WHY DO INDIVIDUALS RETIRE WHEN THEY DO AND WHAT DOES IT MEAN FOR THEIR RETIREMENT SECURITY?

"The factors that have a significant impact on individuals' decisions regarding when to retire include: equity market returns, the retirement status of a spouse, and the type of retirement plan in which an individual participated."

Introduction

The timing of an individual's retirement can have a significant impact on his or her retirement security. It can affect the amount saved for retirement, the level of Social Security benefits received during retirement, and the investment returns expected to be earned on retirement savings after retiring.[1] At the same time, the decision about when to retire has become more complex. Today, fewer individuals are covered by defined benefit (DB) plans, which help guide DB participants' retirement decisions by providing them with certainty about how much retirement income they will receive after retiring. Increasing longevity also makes retirement planning challenging, because individuals have to plan for retirements that may last anywhere from a few years to multiple decades.

Prudential Financial sponsored research by the University of Missouri to identify the key factors that impact when individuals choose to retire. This research identified several factors that make individuals more likely to retire in any given year, including strong equity markets performance, the retirement status of a spouse, and participation in a DB plan.[2] Some of these factors heighten the retirement risks to which individuals are exposed. For example, based on historical stock market data, retiring after periods of strong equity market performance increases the likelihood of experiencing negative equity returns just after retiring, which have a much more detrimental impact on an individual's retirement security than negative returns experienced later in retirement.[3]

This article outlines the findings from the University of Missouri's research, highlights the investment risks associated with individuals' elective retirement decisions, and discusses the implications of this research for financial professionals.

Key factors which impact individuals' elective retirement decisions

The University of Missouri's research is based on an analysis of the elective retirement decisions of a cohort of pre-retirees tracked by the Health and Retirement Study from 1992 to 2008.[4] This cohort comprised individuals between the ages of 51 and 61 in 1992, and hence, likely to be making decisions about when to retire during the period covered by the study. According to this research, after controlling for variables such as age, wealth, and income, the factors that have a significant impact on individuals' decisions regarding when to retire include: equity market returns, the retirement status of a spouse, and the type of retirement plan in which an individual participated.[5]

Equity market returns have a pronounced effect on individuals' elective retirement decisions. A 1% increase in the S&P 500 index in any given year increases the probability that a pre-retiree will retire by 2.5% during that year. For example, during a year in which the S&P 500 gains 10%,

[1] Delaying retirement can increase Social Security benefits due to the incremental Social Security contributions paid by an individual who is working longer, as well as due to the retirement credits earned by an individual as a result of delaying retirement past the minimum age at which he or she is eligible for benefits (up to age 70).

[2] Rui Yao and Eric Park, University of Missouri, "Do Market Returns Affect Retirement Timing?," March 2011.

[3] Prudential Financial analysis.

[4] The Health and Retirement Study is a national biannual panel survey that tracks the retirement, health, insurance, and economic status of a sample of individuals over age 50 and their spouses/partners. The survey was conducted by the Institute for Social Research at the University of Michigan and funded by the National Institute of Aging. The data covered nine interview waves, beginning with the wave collected in 1992. The total sample size in 1992 was 12,652 respondents from 7,608 households. This sample was narrowed to respondents between ages 51 and 61 in 1992 and still working full-time or part-time.

[5] Rui Yao and Eric Park, University of Missouri, "Do Market Returns Affect Retirement Timing?," March 2011.

pre-retirees are 25% more likely to retire than a year in which the S&P 500 was flat. The retirement status of a spouse is also an important consideration in elective retirement decisions. Pre-retirees with a retired spouse are 2.4 times more likely to retire in any given year than pre-retirees whose spouses are working. Finally, pre-retirees covered only by DB plans are 1.9 times more likely to retire in any given year than pre-retirees covered only by defined contribution (DC) plans.

Moreover, these factors have a cumulative impact on individuals' retirement timing decisions. For example, the combination of the retirement of a spouse and recent strong equity market performance will make an individual more likely to retire than if only one of these conditions is true.

Not surprisingly, pre-retirees become more likely to retire the older they are and the higher their net worth, after controlling for other variables such as income.

Risks posed by retiring after periods of strong equity market performance

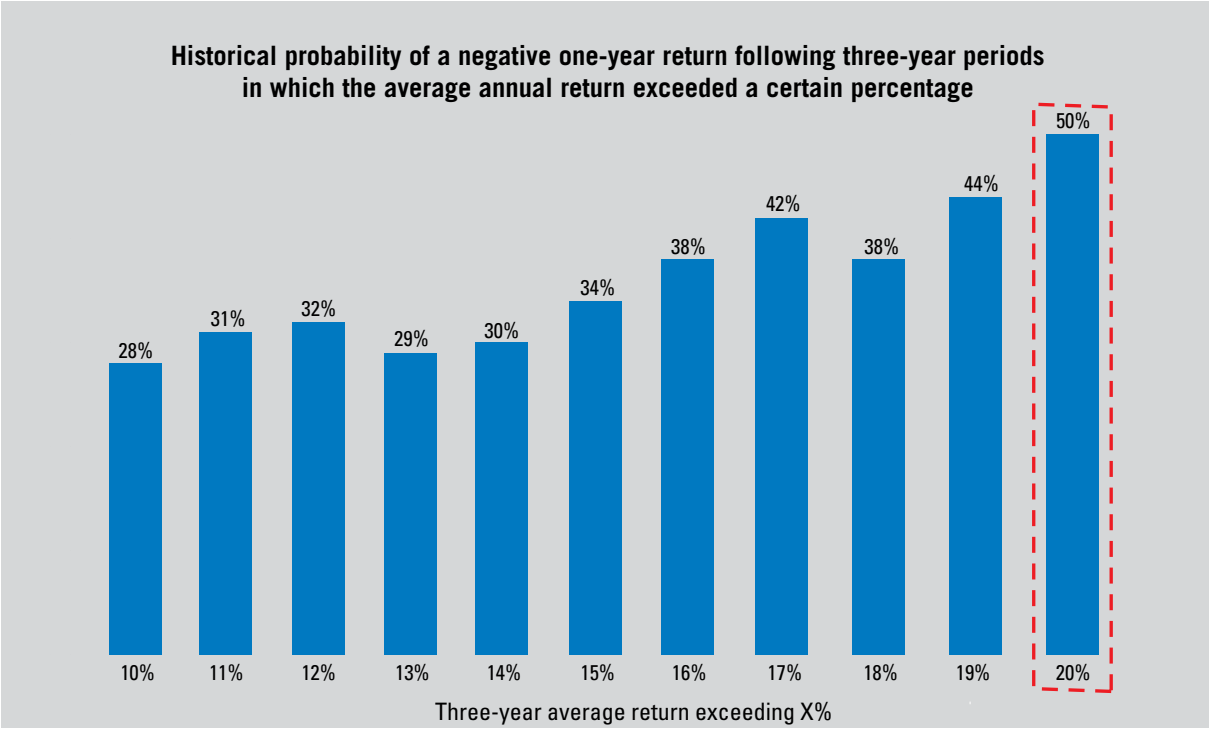
The University of Missouri's research demonstrates that individuals have a tendency to retire after periods of strong equity market performance. This raises two important retirement planning questions.

- Does retiring after periods of strong equity market performance make it more likely that an individual will experience negative equity returns just after retiring?
- What is the impact of negative returns experienced early in retirement?

To explore the first question, Prudential analyzed the complete set of historical returns of the S&P 500 to determine how likely the S&P was to have a negative year of investment returns after preceding three-year periods in which the S&P had an average annual return above a certain level.[6]

As shown in Exhibit 1, the probability of a negative year for the S&P 500 was higher after periods of stronger performance in the preceding three years. For example, there was a one-in-two probability of a negative return after a three-year period in which the average annual return for the S&P 500 index was 20% or higher.

Exhibit 1: Market Returns After Strong Periods of Market Performance



Source: Prudential analysis based on historical annual returns of the S&P 500 index from 1926 to 2010.
Past performance is no guarantee of future results.

[6] Returns were analyzed during the period 1926 (the year in which Standard & Poor's created the first U.S. stock composite price index computed daily) to 2010. Source: Standard & Poor's website.

Individuals may retire after sustained periods of strong equity market performance because they have achieved a certain level of retirement assets. Unfortunately, based on historical market data, this behavior increases the risk of individuals experiencing a market decline right after retiring.

To make matters worse, market losses experienced during the early years of retirement are much more detrimental to retirement security than losses experienced later in retirement, assuming that a retiree has begun drawing income from his or her retirement assets. This risk, known as the sequence of returns risk, is illustrated in Exhibit 2, which shows how a hypothetical retiree's portfolio performs in two different scenarios described below.

- Scenario 1: the retiree experiences positive investment returns early in her retirement and negative returns during the later years of her retirement.
- Scenario 2: the pattern of returns is reversed, with negative returns occurring earlier and positive returns occurring later. (The average annual return over the modeled time period is identical in both scenarios.)

The retiree's portfolio fares much worse in Scenario 2, highlighting the risk posed by negative returns early in retirement. The reason for this is that as the retiree withdraws assets from her retirement portfolio, she has fewer assets left in her portfolio in her later years of retirement to benefit from positive returns.

Exhibit 2: Impact of the Sequence of Market Returns on a Retirement Portfolio

Key Assumptions

- $1,000,000 starting balance for portfolio in both scenarios
- $50,000 annual withdrawal from portfolio in both scenarios
- Average annual return of 0% over 11 years in both scenarios
- Negative returns occur during the later years in Scenario 1 and during the early years in Scenario 2

	Scenario 1: Early positive returns		Scenario 2: Early negative returns	
Year	Annual Return	Ending Balance	Annual Return	Ending Balance
0	NA	$1,000,000	NA	$1,000,000
1	10%	$1,050,000	-10%	$850,000
2	8%	$1,084,000	-8%	$732,000
3	6%	$1,099,040	-6%	$638,080
4	4%	$1,093,002	-4%	$562,557
5	2%	$1,064,862	-2%	$501,306
6	0%	$1,014,862	0%	$451,306
7	-2%	$944,564	2%	$410,332
8	-4%	$856,782	4%	$376,745
9	-6%	$755,375	6%	$349,350
10	-8%	$644,945	8%	$327,298
11	-10%	**$530,450**	10%	**$310,028**

Source: Prudential Financial calculations.

Notes: This example is hypothetical, intended for illustrative purposes only, and not meant to represent the performance of any particular investment; the hypothetical returns do not reflect any investment or account fees.

Implications for financial professionals

This article highlights the factors that can affect individuals' decisions regarding when to retire. In light of these factors, there are a number of steps financial professionals can take to enhance their clients' retirement prospects.

- **Motivate clients to think beyond a "number" for retirement.** Clients may be more likely to retire after periods of strong equity market performance because their retirement assets have reached a certain level, i.e., they have "hit their number." However, in addition to assessing whether they have sufficient assets to retire, clients should also evaluate whether they will have enough income in retirement. For example, today's low interest rate environment is making it difficult to generate high levels of retirement income from retirement assets invested in CDs or money market accounts.

  To address this issue, it may be appropriate to advise some clients to delay retirement, even if they have hit their number. Doing so can enable individuals to save more for retirement, increase their Social Security benefit (and hence their future retirement income), and reduce their future retirement expenses since they will have to fund fewer years while not working.

- **Educate clients about the risks associated with the timing of their retirements.** For example, a client who has just "hit his number" after several years of strong equity market performance, but who never participated in a DB plan, faces more risk when retiring than a client who has access to a healthy pension and who "hit his number" years ago, but kept working and saving more. In another example, households in which both earners retire at the same time are exposed to the risk of being unable to replenish their retirement assets in the event of a significant market downturn. Helping clients understand the risks associated with the timing of their retirements can make them more receptive to planning and investment recommendations to address these risks.

- **Help clients develop a contingency plan in case their retirement plans change.** Some clients may be planning on staggering their retirements, with one earner retiring first and the second earner retiring several years later. However, as demonstrated by this research, the retirement of a spouse increases the likelihood that the remaining working spouse will retire. Financial professionals should help ensure that clients are saving enough to address an unexpected change in their retirement plans.

- **Evaluate investment approaches to secure clients' retirements.** Financial professionals should assess how risky the timing of a client's retirement is, and mitigate this risk by appropriately rebalancing the client's portfolio as the client enters retirement. Financial professionals can also evaluate the use of investment products that help protect principal; this is especially critical in the early retirement years due to the sequence of returns risk. For example, absolute return and market neutral funds are designed to lower portfolio volatility.

- **Help clients build a personal pension plan.** According to the University of Missouri's research, individuals covered only by DB plans are more likely to retire in any given year than individuals covered only by DC plans. DC participants may delay retirement because they feel less secure than DB participants about how financially prepared they are for retirement.[8]

  However, there are solutions that can provide DC participants with some of the features found in DB plans, thereby making DC participants more confident about their retirements. For example, clients can roll over their DC assets to an Individual Retirement Account and access products such as variable annuities with living benefits. Most such products provide investors with a stream of guaranteed lifetime income after retiring. Moreover, these products typically allow investors to remain substantially invested in the equity markets and retain control over their retirement assets at all times.

[8] A recent survey indicated that participation in a DB plan increases the likelihood that an individual is satisfied with his or her financial situation and confident about the adequacy of his or her retirement savings. Source: Towers Watson, "Retirement Attitudes Part I: Confidence in Retirement," September 2010, p. 5.

Conclusion

Individuals decide when to retire based on a set of factors that go well beyond just their age. Moreover, individuals have a tendency to retire at potentially risky times, such as after periods of strong equity market performance or following the retirement of a spouse. Fortunately, there are a number of retirement planning approaches and investment solutions that financial professionals can employ to influence when their clients retire, and to mitigate the risks associated with the timing of their clients' retirements.

Five key takeaways on the "when to retire" decision

1. **A 1% increase in the S&P 500 index in any given year increases the probability that a pre-retiree will retire by 2.5% during that year.**
2. **Pre-retirees with a retired spouse are 2.4 times more likely to retire in any given year than pre-retirees whose spouses are working.**
3. **The combination of the retirement of a spouse and recent strong equity market performance will make an individual more likely to retire than if only one of these conditions is true.**
4. **Historically, the probability of a negative year for the S&P 500 was higher after periods of stronger performance in the preceding three years.**
5. **Market losses experienced during the early years of retirement are significantly more detrimental to retirement security than losses experienced later in retirement.**

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About the Researcher

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