Expectations for Retirement: A Survey of Retirement Investors

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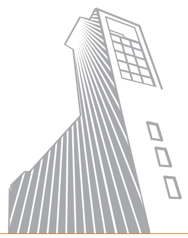

Executive Summary

Retirement investors generally are aware of the risks they face as they approach retirement. However, their expectations often are not well matched with economic reality, particularly regarding savings adequacy. For many, awareness does not translate into concrete savings plans, and there is a fundamental misalignment between retirement goals and current assets and savings rates.

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Awareness versus specific plans. Nine of 10 retirement investors have given at least some thought to the adequacy of their savings and the impact of inflation during retirement. Eight of 10 have thought about how they will manage their assets during retirement, how they will pay for health care, and how long their retirement might last. Yet despite this awareness, many lack specific plans. Only 41% have a target goal for asset accumulation. Eight of 10 feel they are not saving enough for retirement, or are not sure what to save.

Income expectations versus behavior. On average, retirement investors report they will need 70% of current income to maintain their standard of living during retirement. A retirement income of 51% of current income would offer a "minimally acceptable" standard of living. Yet we estimate that less than one-third of retirement investors are on track to maintain their current standard of living, and the average investor is only saving enough to meet the "minimally acceptable" goal.

Variations in preparedness. Beneath the averages, there is a wide variation in retirement preparedness. About one-third of retirement investors are "on track"—likely to generate an income replacement ratio of 70% or greater in retirement. These investors have saved in the past, are saving at double-digit rates today, and are planning to retire at age 66 on average. Another 30% of investors are "potentially secure," able to reach the 70% threshold if they change their behavior today. To get on track, they need to double their savings rates and consider deferring retirement until their late 60s. The remaining 38% of retirement investors are "at risk" financially. They need to double their savings rates, defer retirement until age 70—and recognize that they may still fall short of a 70% income replacement goal.

Realistic market expectations. Investors anticipate dramatically lower future returns for U.S. stocks in the aftermath of the 2000–2002 bear market. The average retirement investor expects an 8% return on equities over the coming decade. One-third of respondents expect a return of 6% or less. These results could reflect a short-term reaction to the bear market, or a once-in-a-generation shift in investor attitudes.

A heightened fear of risk. While investor expectations may be more realistic today, they also may reflect an overreaction to the market decline and an excessive aversion to risk. Retirement investors say there is a 50-50 chance of stocks dropping by one-third in any given year. In fact, the historical risk is only 2%*.

Misunderstanding of longevity risks. Retirement investors as a group simultaneously believe their life spans will be shorter, and longer, than the facts suggest. Participants in almost every age category estimate their chances of living to age 70 at 70%–75%, while actuarial data on pension plan participants suggests the actual probability is greater than 85%. Meanwhile, investors estimated the likelihood of living to 100 as 26%—while the actuarial data suggests than only 2% will reach this age.

Implications of research. This research has several implications for retirement investors, as well as for policymakers, plan sponsors, and financial service providers. First, it is clear that many individuals, while aware of the risks of retirement, have difficulty translating awareness into concrete savings plans. There is evidence of a lack of adequate planning and of inertia and procrastination in raising savings rates. Many retirement investors are failing to solve the "asset/income puzzle." They need help translating their retirement income goals into specific asset and savings targets.

From this perspective, pessimism over future stock market returns may be a positive development. Such pessimism underscores the notion that the capital markets cannot be expected to rescue weak savings programs. The solution instead lies in higher savings rates.

The confusion over mortality risk also highlights the importance of calibrating asset levels and income goals. If investors are struggling with this issue in the accumulation phase, they will face a similar dilemma in retirement—deciding how to translate a large asset pool into a sustainable stream of income. Programs that assist investors with these activities should remain the top priority of policymakers, plan sponsors, and financial service companies.

Samuel Atlee, Suzanne Cionci, Lisa Collins, John Friel, Kelly Harrison, Christine Johnson, and Martha Witte assisted with the report's editing, design, and production. Holly Fergusson and Cynthia Brower assisted with the survey's design.

* Source: The Vanguard Group, 2004. See page 14 for further details.

Introduction

Over the past two decades there has been a marked shift toward individual responsibility and self-reliance in the funding of retirement benefits. In the workplace, defined contribution plans have supplanted defined benefit plans as the dominant type of private-sector retirement program. In the retail financial services marketplace, households have come to rely increasingly on direct investment in the capital markets—through such vehicles as individual retirement accounts, mutual funds, and self-directed brokerage accounts—rather than saving and investing through banks and insurance intermediaries.

These trends have given rise to the development of a distinct "retirement investor" class—tens of millions of Americans who have accumulated financial assets, and assumed direct equity and bond market risk, often through tax-advantaged individual accounts. Over the past two decades investors in such programs have faced a variety of "accumulation" phase issues—the need to save regularly for the future, the risk of inflation, the importance of diversification, and the role of asset allocation and balanced investment strategies in managing risk-return trade-offs.

Today retirement investors face a new challenge: weighing the set of risks that will emerge as they approach and enter retirement. These risks include:

- *Retirement savings adequacy*. Are accumulated assets and benefits sufficient to maintain an investor's desired standard of living in retirement—not only in the first few years, but also over time?

- *Capital markets risk.* How will market returns and risks be different in the future—and how do they shape an investor's retirement future?

- *Longevity risk*. As life expectancy continues to improve, how do retirement investors minimize the risk of outliving their savings and benefits?

Our study focuses on these three primary risks. Importantly, all individuals face a fourth risk, which we will consider in a future report—the risk of adverse health events and the costs of health care.

The goal of our research is to compare general awareness of retirement risks with actual investor behavior. First, to what extent are individuals aware of the risks facing them as they approach retirement? And, equally important, are they taking the right steps to address these risks? In short, our focus is on whether retirement investors' expectations are well calibrated with economic reality.

In the first section of our report we describe our methodology, then present our findings on savings adequacy, investment expectations, and longevity risks. In our final section we summarize implications for retirement investors—as well as for policymakers, financial service providers, and plan sponsors, all of whom assist retirement investors in achieving their goals.

Methodology

Our aim was to identify a survey population broadly representative of U.S. "retirement investors." To do so, we randomly selected 1,000 respondents from an online panel of more than 1.8 million individuals sponsored by Greenfield Online, a U.S. marketing research firm. The survey was conducted in June 2004.

Surveyed investors were past or present "retirement investors"—all respondents said that they were currently saving for retirement, or had saved for retirement in the past. We also limited our survey respondents to those age 40 and older. In addition, because it is possible that the perception of retirement risks changes with actual retirement, our respondents were still working—they had not yet retired from their primary occupations.

Our survey respondents might be thought of as the baby boom "investor class." While it is difficult to gauge how representative these 1,000 respondents are of this class, given the depth of our original online panel and the average or median characteristics of survey respondents, it is likely that our respondents are representative of a broad group of over-40 retirement investors.[1]

Our median respondent was 48 years old, with a median household income of $67,500. Median household assets saved for retirement were $100,000. Half of the respondents were male, half were female.

More than 90% of respondents indicated that they planned to retire; 9% said they would never retire. The median planned retirement age was 65. About one-third anticipated retiring after age 65, while a somewhat smaller percentage indicated retiring earlier.

Other demographic characteristics are shown in the Appendix.

Figure 1.

Questions To Measure Expectations

"On a scale of 0 to 100, where 100 means 'certain it will happen' and 0 means 'no chance it will happen,' please rate the chance of the following events occurring in your retirement." (Select an answer in each row.)

	No chance it will happen					50-50 chance					Certain it will happen
	0	10	20	30	40	50	60	70	80	90	100
1. I'll have enough money for the first five to ten years of retirement.	○	○	○	○	○	○	○	○	○	○	○
2. I'll have enough money for the first twenty or thirty years of retirement.	○	○	○	○	○	○	○	○	○	○	○
3. I'll run out of savings and investments during retirement—in other words, to make ends meet, I'll have to spend most or all of my principal.	○	○	○	○	○	○	○	○	○	○	○

1 Our sample is not representative of Americans generally, as it excludes households that have not saved for retirement. In this way, our results are representative of baby boom "savers" and exclude baby boom "nonsavers," who will rely principally or exclusively on Social Security for retirement.

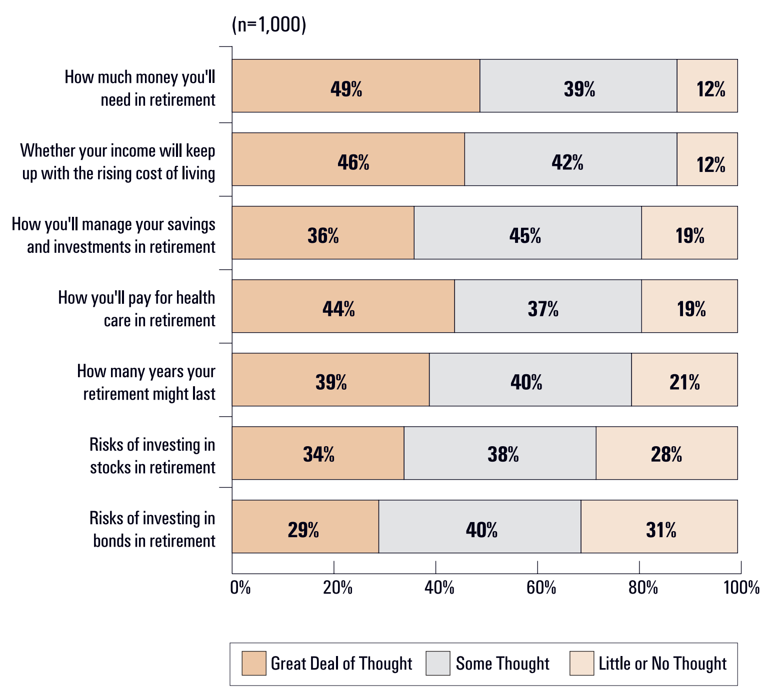
Measuring Expectations

One of the unique aspects of our survey was to ask individuals about their expectations of future events.[2] To do so, we provided respondents with a statement about an event or situation, such as "I'll be able to maintain my standard of living once I retire." Respondents were asked to rate the chances of this event happening on a scale of 0 to 100, measured in increments of 10 (see Figure 1).

Figure 2.

General Awareness

"Have you given a great deal of thought, some thought, only a little thought, or no thought at all to the following topics?"



Source: The Vanguard Group, 2004.

This question allowed us to assess perceptions of future risks—such as the risk of having enough money in retirement, the risk of living to age 80, or the risk of the stock market falling by 10% in a given year.

General Awareness

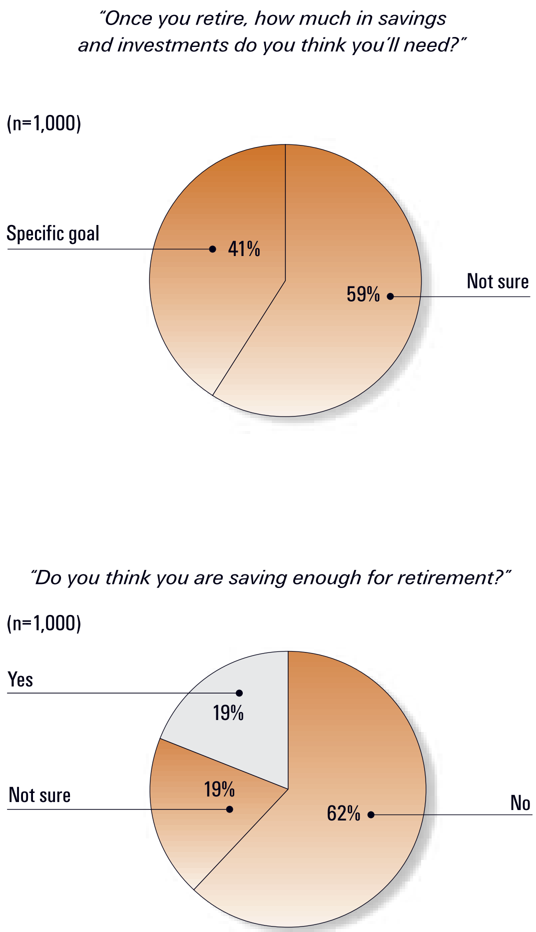
By and large, retirement investors are aware of the risks they face as they approach retirement. Far from being ignorant of important planning issues, retirement investors say they have given at least some thought to the risks that financial planners, actuaries, and financial services companies have identified as crucial to retirement security (see Figure 2).

Nine of 10 retirement investors report they have given at least some thought to how much money they will need during retirement, and the impact inflation might have on their retirement savings. Eight of 10 have given some or a great deal of thought to how they will manage money once they retire, the cost of health care, and how long retirement might actually last.

2 For a discussion of expectations and their measurement, see Manski (2004).

Figure 3.

Lack of Specific Plans



Source: The Vanguard Group, 2004.

Lack of Specific Plans

While generally aware of the risks they face, retirement investors appear not to have a well-defined plan for addressing them. One obvious example is the question of savings adequacy. We asked respondents for the specific dollar figure they would need for retirement. Only 41% had a specific amount in mind (see Figure 3, top panel). Six of 10 retirement investors could not say whether they needed $10,000, $100,000, or $1 million in savings to achieve their retirement goals.

A lack of specific plans is reflected in current savings rates. When asked whether they were saving enough for retirement, 62% of retirement investors said "no" (see Figure 3, bottom panel). Another 19% said they were not sure. In total, 8 of 10 investors were certain they were not saving enough—or were not sure what they should be saving.

Of the 62% who said they were not saving enough, the problem apparently is not awareness of a specific goal, but the actual ability to act and change current behavior. These respondents reported that they were saving 8% of income for retirement, but felt they should be saving about twice as much (17%).

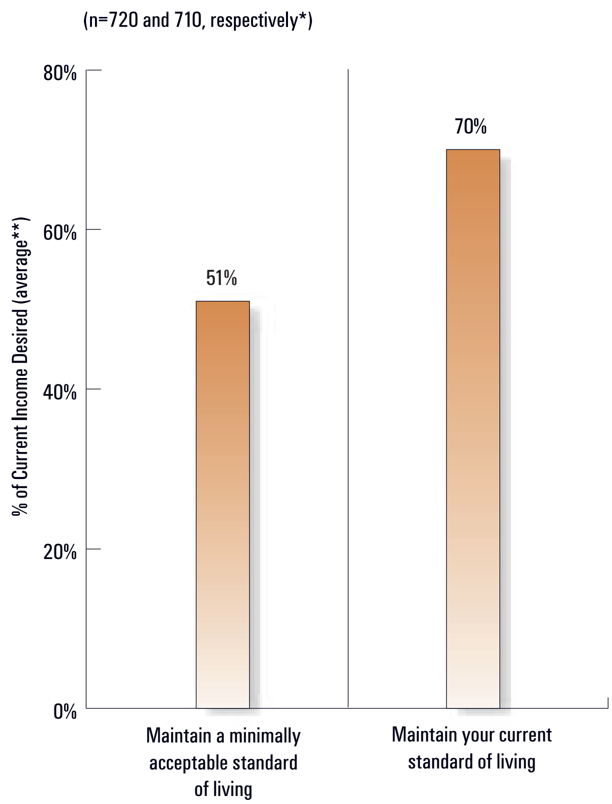
These findings are consistent with other research results on weak planning skills and inertia and procrastination in savings behavior. Specific asset goals are not top of mind for a majority of retirement investors. Many know they should be saving more—but they just are not.[3]

3 See Mitchell and Utkus (2004) for a summary of the literature on the behavioral influences affecting savings behavior.

Figure 4.

Expectations for Retirement Income

"If you were to retire tomorrow, what annual income do you think you would need to . . . ?"



	Minimally Acceptable	Current
Ranges		
0–19%	13%	8%
20–39%	26%	11%
40–59%	32%	20%
60–79%	16%	22%
80–99%	8%	24%
100% and over	5%	15%
	100%	100%

*25% of respondents were excluded who did not provide specific dollar goals for retirement, and those with replacement ratios of 200% or more were excluded due to coding errors.

**Median results are 49% and 69%, respectively.

Source: The Vanguard Group, 2004.

Expectations for Retirement Income

According to a standard rule of thumb suggested by financial planners, individuals need 70%–80% of their preretirement income to maintain their standard of living once they retire.[4] Before considering whether retirement investors were actually on track to meeting their goals, we sought to understand exactly how retirement investors define a financially secure retirement.

Our view is that few households think in terms of percentage replacement rates. Instead, we asked the question in concrete terms. In one part of the survey, we asked individuals to estimate the annual income needed to "maintain their current standard of living" or to "maintain a minimally acceptable standard of living." Later in the survey, we asked them to estimate their current income. From this we derived the replacement ratios implicit in their responses.

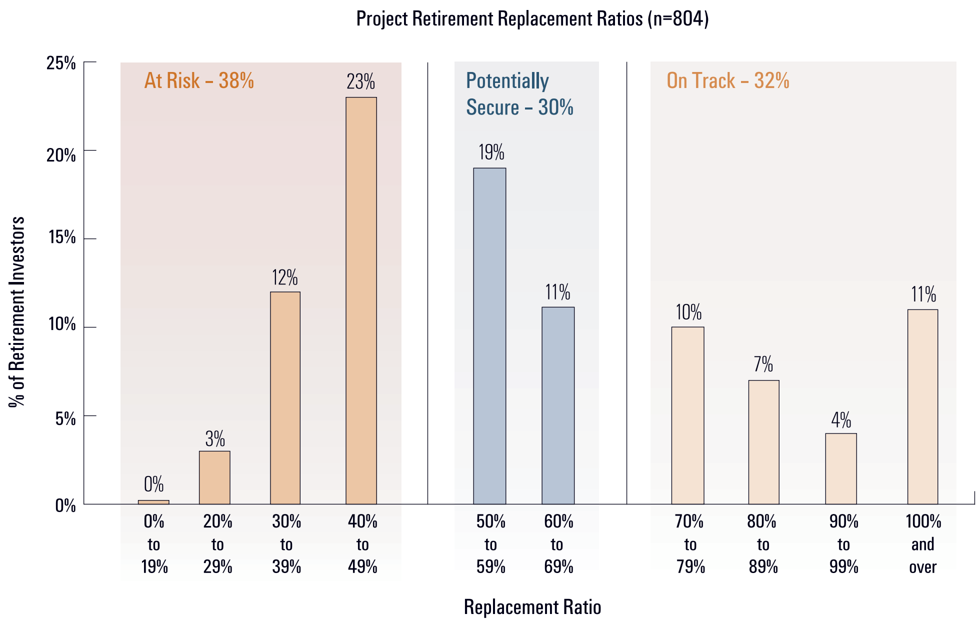
What the results show is that the typical retirement investor has rather conventional expectations for retirement income—but that there is enormous variation around the average. To maintain their current standard of living, retirement investors would like a retirement income equal to 70% of their current income (see Figure 4). This figure is not too far below that suggested by financial planners. For the average retirement investor, a retirement income equal to about half (51%) of their current income would constitute a "minimally acceptable" standard of living.

Interestingly, one quarter of survey respondents could not specify an income goal during retirement (either for their "current" or "minimally acceptable" standard of living). Again this confirms how many individuals lack concrete goals—they simply are not sure what income they will need to retire.

4 See, for example, Aon Consulting and Georgia State University (2004). Low-income households earning $20,000 a year have actually much higher required replacement ratios, around 85%–90%, because they pay little in taxes prior to retirement. Meanwhile, the replacement rate for upper-income households has climbed in recent years from just more than 70% to near 80% because of a variety of tax and benefit changes.

Figure 5.

Retirement Readiness



Source: The Vanguard Group, 2004.

For the majority of investors who provided a specific goal, expectations for retirement income varied by wide margins. At one extreme, 15% would like the same level of income they enjoy today (or higher) in retirement to maintain their current standard of living. Yet nearly 1 of 5 would be happy with less than 40% of their current income. The bulk of responses seem almost evenly divided between three income replacement ranges: 40%–59%, 60%–79%, and 80%–99%.

There are two possible explanations for these large variations in retirement goals. One is the lack of relevant knowledge and education. Many retirement investors simply are not aware of the standard advice provided by financial planners. As a result, they provide a wide range of responses to questions about retirement income needs.

A second explanation is that some individuals expect a lower standard of living in retirement. They may have their own notion of retirement security unrelated to standard planning advice. They may imagine that they will be able to "get by" with a lot less than financial planners, accountants, or economists think they will need.

This question—to what extent do retirement income goals reflect a conscious choice or a lack of knowledge and education?—remains an important area for future research.

Retirement Readiness

How many retirement investors are on track to achieve retirement security? For 804 of the 1,000 respondents, we were able to estimate their actual replacement ratio at retirement—the income in retirement as a fraction of their current income.[5] Their current assets and current savings rates were projected to retirement, assuming a real rate of return of 4%. We assumed that they retired at the age they specified. At retirement their income came from two sources: Social Security benefits and a 5% withdrawal of accumulated assets.[6]

Based on our calculations, retirement investors fall into three broad categories in terms of retirement readiness (see Figure 5).

5 These were the individuals who gave us complete responses for their current assets, income, savings rates, and expected retirement age.

6 A 4%–4.5% initial withdrawal rate of a portfolio beginning at retirement, and adjusted for inflation over time, typically results in a low risk of depletion of assets. We used a 5% withdrawal rate to assume somewhat higher consumption of principal during retirement. We did not assume annuitization of assets at retirement as few individuals currently avail themselves of that option when they retire.

- *On Track.* About one-third (32%) of investors are "on track." They should enjoy a retirement income equal to 70% or more of their current income. In fact, on average, this group is "on track" to generate a near 100% replacement ratio of current income in retirement.
- *Potentially Secure.* Another 30% are "potentially secure." With no changes in behavior, they are likely to generate an income equal to 50%–69% of their current income.
- *At Risk.* About 4 of 10 (38%) are significantly "at risk." With no changes in behavior, they are likely to generate a retirement income equal to less than half of their current income.

As noted earlier, the typical investor says he or she needs a replacement ratio of 70% to maintain his or her standard of living—and a replacement ratio of 51% to maintain a "minimally acceptable" standard of living. Based on these definitions, two-thirds of investors are not on track for maintaining their current standard of living—and about 4 of 10 are likely to fall short of a "minimally acceptable" standard of living, without any change in current behavior.

Who Is—And Isn't—Ready?

To understand the factors that influence retirement readiness, we analyzed individual characteristics for our three categories of retirement investors: the On Track, the Potentially Secure, and the At Risk groups.

The biggest factor influencing retirement readiness is prior savings (see Figure 6).

Figure 6.

Who Is—And Isn't—On Track for Retirement?

	Population n=804	At Risk n=307	Potentially Secure n=244	On Track n=253
% of total	100%	38%	30%	32%
Replacement ratio at retirement	**64%**	**41%**	**59%**	**97%**
Current age	50	52	50	49
Retirement age	65	64	65	66
Years until	15	12	15	17
Income (000)	$67.5	$90.7	$70.3	$69.2
Assets (000)	$100.0	$40.0	$100.0	$250.0
Asset/income ratio	1.5	0.5	1.5	4.4
Savings rate	9%	8%	9%	11%
Who's in this category? Late 40s/early 50s investors with:		Single-digit savings rate. Assets < 1x income.	High single-digit savings rate. Assets 1–2x current income.	Double-digit savings rate. Assets 3–5x current income.
Closing the gap		Dramatic effort needed. Double savings rates, plan to retire at 70, and recognize risk of falling short. Get planning help now.	Significant changes required today. Double savings rates, and plan to work into your late 60s.	Keep up current savings rate and plan for early retirement.

Note: All figures are averages within each category—except for income, assets, and asset/income ratio, which are medians for each category.

Source: The Vanguard Group, 2004.

On Track investors have accumulated four times their current income in financial assets by their late 40s. Potentially Secure investors have assets equivalent to 1.5 times their income. And the At Risk investors have assets equivalent to half a year's worth of income.

These results alone underscore a well-known lesson of retirement planning: the need to start early. Clearly it is prior savings (as measured by current assets) that distinguishes the prepared from the unprepared.

The second major factor is a combination of income goals, current savings rates, and planned retirement age. On Track investors are slightly younger, plan to retire somewhat later, and continue to save at double-digit rates. Combined with assets accumulated to date, this results in a very positive retirement outcome. On Track investors can afford to retire early—without a significant drop in their standard of living.

Meanwhile, Potentially Secure investors are slightly older and plan to retire somewhat earlier—leaving them with fewer years to continue to save. They also are saving at a lower rate than the On Track investors. The main issue facing Potentially Secure investors is the need to make up for lost time. They have not accumulated sufficient assets in the past, and so must remedy the situation in two ways: nearly doubling savings rates from 9% to 17% of income, and deferring planned retirement by another three years.

At Risk investors face a daunting challenge. This group has a higher income, so it must generate more postretirement earnings to maintain its standard of living. But the group is only saving at single-digit rates and has failed to save in the past. Dramatic efforts are needed at this point to reverse course. These include at least doubling current savings rates and deferring retirement until age 70 or considering a standard of living below 70% of income.

A Comment On Our Calculations

Our calculations may appear to be pessimistic, so we offer some background regarding our approach.

Our calculations are designed to represent a reasonable approximation of a fundamental question: Among retirement investors, given current assets and current savings rates, along with Social Security, will they have enough to live on once they retire? Certainly this is the kind of back-of-the-envelope calculation that most retirement investors should be capable of making. And based on the results, it appears that 30% do so easily, 30% are struggling, and 40% are failing at this task.

We acknowledge that in several ways our calculations may be too pessimistic:

- *DB/DC plans.* We did not capture defined benefit (DB) pensions in our survey. DB benefits are in decline (at least among private-sector workers), and research has shown that few individuals can accurately report their DB benefits. In one question on our survey, only 16% said they expected to rely principally on a DB pension in retirement. Similarly, our survey did not capture employer-funded DC contributions, such as matching or profit-sharing contributions.
- *Home equity.* We did not assume that home equity would be liquidated to support income needs in retirement. Few individuals appear to do so today—except upon the death of a spouse or entry into a nursing home.
- *Inheritance.* Some portion of our survey group no doubt will benefit from inherited assets, and so improve their retirement readiness.
- *Social Security benefits.* We assumed single-earner benefits, but for low-income households with two earners, spousal benefits could be an important source of income for the lower-wage earner.

At the same time, our results may be too optimistic because we did not model the volatility of investment results over time, which can raise the savings bar quite dramatically. As well, we did not assume any reduction in benefits because of Social Security's long-term funding crisis.

Despite these limitations, we think our calculations represent good first-order estimates of retirement readiness—especially among members of the retirement investor class, who anticipate relying on personal assets and Social Security to generate their retirement incomes.

Inconsistencies: Expectations and Behavior

Our findings on savings suggest a basic inconsistency between expectations and behavior. Nine of 10 retirement investors have given some or a great deal of thought to savings issues. Yet 6 of 10 could not articulate a specific dollar figure that they needed for retirement. Moreover, 6 of 10 say they are not saving enough, and another 2 of 10 are not sure. Without any changes, two-thirds will fail to maintain their current standard of living in retirement, and 4 of 10 will fall short of a "minimally acceptable" standard of living.

The broad implication is that retirement investors have difficulty translating general awareness about retirement savings into:

- A realistic level of income during retirement.
- A specific asset figure they need to retire.
- Current savings rates and asset levels needed to achieve these two goals.

We call this the "asset/income" puzzle—translating a retirement income goal into some target asset level, and determining the current savings rate (along with current assets) needed to reach that target by retirement.

One possible explanation for this behavior is overoptimism—individuals are just too optimistic that somehow they will accumulate the resources they need, even when they are not taking the action needed today to achieve those goals. Perhaps they believe that some other party—their family or the government—will address any shortfall they experience.

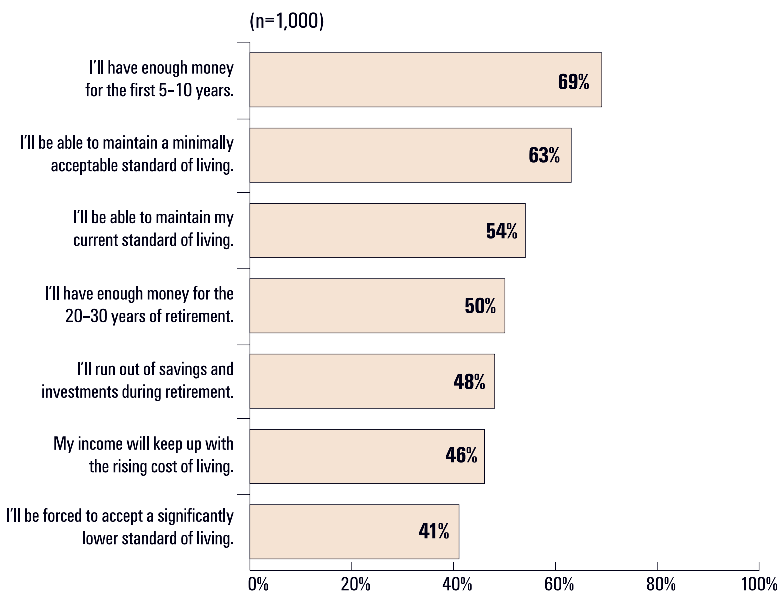
There is some evidence of overconfidence in our survey results. We asked respondents to identify their main source of retirement income. More than half said that their retirement income would rely on workplace savings plans (33%) or personal savings (20%). We also asked respondents about the main source of retirement income for "others like you." In this case, they thought that others would mostly rely on Social Security (44%). This is a classic illustration of overconfidence—retirement investors think "others" like them will have to rely on public programs for retirement security, but that they themselves will have the discipline to rely on their own savings.

Still, the situation of many retirement investors is not easily explained by overconfidence. From another part of our survey, it is clear that many retirement investors have some understanding that their goals and resources are misaligned, or that they are uncertain how to align them. We asked respondents to rate the chance of achieving certain retirement savings goals (see Figure 7). The results? About 7 of 10 thought they would have enough money for the first five years of retirement.

Figure 7.

Average Chance of Reaching Retirement Goals

"Please rate the chance of the following events occurring in your retirement."



Source: The Vanguard Group, 2004.

However, retirement investors said there was only a 50-50 chance they would maintain their current standard of living in retirement. They reported a 50-50 chance of having enough money for the 20 to 30 years retirement might last. Equally troubling, retirement investors thought it was only a 50-50 chance—a veritable coin toss—that they would run out of savings during retirement.

We interpret these results not as over-optimism, but as a lack of knowledge about how much retirement investors really need to be saving—once again, an inability to solve the asset/income puzzle. The survey responses suggest a lack of planning skills. There is also evidence of inertia and procrastination—an inability or unwillingness to take action to increase savings.

These high levels of uncertainty may make it difficult for investors to save more today. Perhaps they are unsure whether any action taken today will have a material impact on the outcome many years ahead. This ambiguity may have something to do with the lack of priority that investors assign to increasing their savings today.

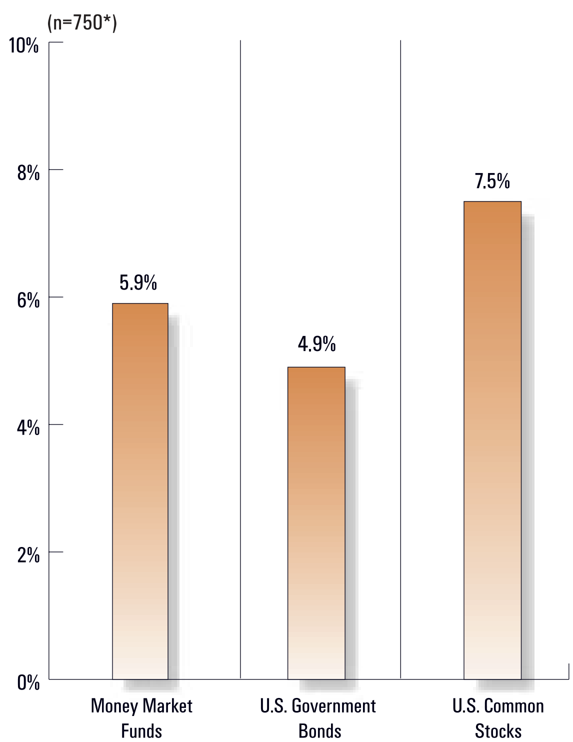
Expected Stock Market Returns

The second important risk facing retirement investors is capital markets risk. In the aftermath of the 2000–2002 bear market in U.S. stocks, our goal was to gauge investor expectations for stock market returns compared with bonds and money market instruments—as well as to measure perceptions of stock market risk.

Figure 8.

Expected Investment Returns

"What average return per year do you think U.S. common stocks (or U.S. government bonds or money market funds) will provide over the next decade?"



*25% of respondents were unable to provide estimate.
Source: The Vanguard Group, 2004.

The results on expected stock market returns are striking (see Figure 8). Our respondents expect an average annual return of only 7.5% on U.S. common stocks over the coming decade. Indeed, one-third of respondents expect an average stock market return of 6% or less. To our knowledge, this is the first public survey of investors reporting single-digit expectations for U.S. stock returns.[7]

The expected average return for bonds was 4.9%, while for money market funds it was 5.9%. This data is consistent with other findings that individual investors in the accumulation phase of life do not appear to understand fixed income returns and yields very well.

Expected Stock Market Risks

To gauge perceptions of stock market risk, we asked retirement investors to rate the chance of various events occurring in the stock market. Most of the statements were associated with pessimistic outcomes—stocks declining by one-third or by 10% in the coming year, stocks losing ground to bonds, or stocks earning 0% over the coming decade. One statement was sunny and optimistic—stocks gaining 20% per year over the coming decade.

7 Vanguard (2002) found that 401(k) participants expected a median 15% return over the "next 10 or 20 years." John Hancock (2004) reported a 14% expected long-term return for stocks among 401(k) participants. Merrill Lynch (2002), in a survey of working-age Americans, found that 10% of respondents expected returns of 15%–49% and 15% expected returns of 50% or more. All three surveys found large groups with no strong convictions about future returns.

Based on the results, retirement investors have become acutely pessimistic about the risks of stocks (see Figure 9). More importantly, that pessimism seems sharply higher than warranted by the historical data. For example, retirement investors estimated that there is a 63% chance that the stock market might drop by 10% in the coming year. But the actual historical risk is only 14% over the 1926–2003 period. They estimate even odds (51%) that the market might drop by one-third in a given year, though the historical risk is only 2%.

On relatively neutral statements of risk, investors appear well-grounded in the facts. They report a 52% chance of stocks earning 10% over the coming decade—while the actual historical probability is 57%. Yet if there is clear evidence that investors are exaggerating the downside risks of stocks, there is also some evidence of overoptimism. Retirement investors thought there was a 37% chance that stocks might earn 20% per year over the coming decade—even though the chance of a 20% gain over any rolling ten-year period from 1926–2003 is only 1%.

Figure 9.

Expected Risks from Stocks

"Please rate the chance of the following events occurring."

(n=1,000)

Event	Average chance	Actual probabilities, 1926–2003	Gap
Overly optimistic expectations			
U.S. stocks will return 20% per year over the next decade.*	37%	1%	36%
Neutral expectations			
U.S. stocks will return 10% per year over the next decade.*	52%	57%	–5%
Overly pessimistic expectations			
In any given year, the U.S. stock market might drop by ⅓.	51%	2%	49%
In any given year, the U.S. stock market might drop by 10%.	63%	14%	49%
Bonds will provide a higher return than stocks over the next decade.	41%	15%	26%
U.S. stocks will remain basically flat (0% return) for the next decade.	39%	4%	35%

*Actual probability based on 20% or better (or 10% or better) returns over decade.

Note: Probabilities calculated based on rolling 12-month or 10-year returns over the 1926–2003 period for U.S. common stocks and long-term corporate bonds.

Source: The Vanguard Group, 2004.

Longevity Risk

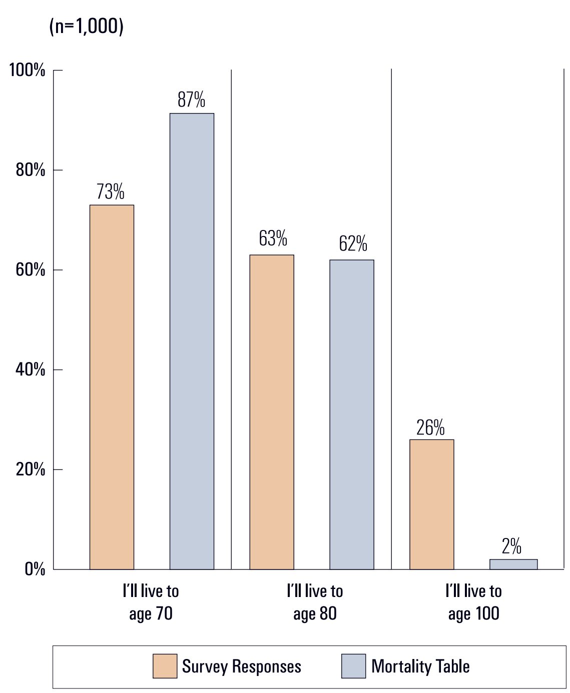
Another critical risk facing retirement investors is longevity risk—the risk of running out of retirement assets and benefits prematurely. As with savings and investment risks, in our survey we sought to understand how well-tuned investor expectations were to longevity risk—in other words, do respondents assess the risk accurately or not?

On average, retirement investors do a good job of estimating average life expectancy (see Figure 10). On average, our respondents thought there was a 63% chance of reaching age 80—and the mortality tables from the Society of Actuaries suggest that there is, in fact, a 62% chance of respondents reaching this age.[8]

Figure 10.

Understanding of Longevity Risk

"Please rate the chance of the following events occurring in your retirement."



Source: The Vanguard Group, 2004. Society of Actuaries RP-2000 mortality table.

But investors struggle with the extremes. For example, retirement investors are moderately pessimistic about their short-term prospects. On average, they estimate that there is only a 73% chance of living to age 70, while the actuarial tables suggest the likely probability is 87%. At the other extreme, they have highly exaggerated expectations for a very long life. Our respondents estimate that there is a 26% chance they will live to age 100, whereas the actuaries estimate these chances at only 2%. Such an overestimation may be due to the media attention given to increasing life expectancies.

As we have seen, retirement investors struggle with the asset/income puzzle during the accumulation phase—matching income goals with assets and savings levels. Our results on longevity suggest that investors will face a similar problem in retirement, because longevity estimates are crucial in determining how quickly an individual should draw down his or her savings in retirement.

For retirement investors, the results suggest two possible missteps. Predicting too short a life span may lead some individuals to avoid strategies that could be valuable in retirement, such as annuitization of a portion of their lump-sum wealth. Predicting too long a life span could lead investors to draw down their assets too conservatively, contributing to a lower standard of living in retirement. In the end, our results suggest that individuals will continue to struggle with calibrating their income requirements with the large asset pools they will be managing in retirement.

8 Based on respondents' current age and gender, we determined estimated life expectancy from the Society of Actuaries' RP-2000 mortality tables. See Society of Actuaries (2004). For each respondent we first compared expectations with actuarial probabilities of surviving to a given age. For example, a 45-year-old and a 65-year-old will have both different actuarial probabilities and different expectations of living to age 70. After calculating differences between expectations and actuarial probabilities for each respondent, we averaged them together to provide an overall perspective on mortality risk.

Implications

The growth of tax-deferred retirement savings programs has been accompanied by a rapid expansion in retirement education—in the media, in the workplace, and through government initiatives on financial literacy. In terms of simple awareness, it would appear that these efforts are bearing fruit, not just around the risks relating to the accumulation phase, but also around the risks of retirement. As a result, retirement investors appear reasonably aware of the importance of such issues as savings adequacy, investment and inflation risk, longevity risk, and the risks of financing health care in retirement.

Yet it also is clear that many individuals, while aware of the risks, have difficulty translating awareness into concrete savings plans. There is strong evidence that many lack concrete goals and objectives, possess weak planning skills, and exhibit a high level of inertia and procrastination. The fundamental issue appears to be an inability among many retirement investors to solve the asset/income puzzle—an inability to translate asset holdings and savings rates into desired income goals. Retirement income expectations, in short, are misaligned with current assets and savings levels.

Retirement investors clearly need more help making the transition from assets to income, and more assistance in raising savings rates. However, our results suggest that the added impact of general savings education may be of minimal value. Many individuals appear to already know that they should be saving more. Thus the real issue is changing their savings behavior, not simple awareness.

In the workplace, the trend toward automatic savings programs in retirement plans—such as automatic enrollment and automatic savings increases—is a very positive step in this regard. These programs direct individuals to save more over time by making higher contribution rates a default design feature of the plan. Individuals retain the right to opt out of such arrangements, retaining their freedom of choice. Yet through inertia and lack of scrutiny, individuals actually "choose" to save more than they otherwise might.

The fundamental issue appears to be an inability among many retirement investors to solve the asset/income puzzle—an inability to translate asset holdings and savings rates into desired income goals.

For financial service companies, the focus of advisory services has historically been on providing investment product advice. In light of our results, the emphasis should be shifted toward a correction of the misalignment of income goals with assets and savings behavior. For policymakers, there has been a long-standing issue about providing investment advice in workplace plans. Yet it appears that the critical priority today concerns goal-setting and savings rates, not investment product selection.

This alignment of savings goals with savings behavior is even more important given investors' cautious outlook for future stock market returns. In our view, these lowered expectations for equity returns are a welcome event, as it no longer appears that investors are anticipating that outsized market returns will rescue their retirement plans. In this more sober environment, retirement investors may be more amenable to the recommendation that they need to focus on their own savings behavior—not the equity markets—as the mainstay of their planning efforts.

Complicating saving for retirement is investors' confusion regarding longevity risk. Indeed, investors seem unduly worried about an early death, but also too optimistic about living to 100. These findings only underscore the importance of innovative programs that help investors calibrate assets with future income needs—especially when in retirement, as they decide how to spend down a lifetime of savings.

Appendix

The following table summarizes characteristics of the 1,000 respondents for the retirement risk survey.

Demographics of Survey Respondents

Current Age	
40–45	29%
46–50	23%
51–55	22%
56–60	14%
61–65	8%
Older than 65	3%
Median	48

Planned Retirement Age	
Before 60	10%
60–64	20%
65	27%
66–69	12%
70 and older	22%
Not planning to retire	9%
Median	65

Gender	
Male	52%
Female	48%

Marital Status	
Single	12%
Partnered	6%
Married	62%
Separated, widowed, or divorced	20%

Household Income ($000)	
Mean	$74.5
Median	$67.5

Retirement Assets ($000)	
Mean	$276.8
Median	$100.0

Home Ownership	83%

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