



Answer Quickly: How Much Do You Think You'll Get from Social Security?

By Andrew G. Biggs

This year, one in four new retirees will discover that their largest retirement income source falls 28 percent or more below their expectations. But that asset is not a recession-battered 401(k) account. It is Social Security. To understand why, answer quickly: how much do you think your Social Security benefit will be? If you do not know, you are in good company. Due to the complexity of Social Security's benefit formula, a worryingly large proportion of Americans have no idea what their Social Security benefit will be until the first check arrives. This "predictability risk" is just as costly as the market risk associated with 401(k) plans. Simplifying Social Security benefits should be a priority when reform is addressed.

A principal advantage of a traditional defined-benefit pension plan over defined-contribution plans like individual retirement accounts and 401(k)s is the predictability of future retirement benefits. The Federal Citizen Information Center calls defined-benefit pensions "a predictable, secure pension for life," saying that "workers are promised a specific benefit at retirement . . . [and] can know in advance what benefits they will receive."¹

Unlike defined-contribution plans, in which plan participants bear the risk of fluctuating stock and bond values, defined-benefit plans pay a set benefit that individuals should be able to predict well in advance. Knowing with precision what their retirement benefits will be allows individuals to make better decisions regarding how much to save on their own and when to leave the workforce.

Social Security provides a defined benefit. In debates over how to restore Social Security's solvency and whether to incorporate personal retirement accounts into the program, Social Security's "predictable, stable retirement income," in AARP's words, has been touted as a reason to retain its traditional benefit structure without reductions or diversification into personal accounts.²

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This position is undercut, however, if individuals are not able to predict their future benefits accurately. A defined benefit that is difficult to predict due to the complexity of its benefit formula carries "predictability risk" in the same way that a defined-contribution retirement carries market risk. In both cases, individuals may find themselves

Key points in this Outlook:

- A significant number of people near retirement have no idea what their Social Security retirement income will be.
- One reason is that the Social Security benefit calculation is extremely complex.
- Unpredictability imposes significant costs on future retirees, who either save too little or too much for their retirement.
- One goal for reforming the system should be to simplify it so working-age Americans, especially those near retirement, have a better sense of what is ahead.

with retirement incomes that differ significantly from what they anticipated. Those who overestimate their retirement incomes are at greatest risk. However, even those who underestimate their future benefits pay a price because of oversaving during their working years. This excess saving sacrifices other opportunities, such as pursuing further education, purchasing a home, or starting a business.

A predictable Social Security benefit helps working-age individuals decide how much to save on their own to create an adequate retirement income. Unpredictability means that too many individuals discover their error after it is too late to do much about it.

The Social Security Benefit Formula

What makes Social Security benefits so hard to predict? First, consider how a typical private-sector, defined-benefit pension is calculated: workers simply multiply a percentage of their final salary by the number of years of employment. This allows for relatively easy estimates of future retirement benefits that can be updated on the fly.

But for Social Security, benefits are calculated by indexing a worker's past earnings to the growth of average national wages. This involves multiplying the ratio of earnings in a past year to average wages economy-wide in that year by the average wage in the year the worker turned sixty. Earnings past age sixty are not indexed. Next, Social Security averages the highest thirty-five years of indexed earnings. These average earnings are then run through a progressive benefit formula to produce the Primary Insurance Amount payable at the full retirement age, currently sixty-six. For a new retiree in 2009, Social Security replaces 90 percent of the first \$744 in average monthly earnings, 32 percent of earnings between \$745 and \$4,483, and 15 percent of earnings above \$4,483. These dollar amounts increase each year along with average wage growth in the economy.

However, if this benefit is less than half of the benefit received by the higher-earning spouse in a married couple, the lower-earning spouse is eligible to receive a spousal benefit instead. Spousal benefits may be collected off the earnings record of a former spouse—but only if the marriage lasted at least ten years.

Whatever benefit is received is then reduced or increased based on whether benefits are claimed before or after the full retirement age, which is itself increasing for those born between 1954 and 1959.³ Finally, the retirement earnings test may reduce benefits for early claimants who continue working. Few Americans are aware, however, that at the full retirement age, benefits are increased to account for reductions due to the earnings test.⁴ To say the least, these are not back-of-the-envelope calculations.

Do Americans Know What They Will Receive from Social Security?

How bad is the problem? The Health and Retirement Study (HRS), a federally funded survey of older Americans, allows us to compare near-retirees' predictions of their future Social Security benefits to what those benefits actually turned out to be.⁵ My analysis builds upon similar studies by Alan L. Gustman and Thomas L. Steinmeier⁶ and Susann Rohwedder and Arthur van Soest.⁷ I use data from the 2000, 2002, 2004, and 2006 waves of the HRS. In these years, individuals were asked at what age they expected to start collecting benefits, followed by: "If you start collecting Social Security benefits then, about how much do you expect the payments to be in today's dollars?" Individuals who have already claimed benefits are asked what their Social Security benefit is.

This analysis relies on the fact that HRS respondents are interviewed in multiple "waves," meaning that for many individuals, the survey contains data both on their expected benefits and on the benefits they actually receive in retirement. As some respondents may have been asked to predict their benefits in more than one HRS wave, this analysis relies upon their final benefit prediction, which would have occurred one to two years prior to first claiming benefits.

The results, listed in table 1, are sobering. Almost one in four individuals on the verge of retirement could or would not even hazard a guess as to their Social Security benefit level. Of those who could make a prediction, guesses were close to accurate on average—but only on average. While the median prediction underestimated realized benefits by only 3 percent,⁸ one-third of near-retirees overestimated

One-third of near-retirees overestimated their benefits by at least 10 percent, while one-quarter overestimated them by more than 28 percent.

TABLE 1
DISTRIBUTION OF PROJECTED
VERSUS REALIZED RETIREMENT BENEFITS

Percentage of sample	Difference between projected and actual benefit (percent)
5	-58
10	-46
25	-19
50	-3
75	28
90	107
95	168

SOURCE: University of Michigan, Institute for Social Research, Health and Retirement Study, 2000–2006 waves.

NOTE: N=1,901; negative numbers denote underestimates.

their benefits by at least 10 percent, while one-quarter overestimated them by more than 28 percent. One in ten retirees was to receive a benefit of less than half as much as he expected.

Similar numbers underestimate their future benefits. This is important, as it implies that a single uniform error—such as a failure to account for the effects of inflation on future benefits—is not responsible for the misestimates of benefits observed in HRS data.

Figure 1 displays the same data in graphic form. There is a clear spike in estimates close to the actual value of benefits received; specifically, 22.6 percent of respondents predicted their Social Security benefits in an error range from -10 percent to zero percent. However, this spike constitutes less than one quarter of the overall sample. Significant majorities misestimate their benefits by larger amounts. More broadly, while positive and negative dollar estimates are normally distributed, the distribution of errors around the mean estimate is not normal but log-normal, as underestimates of

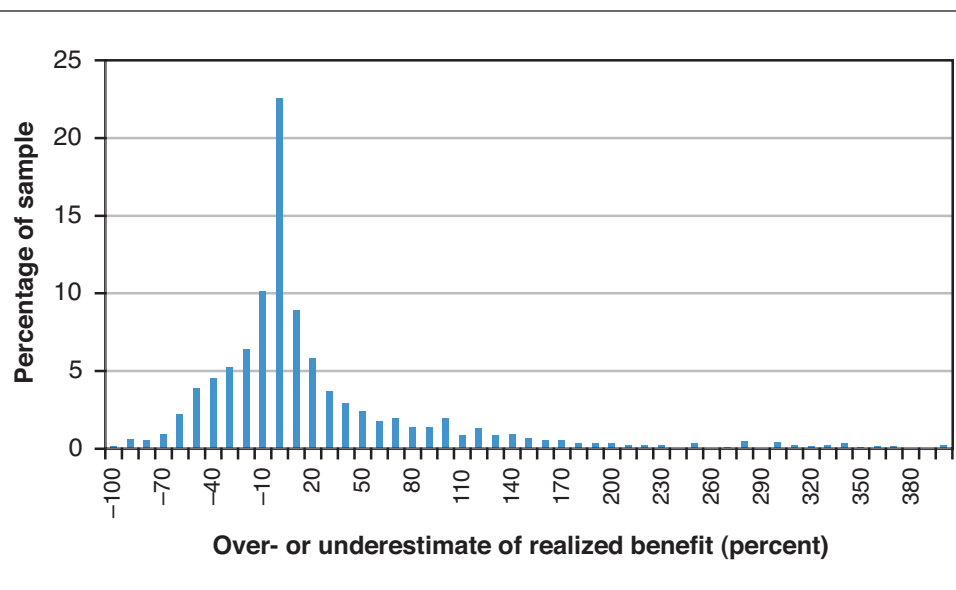
benefits cannot exceed 100 percent, but overestimates are theoretically unlimited. Thus, there are small numbers of respondents who overestimate their benefits by several orders of magnitude.

Put simply, a significant number of Americans have no idea what their “predictable, reliable” Social Security benefit will be until the first check arrives. It is difficult to see how this “predictability risk” differs in substance from the market risk inherent in defined-contribution retirement accounts. In both cases, there is the chance that the income derived from the retirement vehicle may differ from the level expected prior to retirement. In the case of defined-contribution accounts, however, the individual has the option to reduce that risk by investing in more stable, but lower-returning, assets. Under Social Security’s benefit formula, however, predictability risk is difficult to eliminate. The only thing an individual can do is take steps to inform himself as retirement approaches.

Are Americans Gaining Better Knowledge of Their Benefits?

With benefits impossible to predict intuitively, workers are almost entirely reliant upon annual benefit estimates sent to them by the Social Security Administration (SSA)—the Social Security Statement. While some research

FIGURE 1
DISTRIBUTION OF PROJECTED SOCIAL SECURITY BENEFIT ERRORS
RELATIVE TO REALIZED BENEFITS



SOURCE: Author’s calculations, based on 2000–2006 HRS waves.

TABLE 2
PERCENTAGE OF NEAR-RETIREEES UNABLE
TO ESTIMATE SOCIAL SECURITY BENEFIT

Year claiming benefits	Percentage saying “don’t know”
1998	24
2000	27
2002	28
2004	29
2006	25

SOURCE: University of Michigan, Retirement Research Center, Health and Retirement Study, 1996–2006 waves.

indicates that the Statement has improved Americans’ knowledge of their retirement benefits,⁹ data drawn from the HRS are less encouraging.

One measure of Americans’ benefit knowledge is their ability to make an estimate. That is, a decline in the percentage of HRS respondents who cannot estimate their future benefits would tend to indicate at least rising confidence in benefit knowledge. Looking at individuals one to two years prior to benefit claiming, however, the percentage unable even to guess their future benefits has stayed roughly constant over time (see table 2). Among individuals claiming benefits in 1998, about 24 percent answered “don’t know” to the HRS benefit estimate question when asked in 1996. The percentage of “don’t knows” rose from 2000 through 2004 but declined to 25 percent in 2006. Thus, a clear trend is hard to discern.

Moreover, the accuracy of near-retirees who did predict their future benefits has not improved significantly. Beginning in 1995, all workers sixty and over received annual Social Security Statements. The statements include a worker’s past wages and an estimate of future benefits.

The HRS data can be used to test whether these mailings significantly improved Americans’ knowledge of their retirement benefits. In 1994, 46 percent of near-retirees could predict their benefits with an error of less than plus or minus 10 percent. In 1996, the first year in which all near-retirees would have received a statement, 76 percent predicted their benefits with this accuracy. Since then, however, the accuracy of predictions has gradually declined.

In 2006, only half were able to predict their benefits within 10 percent.

The most intuitive explanation is that the publicity surrounding the 1995 rollout of the Social Security Statement caused near-retirees to pay attention, but since then, attention has waned. Further analysis is required to control for changing characteristics of near-retirees, and a not-yet-released experimental module of the 2008 HRS wave asks respondents directly about their receipt and reading of the Statement. These data, when released, may tell us more.

While the Statement serves other purposes, and SSA’s new online benefit calculator should help, we should be realistic about what these tools can do when the basic benefit calculation remains so complex. The core finding that most near-retirees cannot accurately predict their future Social Security payments highlights the need for a benefit formula that allows for more intuitive calculations.

Potential Reforms

A significant number of Americans have no idea what their “predictable, reliable” Social Security benefit will be until the first check arrives.

To date, most proposals to reform Social Security have focused almost solely on solvency issues. In doing so, most aspects of the Social Security benefit formula are left untouched, modified only to reduce generosity in future years. In certain cases, reforms make the program even more complex. Proposals with personal accounts often contain interactions between the account and the traditional benefit formula that may be difficult for

some participants to understand. Likewise, “low-earner enhancements” contained in both account and non-account reform plans effectively add a second benefit formula to the current one, such that low earners with long work histories receive the higher of the two benefits. Again, while such reforms may improve the targeting of Social Security benefits toward low earners, the increased complexity will make benefits even more difficult to understand or predict.

One wholesale reform to improve the understandability and predictability of benefits is a flat dollar payment to each retiree—some call this a “citizens’ pension”—supplemented by individual savings in a personal account.¹⁰ For instance, New Zealand’s universal pension plan pays a benefit equal to 42 percent of per-capita gross domestic product, supplemented by the more recent KiwiSaver accounts. Likewise,

the United Kingdom is shifting toward a flatter defined benefit, adjusted for years of labor force participation, supplemented by individual savings accounts. In either case, the uniformity of the base benefit would cause its value to be well-known and better understood, making other saving decisions easier. Combined with individual saving, a flat dollar benefit could provide the same level of benefits and progressivity as current-law Social Security but in a significantly simpler package.

Many options are available, but the key is for policy-makers to accept the difficulty many Americans have in understanding how their Social Security benefits are calculated. While the temptations to fine-tune the benefit formula are many, the predictability risk they create imposes significant costs on American retirees. While improved notification of Social Security benefits is important, this alone will not fully address the problem.

Conclusion

Critics of defined-contribution pension plans point to possible market declines just prior to retirement that can lead to unexpected reductions in retirement income. But just as ordinary investment is subject to market risk, Social Security's complex benefit formula involves predictability risk. An individual's future Social Security benefit might be "defined" for SSA's computers in Baltimore, but for an individual who lacks the computational skills to calculate his benefit, there remains considerable uncertainty. And the welfare loss to retirees is the same, whether their 401(k) generates less-than-expected income due to stock market declines or their Social Security benefit is less than expected simply because they could not understand the benefit formula. What is needed is simplicity so that working-age Americans will have better intuitive knowledge of their future Social Security benefits.

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Notes

1. Federal Citizen Information Center, "Predictable, Secure Lifetime Benefits," available at www.pueblo.gsa.gov/cic_text/

money/secure-4life/secure-pension.htm#secure (accessed June 9, 2009).

2. William D. Novelli, "Reform Social Security—Don't Destroy it," *AARP Segunda Juventud* (April/May 2005), available at www.aarpsegundajuventud.org/english/social/2005-AM/05AM_novelli.html (accessed June 1, 2009).

3. The full retirement age is increasing two months per year from sixty-five to sixty-seven years of age. The full retirement age is currently scheduled to remain at sixty-seven for all individuals born in 1960 or later. A full explanation of this change is available at www.ssa.gov/retire2/retirechart.htm (accessed June 9, 2009).

4. Andrew G. Biggs, "The Social Security Earnings Test: The Tax That Wasn't," *Tax Policy Outlook* no. 3 (July 2008), available at www.aei.org/outlook/28341.

5. The Health and Retirement Study (HRS) is sponsored by the National Institute of Aging (grant number NIA U01AG009740) and is conducted by the University of Michigan. This paper uses only public information from the HRS. This includes raw files and the RAND HRS file, Version H.

6. Alan L. Gustman and Thomas L. Steinmeier, "What People Don't Know about Their Pensions and Social Security: An Analysis Using Linked Data from the Health and Retirement Study" (Working Paper 7,368, National Bureau of Economic Research, Cambridge, MA, October 1999), available at www.nber.org/papers/w7368 (accessed June 1, 2009).

7. Susann Rohwedder and Arthur van Soest, "The Impact of Misperceptions about Social Security on Saving and Well-Being" (Working Paper 118, Retirement Research Center, University of Michigan, Ann Arbor, MI, May 2006), available at <http://mrrc.isr.umich.edu/publications/papers/pdf/wp118.pdf> (accessed June 1, 2009).

8. The mean prediction overestimated actual benefits by 18 percent.

9. Giovanni Mastrobuoni, "Do Better-Informed Workers Make Better Retirement Choices? A Test Based on the Social Security Statement" (Working Paper 51, Collegio Carlo Alberto, Turin, Italy, July 2007), available at www.carloalberto.org/files/no.51.pdf (accessed May 26, 2009).

10. Alternately, the flat dollar benefit could be paid to any retiree with a requisite number of years of labor force attachment, with reductions or increases for individuals with lesser or greater labor force participation.