from the Federal Reserve's Survey of Consumer Finances and found that, based on their assumptions about future incomes and rates of return on assets, about half of households were on track and the other half were likely to run out of money in retirement – some sooner and some later.[8] Another study used ESPlanner to estimate required savings rates and determined that most households were saving too little.[9]

In an extension of the replacement rate approach, two recent studies compare people's actual behavior with the behavior that comes out of simulation models. In these simulations, people attempt to smooth their consumption over their remaining lives as they are buffeted by shocks to their wages, employment, and health. Because of these shocks, households with very similar characteristics can end up with very different levels of wealth. These simulations have generally produced results where people's actual level of preparedness look very much like the numbers generated by the simulations, suggesting that people respond rationally to life's events. Nevertheless, the first study showed that one quarter of the population clearly had inadequate resources for retirement.[10] The second study found that while more than 80 percent of households were accumulating enough wealth to maintain pre-retirement living standards if all housing equity were available to support post-retirement consumption, only 58 percent of households were on track if only half of home equity were included.[11]

In summary, economists have produced a number of estimates about the extent to which people are saving enough for retirement. In presenting their results, some emphasize the donut and some the hole. Taken in their entirety, however, the results suggest that about half of the boomers are on track to accumulate enough retirement wealth to maintain their pre-retirement living standards. The other half are likely to experience a drop. For a quarter, the drop will be modest, but for the other quarter the drop is likely to be substantial. Note that most of these studies include housing wealth and assume that Social Security benefits will be those provided under current law.

THE QUESTION OF HOUSING

As we have seen, the outcomes of studies of financial preparedness for retirement depend crucially on the treatment of people's homes. Housing is a unique asset that represents both wealth and the provision of services. Most households appear to be accumulating sufficient wealth to finance retirement if housing equity is treated as available to finance post-retirement consumption. Without housing equity, the conclusions are much less sanguine.

The argument for including housing wealth is that it represents a real asset that could be used to support consumption in retirement and therefore should be counted. The argument against including it is that people appear to be reluctant to tap into their housing wealth to finance general consumption, hanging on to their homes until advanced old age. Most households do not downsize at retirement as a way of accessing some of their housing equity.

If housing wealth is to be included, a second issue is to what extent. For simplicity, assume that the household owns the house free and clear. Before retirement, the household enjoys housing services in the form of "imputed rent." To continue to receive the same housing services after retirement, the household can either keep the house or it can sell the house and pay rent for a comparable home.

If the household keeps the house, it will be able to access – using a reverse mortgage – only a portion of the housing wealth. This amount is the present discounted value of the home when the last member of the household dies 20 or 30 years or so down the road and will range between 25 percent and 75 percent of housing equity depending on interest rates. The annuitized value of the reverse mortgage payment can support consumption in retirement.

The alternative is to assume that the household sells the house. In this case, the household can accesses 100 percent of its housing wealth and annuitize the entire amount. But the household no longer receives the imputed rent, so the analyst needs to deduct the rent required to duplicate the pre-retirement housing services from the annuity payment to calculate the net addition to income. In theory, the net amounts available for consumption in retirement are the same whether the household accesses housing equity through a reverse mortgage or sells the home and deducts required rental payments.

The upshot is that studies that assume the full amount can be annuitized to supplement other sources of retirement income, without some adjustment for imputed rent, most likely overstate the extent of retirement preparedness. Including a portion of home equity – perhaps 50 percent – seems like a reasonable approach.

THE DECLINE IN SOCIAL SECURITY AND THE SHIFT IN PENSIONS

The analyses of retirement preparedness to date have focused on today's retirement system. But today is probably the golden age of retirement. Today's retirees are leaving the labor force with substantial Social Security benefits and often a good pension from their employer. The outlook for tomorrow is somewhat bleaker. Social Security benefits – relative to earnings before retirement – are scheduled to decline even under current law, and further cuts are likely given the program's financial shortfall. At the same time, the shift from defined benefit to 401(k) plans has made pension benefits far less reliable.

Lost in the Social Security discussions about personal accounts and financial shortfalls is the fact that replacement rates are scheduled to decline substantially even under current law. Today, a person with average earnings retiring at 65 receives benefits equal to $1,184 per month or 41.9 percent of previous earnings. After paying the Medicare Part B premium, which is automatically deducted from Social Security benefits, the replacement rate is 38.7 percent. *Under current law,* this Social Security replacement rate is scheduled to decline for retirement at any given age. The increase in the normal retirement age from 65 to 67, currently in progress, is equivalent to an across-the-board benefit cut. Medicare Part B premiums are also projected to increase sharply due to rising health care costs. Benefits will also be taxed more under the personal income tax, as the exemption amounts are not indexed to inflation. As shown in Table 3, these three factors will reduce the net replacement rate from 38.7 percent today to 29.4 percent in 2030.

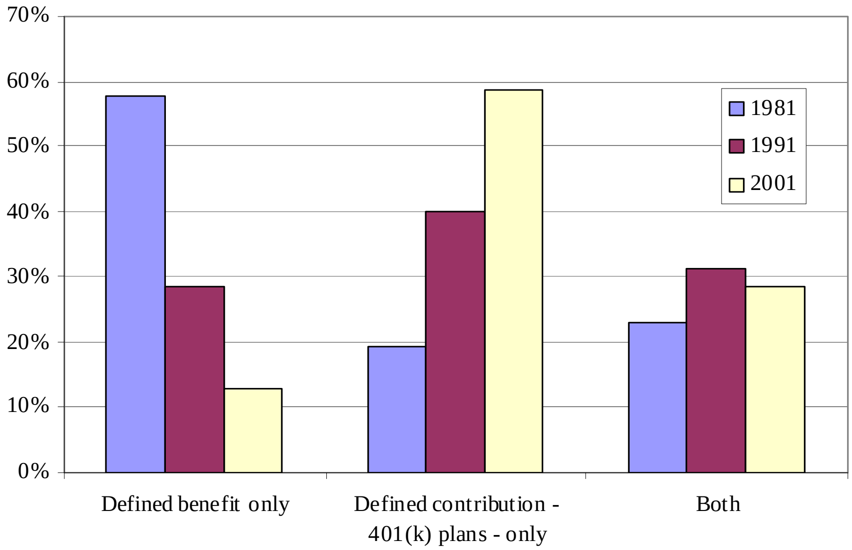
Table 3. Social Security Replacement Rates for an Average Earner Retiring at Age 65, 2004 and 2030

Provision	*Replacement Rate (%)*
2004	
Reported Replacement Rate	41.9
After Medicare Part B deduction	38.7
2030	
Replacement Rate after extension of Normal Retirement Age	36.3
After deduction for Medicare Part B	32.1
After personal income taxation	29.4

Source: Alicia H. Munnell. 2003. "The Declining Role of Social Security." Issue in Brief. Center for Retirement Research at Boston College and author's updates.

The shift away from defined benefit to defined contribution pension plans is also likely to make retirement income even less secure for many people. Although college teachers and others in higher education have participated successfully for decades in defined contribution plans, the relatively sudden shift from defined benefit to 401(k) plans for the rest of the private sector is not working well. Simulations show that the typical household should end up with about $350,000 in its 401(k) account at retirement, but the Federal Reserve's 2001 Survey of Consumer Finances reports that the typical household approaching retirement has only $55,000. The reason for these low balances is that 401(k) plans have shifted all the responsibility and risks from the employer to the individual, and individuals are making mistakes at every step along the way. For example, about one-quarter of workers covered by a plan do not participate, less than 10 percent of participants contribute the maximum, and many cash out when they change jobs. Moreover, 401(k) plans usually provide beneficiaries with a lump sum at retirement and individuals have to figure out how to spread that money over an uncertain lifetime.

Figure 1. Percent of Wage and Salary Workers with Pension Coverage, by Type of Plan, 1981-2001



Source: Munnell and Sundén. 2004. *Coming Up Short: The Challenge of 401(k) Plans*. Brookings Institution Press.

With a declining role for Social Security and most private sector workers faced with "rolling their own" pensions, future studies of retirement preparedness are likely to produce much more gloomy assessments than those reported to date.

CONCLUSION

The answer to whether people are saving enough for retirement appears to be the following. Middle-class households need about 65 to 75 percent of pre-retirement income to maintain their standard of living in retirement. Of those retiring today or in the near future, half are right on track, another quarter may fall somewhat short, and the final quarter is in trouble. The outlook is not so good if households are unwilling or unable to convert all the equity in their home into retirement income. And, the future looks grimmer because Social Security will decline relative to pre-retirement income even under current law, and the decline could be even greater if benefit cuts are part of the solution to the program's financing problems. Moreover, the shift from defined benefit plans to 401(k) plans has not produced expected levels of retirement saving. In the future, if individuals continue to withdraw completely from the labor force in their early 60s, a large and growing number will be hard pressed to maintain an adequate standard of living throughout retirement.

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ENDNOTES

[1] John Karl Scholz, Ananth Seshadri, and Surachai Khitatrakun, "Are Americans Saving 'Optimally' for Retirement?" Working Paper No. 10260, Cambridge, MA: National Bureau of Economic Research.
[2] Combined income is adjusted gross income as reported on tax forms plus nontaxable interest income plus one half of Social Security benefits.
[3] The HRS is conducted by the Institute for Social Research (ISR) at the University of Michigan and is made possible by funding from the National Institute on Aging. More information is available at the ISR website: http://hrsonline.isr.umich.edu/.
[4] The Congressional Budget Office produced a nice summary of studies through 2003 in "Baby Boomers' Retirement Prospects" (November 2003).
[5] B. Douglas Bernheim. 1993. *Is the Baby Boom Generation Preparing Adequately for Retirement? Summary Report*. Princeton, N.J.: Merrill Lynch; B. Douglas Bernheim. 1994. *The Merrill Lynch Baby Boom Retirement Index*. Princeton, N.J.: Merrill Lynch; B. Douglas Bernheim. 1997. "The Adequacy of Personal Retirement Saving: Issues and Options," in David A. Wise, ed. *Facing the Age Wave*, Publication No. 440. Stanford, CA: Hoover Institution Press.
[6] William G. Gale. 1997. "The Aging of America: Will the Baby Boom Be Ready for Retirement?" Brookings Review, vol 15, no. 3 (Summer .
[7] Alan L. Gustman and Thomas L. Steinmeier. 1998. "Effects of Pensions on Savings: Analysis with Data from the Health and Retirement Study," Working Paper No. 6681 Cambridge, MA.: National Bureau of Economic Research (August).
[8] Mark J. Warshawsky and John Ameriks. 2000. "How Prepared Are Americans for Retirement?" in Olivia S. Mitchell, P. Brett Hammond, and Anna M. Rappaport, eds., *Forecasting Retirement Needs and Retirement Wealth*. Philadelphia: University of Pennsylvania Press.
[9] B. Douglas Bernheim and others.2000. "How Much Should Americans Be Saving for Retirement?" *American Economic Review*, vol. 90, no. 2 (May).
[10] Eric M. Engen, William G. Gale, and Cori E. Uccello. 1999. "The Adequacy of Retirement Saving," *Brookings Papers on Economic Activity*, no. 2.
[11] John Karl Scholz, Ananth Seshadri, and Surachai Khitatrakun, "Are Americans Saving 'Optimally' for Retirement?" Working Paper No. 10260, Cambridge, MA: National Bureau of Economic Research. This study took a slightly different approach than Engen, Gale, Uccello (1997). Instead of comparing the range of preparedness for actual households and simulated households facing various shocks, it compared each household with its simulated counterpart.