Will We Outlive Our Money?

by Dallas L. Salisbury

▶**Fewer and fewer Americans retire with benefits in the form of life annuities.** *The author raises key issues regarding the increased importance that uncertainty plays in determining retirement income. The key issues include longevity risk and how savings withdrawals rates will be affected at varying rates of return.*◀

Whether or not we will outlive our money becomes a more important question each year, as fewer and fewer retiring Americans get streams of income from their prior employers, and more and more accumulate accounts that allow/require them to make distribution decisions. By 1998 56.8% of families with a head under age 65 were participating in a retirement plan; 56.3% had accumulated assets in a tax-deferred retirement plan; and 77.3% of those given the opportunity to contribute to a defined contribution plan did so. This last statistic is pointed out because of the way in which the retirement system is changing. Between 1992 and 1998, the number of families with only a defined benefit plan went from 40% to 20.7%; the number with only a defined contribution plan went from 37.7% to 57%; and the number with both went from 22.5% to 22.4%. Workers with a 401(k) plan increased from 32% to 65%, while those with a 401(k) plan and a defined benefit plan declined from 40% to 27%.[1] At the same time, many existing defined benefit plans were amended to provide for the optional payment of lump-sum distributions, and a majority of workers who were given the choice took lump sums over annuities (the traditional form of payment from a defined benefit plan).[2]

As these developments have occurred, the print and broadcast media have dedicated a great deal of attention to the demise of defined benefit pension plans, the "age of the 401(k) millionaire," medical advances, and the life extension prospects of the Human Genome Project and DNA research. Editorial focus has been on how well the nation is doing; the "positive" trend of Internet day trading; the "stockholder" society; the Internet billionaires and stock option-crazed wannabes; and the "trillions" that will be inherited by the baby boom generation. Against this media backdrop, it is worth noting that, according to the 2000 Retirement Confidence Survey, just 54% of working Americans have calculated how much money they will need to save for their retirement.

The print and broadcast media have dedicated little time or space to the following important issues:

- The near total income dependence of today's retirees on Social Security (nearly

two-thirds have it as their major source of income)
- The actual number of persons who are actually 401(k) millionaires (an optimistic assessment would attribute the rate at .05%, at the end of the 1999 stock market high)
- The reality that 25% of individuals don't live to see the age of 65
- The estimate of the Social Security Administration (SSA) that just 4% of today's retirees saved enough and have enough income to have achieved financial independence, while 12.3% have incomes below the poverty level after age 65.[3]

Others have begun to focus on these issues and the resulting need for Americans to plan and save so that they are prepared to better meet financial needs and to have the prospect of a secure retirement.[4] The need that most readily gets focused upon is what one needs to save to have a certain amount by retirement. The next area for expanding attention will be how fast you can spend whatever you have accumulated if you wish to have some of it last as long as you live. This used to be partially accomplished through a life annuity with a survivor benefit, but even an annuity did not ensure there would be enough money without having done independent savings.

SOCIAL SECURITY STEPS UP ATTENTION

The public has shown limited understanding of the Social Security program over the ten years that the Retirement Confidence Survey has been undertaken, including limited knowledge of likely benefit levels or the age at which benefits would be paid. In October 1999, the Social Security Administration, under congressional mandate, began mailing individual account statements that provide both items of information to workers over the age of 25. By October 2000, over 125 million workers will have been told in writing the age at which they will be eligible for full Social Security benefits, the estimated amount of those benefits, and how to get more information. The 2000 Retirement Confidence Survey found that only 17% know when they will be eligible for full benefits, with the balance thinking it is earlier than it will actually be.[5]

The Social Security Administration has added an online retirement planning section to www.ssa.gov, which includes a Social Security benefits calculator that allows workers to change assumptions, such as how long they will work, in order to see how benefits will change.

The *Social Security Statement* hits home the fact that the program is intended to provide a floor of income for all, but income adequacy for few. For today's retirees on Social Security, 12.3% have total income that is below the poverty level, and 18.1% have income that is within 125% of the poverty level. The retirement planning tools being distributed by SSA are intended to encourage personal savings so that these numbers improve for future generations. The information should serve to increase the number planning and saving for retirement. As a result, the number of persons who have assets at retirement will increase. In turn, the number who will need to be educated about how slowly they must spend money in retirement, in order to not outlive their resources, will also increase.

PERSONAL FINANCE WRITERS HELPING

The media has a growing number of personal finance writers who work hard to present needed basic information, and to put the hype of the regular news reports into perspective. The channel flipper or page turner is likely to see far more stories about those who have struck it rich, the stocks that are up 500%, the retiree who is living the good life, or the 40-something retiree, than the column of the responsible personal finance columnist. Small wonder that the annual Paine-Webber return expectations survey now finds that the public is expecting compounded future market returns above 25% per year![6] Meanwhile, the personal finance writers file their columns trying to put the "news" into perspective and to build realistic expectations.

To augment the work of the personal finance writers, the media Internet sites are being expanded to include financial planning tools, educational content and links to other sources. For example, the *Wall Street Journal* interactive edition of June 5, 2000 carried an article on the issue of how fast you can spend money during retirement, and the trickle of such articles is picking up.[7]

CENTRAL QUESTIONS

The questions of "how much must I save?" and "how fast I can spend it once I stop working?" depend upon knowing answers to the unknowable. That immediately suggests acting in a very conservative fashion. It also suggests making sure you have at least asked the most important questions.

HOW LONG WILL I LIVE?

The lottery of life tells us that 25% of us won't make it to age 65. Half of men will make it to age 81, and half of women will live to age 86. Frequent articles in the popular media tell us that these numbers are our life expectancy, suggesting that we can be sure to be gone by then. And, interestingly, an on-the-street survey suggests that most people think life expectancy is just that—how long I **will** live. Were it certainty, then, at age 51, I would know that I will live until 77 years and six months, and I would be able to calculate my spending rate for a timed death (www.cdc.gov/nchs/fastats). But, these are averages, and they change every time we live another year. A turn on the Internet with the life expectancy calculator at www.hksrch.com.hk/cgi/psy/life/cgi tells me that I can expect to be here at 91, while the "Longevity Game" at www.northwesternmutual.com/games/longevity/main.html concludes that "my longevity is 95."

Life experience tells me that I could die crossing the street any day. Science tells us that the "maximum" looks like age 125 if my body keeps working until it wears out. Science also suggests to us that, with implants and pacemakers and soon-to-be-cloned body parts, more of us will be pushing beyond what "life expectancy" held for us in a more simple world.[8] Science also suggests that DNA mapping of the Human Genome Project will open even more opportunities for advances in medical care and life expectancy. Does this mean that we should tell newborns to plan for 125? There are extensive resources now available online for those who want to study life expectancy.

One of my grandfathers passed at 66, but both great grandfathers made it into their 80s, and Dad and Mom are still going strong as they break through age 85. How much faith should I put in those longevity calculators? It all depends on what decisions I make about how to use my savings that will determine whether or not I run out of money. At work, I have a money purchase pension plan and a 401(k) plan. I will add the value of these two lump-sum distributions to my IRA, and other accumulated assets, and try to make it last. Do I plan for death tomorrow, at 77, at 91, at 95, or later? It obviously affects how much I need to save and how fast I can spend what I have saved when I do retire. It dictates what "making it last" means.

SO, HOW FAST CAN I SPEND MY SAVINGS?

A 1998 study published in the *AAII Journal*[9] (www.aaii.com) provided tables of alternative withdrawal rates depending upon alternative investment allocations and adjusting for market fluctuations. The study presented one table that used historical data with inflation-adjusted rates of return for 1926 to 1995 to test how long one could expect funds to last, given alternative withdrawal rates. The study (see Table I) suggests that, at a withdrawal rate of 3% per year, an investment mix that includes at least 25% equities should allow funds to last for more than 30 years. At 4%, the future would be more uncertain. Should one spend at a faster rate, the higher one goes as a percent of the base, the sooner he or she will run out of money and the longer he or she will live on Social Security alone.

An analysis with the same goal was published by T. Rowe Price in its Spring 2000

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TABLE I

Historical Inflation-Adjusted Portfolio Success Rates: 1926 to 1995 (Percentage of All Past Payout Periods Supported by the Portfolio After Adjusting Withdrawals for Inflation)

Payout Period	3%	4%	5%	6%	7%	8%	9%	10%
100% Stocks								
15 Years	100	100	100	91	79	70	63	55
20 Years	100	100	88	75	63	53	43	33
25 Years	100	100	87	70	59	46	35	30
30 Years	100	95	85	68	59	41	34	34
50% Stocks/50% Bonds								
15 Years	100	100	100	93	79	64	50	32
20 Years	100	100	90	75	55	33	22	10
25 Years	100	100	80	57	37	20	7	0
30 Years	100	95	76	51	17	5	0	0
100% Bonds								
15 Years	100	100	100	71	39	21	18	16
20 Years	100	90	47	20	14	12	10	2
25 Years	100	46	17	15	11	2	0	0
30 Years	80	20	17	12	0	0	0	0

Source: Philip L. Cooley, Carl M. Hubbard and Daniel T. Walz, "Retirement Savings: Choosing a Withdrawal Rate That Is Sustainable," *AAII Journal* 20, No. 2 (February 1998).

newsletter (www.troweprice.com), but it assumed funds were being withdrawn from a tax-deferred account, which would allow funds to accrue tax free, with taxes paid upon withdrawal. In addition, the analysis used a model running 500 alternative market scenarios and assumed an inflation rate of 3%. This analysis (see Table II) provided similar outcomes, suggesting that an annual withdrawal rate of 4% would be sustainable in most cases for 25 years, but in somewhat fewer cases for 30 years. Results were not simulated for a 3% withdrawal rate, but it appears that, at that rate, T. Rowe Price would have also found sustainability for 30 and more years.

Is it expensive to get this type of information on a personalized basis? The T. Rowe Price model is available for $9.95 on its Web site. For $500, T. Rowe Price will do a custom analysis for you. Other tools like that at www.financialengines.com provide a picture of whether your money is likely to last at different dollar spending levels, and then allow you to alter assumptions to see when you get to a mix that keeps you solvent. That service is available for a monthly charge. There are free tools at www.quicken.com, www.vanguard.com, www.fidelity.com and other online sites that get the individual started. Using the Quicken tool under assumptions that would apply to many

TABLE II

3% Inflation-Adjusted Portfolio Success Rates Using 500 Simulated Market Scenarios (Assumes Pretax Withdrawals From Tax-Deferred Assets)

Payout Period	4%	5%	6%	7%	8%
100% Stocks					
20 Years	97	91	76	56	37
25 Years	93	79	59	38	21
30 Years	85	68	47	24	14
60% Stocks/40% Bonds					
20 Years	99	95	77	46	21
25 Years	95	79	56	31	15
30 Years	88	66	41	18	7
5% Stocks/95% Bonds					
20 Years	99	93	19	0	0
25 Years	93	14	0	0	0
30 Years	37	0	0	0	0

Source: Philip L. Cooley, Carl M. Hubbard and Daniel T. Walz, "Retirement Savings: Choosing a Withdrawal Rate That is Sustainable," *AAII Journal* 20, No. 2 (February 1998).

newly retired couples of Social Security annual benefits of $17,000, and a desired total income of $24,000, the tool says you need $34,347 in savings if you will die at 70; $63,976 to get to 75; $130,598 to get to 90; and $147,003 to get to 95. This suggests a withdrawal rate to have the money last until 95 of 3.4% annually. All of these models from various sources produce numbers that underline, as do the results noted above, that longevity is the driver of at what rate retirees can spend their savings. In addition to these models are free Social Security benefit estimate tools now available from the Social Security Administration (at www.ssa.gov), which include estimators that run from the simple to the very sophisticated.

LESSONS FROM OUR FAMILIES

How many of us were told "do as I say, not as I do" by someone along the road of life? My parents say it to me today, and I am sure my grandparents would be saying it as well if they were still alive.

My grandfather earned the certified life underwriter designation in 1935 near the initiation of the program. He worked for The Equitable for decades. He sold life insurance and annuities. He bought insurance on his own life and borrowed against it so both his children could go to college and one could go to medical school. After all, he would live to pay off the loan. He didn't. He died in 1954 at the age of 66. And, in spite of all those years working with one company, his employment relationship provided no pension and no retiree medical benefit. For Grandma, that meant a Social Security survivor benefit alone, with her home of decades sold to add some income to a poverty-level survivor benefit. Beginning when I was five, in 1954, she lived with my family, in an apartment that is home for my parents today, until she went into a nursing home in 1974.

I am a better person from my grandmother's influence and her closeness for all those years, and lessons came through. First, be careful about borrowing from accounts on the assumption of long life and make sure there is a financial plan that provides for your survivors should death come early. In addition, save to ensure that you have more income than the inadequate floor represented by Social Security. Also be prepared to sell your primary residence and go small as a source of income during retirement. Finally, be certain that you are financially prepared to live well beyond your "life expectancy" (as Grandma did).

There are lessons from my parents as well. My father was one of the fewer than 20% of his generation who worked 30 years or more for one employer. And, he was among the 20% of families that were blessed with a defined benefit plan and a defined contribution plan at work, and full retiree medical benefits. Social Security provided income replacement of below 50% when he retired in 1978. The defined benefits came in at about 20%. Social Security was indexed for inflation, but the defined benefit annuity was not. The home I grew up in was sold, as was some inherited property, and the defined contribution lump sum was spent to make up the difference between lifestyle and income as the years passed. With Dad soon to turn age 88, and Mom age 84, they are well beyond what they had been told their "life expectancy" was at birth or at 65. Dad did not select joint and survivor benefits on the defined benefit plan, so it will go to zero, and the retiree medical will be gone, should he pass before Mom. In that event, the Social Security benefit will go down dramatically as well. The beach home inherited from Grandfather is still with us, but should long-term care become a necessity for either Mom or Dad, the last real estate will likely need to go. My folks provide many positive lessons regarding planning, saving, frugality, debt avoidance and so much more. Learning from their decisions, my brother chose a 75% joint and survivor option with 3% inflation indexation when he recently retired. I am saving and planning a retirement date against a spending target of 3% per year (of what I have accumulated and then invested in a portfolio of at least 50% equities). I am saving money in a separate account for medical insurance during retirement and to pay for long-term care if needed. I am also assuming that I will live to 100 for these calculations, given how "young" my parents are.

CONCLUSION

My dad and brother have both retired with "old-fashioned" benefits that will ensure that they have income for life. The number of future retiree families having a defined benefit annuity is, however, as previously noted, on the decline.[10] The proportion of workers and families with retiree medical protection at least partially paid for by a previous employer or union is on a steep decline as well. Thus, there is the need for most of today's workers and families to have more personal savings as they reach retirement than those now retired, and there is the need to have a clear picture of how fast you can spend what savings you have. For those of us who have spent a working life getting two paychecks each month, the time to use a 3% spending assumption for retirement to determine how much we must accumulate and when we can actually hope to retire is now! Is it better to find out later that you saved too much and can increase your spending, or to run out of money 20 years before you die? You decide, but you can now easily base the decision on tools and numbers!

Endnotes

1. See EBRI *Issue Brief* Number 223, July 2000, Employee Benefit Research Institute, Washington, D.C., www.ebri.org.
2. See *What Is the Future of Retirement Plans?,* edited by Dallas Salisbury, (Employee Benefit Research Institute, 2000) www.ebri.org.
3. Social Security Administration Publication Number 13-11871.
4. The U.S. Department of Labor and the U.S. Department of the Treasury announced a savings education campaign in July of 1995. EBRI joined with others in that year to form the American Savings Education Council and since 1996 has sponsored the ChoosetoSave campaign to air public service announcements on TV and radio. (See www.choosetosave.org.)
5. EBRI *Issue Brief* Number 222, June 2000.
6. See www.painewebber.com.
7. See www.wsj.com.
8. Axel Goetz, "Life Expectancy and Retirement Income," in *Retirement Prospects in a Defined Contribution World,* edited by Dallas L. Salisbury, pp. 21-24 (Washington, D.C.: Employee Benefit Research Institute Education and Research Fund, 1997).
9. Philip L. Cooley, Carl M. Hubbard and Daniel T. Walz, "Retirement Savings: Choosing a Withdrawal Rate That Is Sustainable," *AAII Journal* 20, No. 2 (February 1998).
10. EBRI *Issue Brief* Number 223, July 2000.