

## **Forecasting Retirement Needs and Retirement Wealth**

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# **Forecasting Retirement Needs and Retirement Wealth**

Edited by Olivia S. Mitchell,  
P. Brett Hammond, and Anna M. Rappaport

Pension Research Council

The Wharton School of the University of Pennsylvania

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## Preface

Economic security in retirement is a topic about which more people are now worrying than at any other time in human history. Global population aging and weaknesses plaguing financial institutions threaten our hopes for well-being in old age. Indeed the very meaning of retirement itself may now be called into question, as humanity confronts three or even more decades of life after the age of 65. This book offers guidance to those seeking answers to several compelling questions. What are retirement needs, and how should we think about how much to save for old age? What is retirement becoming, especially in an era of downsizing and early retirement windows? What assets should we hold prior to, and then throughout, the retirement period? How should we invest our pension capital, and how can education influence 401(k) plan saving? How important are employer-provided pensions and social security in protecting retirees against old-age poverty, and what special problems do minorities and women face? How do health shocks and the death of a spouse affect wellbeing at older ages, and how do these influence retirement?

Several empirical surveys have recently been developed with which researchers can begin to address these questions. The Health and Retirement Study (HRS) is the source of interesting new insights for many chapters in this volume, and we are proud to collaborate with this important project, which makes it possible to link information on health, retirement, pensions, and social security for the first time. In addition, contributors to this volume have obtained invaluable information from a wide range of other sources, including employer surveys and federal government databases. These rich datasources will open new vistas for researchers in the retirement arena for years to come.

As with all Pension Research Council volumes, our book seeks a broad and inquisitive readership. For this reason we have collected the views of a fine, interdisciplinary group of academics, benefits consultants, lawyers, policymakers, and actuaries. Their cross-cutting analysis should interest

both U.S. residents and experts from other countries as we work to shape reliable old-age systems to meet the challenges of the new millennium.

In preparation of this volume I have enjoyed the cooperation as coeditors of Brett Hammond and Anna Rappaport. Research and publication support was afforded by the U.S. Department of Labor, the Penn Aging Research Center, and particularly the Financial Institutions Center at the Wharton School under the guidance of Anthony Santomero. Our Institutional Members always provide excellent intellectual and financial assistance, and our Senior Partners are particularly helpful in shaping our research agenda. We also gratefully acknowledge continuing support from the Wharton School.



## Introduction

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Retirement is a twentieth-century institution. Earlier, most people died before reaching retirement, but those who did not work until severe disability forced them on the mercy of family and charity. Work and home were often one place, and a role was found for older family members. Even during the first half of the twentieth century, as public and private pensions were developed with government, union, and corporate support, many people eligible for a pension passed away before or shortly after retirement. By contrast, today more people than ever before attain retirement age due to increased longevity and earlier retirements, and many elderly live well into their 70s, 80s, and even beyond. Retirement has spread beyond the exclusive purview of the rich to include the vast majority of the older population.

This growth in retirement can be partly attributed to demography, but it is mainly due to the institutions of private and public pensions, systems that provided a secure and generous stream of income on which millions have grown to depend in old age. Many older people today face the future with high hopes for a better and longer retirement period.

Despite the successes of pension programs, however, huge challenges loom. For many, security in old age now seems riskier than expected even a decade or two ago. Global population aging trends are prompting developed nations to consider major changes to previously popular pay-as-you-go social security systems. Increased reliance on defined contribution plans raises questions of how well individuals are managing their assets intended for retirement, but sometimes spent in advance of that time. In addition, weakened financial institutions in some countries worry pension policy-makers confronting proposals to privatize public pensions. In the face of these changes, it is easy to understand why the very meaning of retirement is now being examined more closely.

This book offers new perspectives on how to support the growing group of older citizens for three, and possibly even four, decades of life in retirement. We draw these perspectives from the most recent and relevant research,

investigating several of the most compelling questions facing people anticipating retirement during the next century.

The discussion begins by asking whether the meaning and process of retirement is changing in this era of downsizing and early retirement windows. We show that new paths to retirement are emerging, paths that involve “bridge” jobs and gradual transitions through various labor market states. Equally important, we explore the related, and knotty, problems of determining or characterizing what resources people need during retirement and how to encourage people to think about how much to save for old age.

These issues take on greater urgency as a growing proportion of people’s future retirement income will come from accumulated assets managed by individuals rather than by employers, and a smaller proportion flows from defined benefit pensions that define a specific retirement benefit. For this reason, we investigate what assets people should consider holding before they retire, and how investment portfolios might be best structured during retirement. In the course of the discussion, we note how important it is to understand the prominent role of employer-provided pensions and social security. These institutions have played a central role in the past, by protecting retirees against old-age poverty. Particular problems facing minorities and women in old age are also highlighted, along with the growing importance of health shocks, divorce, or the death of a spouse at older ages. In addition, there is reason to worry that some people formulate inaccurate expectations regarding their need for retirement income, perhaps based on inaccurate expectations regarding what the family will provide in old age. Each of these factors can profoundly affect older persons’ work and retirement patterns, and in turn their financial wellbeing.

These and several others we cover here are serious issues that retirees will face as the population ages in the United States and abroad. We believe they are deserving of attention now for two reasons. One is because of the long lead time between action and outcome in public and private pension policy. The second is that we are now better equipped to analyze these issues, due to the development of invaluable new datasets recently released for use by retirement researchers. Most prominent among these is the Health and Retirement Study (HRS), a nationally representative survey of people initially aged 51–61. Previously, analysts wishing to track older people as they moved into older age and retirement in the United States had no recent high-quality databases, being forced to rely instead on somewhat outdated and often unrepresentative surveys to draw policy conclusions.

By contrast, the HRS began to be collected with an initial interview in 1992, in which over 12,000 participants were recruited to the study. This large and nationally representative group generously agreed to be re-interviewed every two years thereafter, a structure that has generated an ongoing, and longitudinal, study of incalculable value. Retirement researchers now have a priceless source of economic, psychological, sociological, health, and other

information about a wide cross-section of the population, devised specifically for the purpose of studying retirement and health transitions in the older population.

This volume is the first to feature analyses and insights on retirement preparedness using the HRS. Below we describe in greater detail aspects of this wonderful new data source, along with many of the rich opportunities for research that it affords.

In this introductory chapter we preview several of the key old-age economic security issues raised in this volume, issues engendered by recent movements in the U.S. retirement marketplace along with anticipated future developments. We begin with a look at how the concept of retirement is evolving, and then go on to assess how well—or how poorly—people are planning for their retirement years. Next we highlight several challenges to a secure retirement, focusing on how the unexpected—in the form of corporate downsizing and early retirement windows, for example—can influence the opportunities open to the older worker. More persistent challenges confront older women and minorities in old age, as well as widows, who often experience sharp decreases in their standard of living after the death of a spouse. Finally, we examine how health shocks, and the expenditures associated with poor health, can undermine older people's economic security. The discussion concludes with a brief overview of an exciting new dataset that has recently become available to researchers studying retirement needs and retirement wellbeing.

## **Looking Ahead to Retirement**

Even today, many people's conception of retirement is one where a full-time employee remains with a life-long employer until his or her 65th birthday and then exits the labor force completely, suddenly, and permanently. If this was ever a useful model, it is no longer the standard, as pointed out by Joseph Quinn's interesting description of retirement paths in the HRS. That is, many older people follow unconventional tracks, some working forever, some gradually winding down on the same jobs, and some finding a "bridge" job to move into at older ages.

One explanation for these gradual labor market withdrawal patterns is that people may reach retirement age with inadequate saving, and find that they must remain employed to make ends meet. The extent of retirement saving shortfalls is examined from two different vantage points, by Mark Warshawsky and John Ameriks, and by James Moore and Olivia Mitchell. Though these authors use different technologies to derive what people "should be" saving, both studies conclude that the typical American household falls far short of its mark, lacking sufficient assets to live comfortably in retirement. For example, in the HRS file, the median 56-year old household head would have to boost saving by an additional 16 percent of annual gross

income, if the family is to have enough to live on after retirement. People at the bottom of the wealth distribution (prior to retirement) face far worse prospects, with saving shortfalls amounting to an insurmountable one-third of annual income. For many in this latter group, social security represents virtually their only form of retirement income.

Why do we fall so far short, and what can be done about it? Several factors are identified by Mitchell, Moore, and John Phillips as reasons why older Americans have insufficient saving. For instance, people reporting themselves in very poor health save less than do people in good health. This may be quite a reasonable finding if the very ill have higher than average health-care costs, and they may also expect to die sooner than average. The authors also find that people who have a long planning horizon and those with a more positive outlook on life are better savers than people who have a shorter horizon or who are depressed. This study is one of the first exploring factors influencing saving shortfalls, and it will spur additional research on this fascinating topic.

Related work by Robert Clark, Gordon Goodfellow, Sylvester Schieber, and Drew Warwick offers exciting new information on what employers can do to encourage retirement saving, particularly in the environment of a 401(k) pension plan. Drawing on a unique dataset of employer pension plans covering some 234,000 workers, the authors explore models of employee decision to participate in a company pension, and what fraction of salary to devote to the plan if the worker is covered. The detailed data permit more in-depth investigation of 401(k) investment decisions than was previously possible, and they reveal substantial differences in men's and women's investment patterns. Perhaps surprisingly, there is no evidence that women invest more conservatively than men. Further, women's propensity to participate in a pension plan is more sensitive to age and income than is men's.

## **Facing the Challenges of Retirement**

Beyond analyses of the "typical" or average employee, many policymakers are concerned about the special problems faced in retirement by particular socioeconomic and demographic groups, such as minorities, older women, and widows. Here several useful studies exploit new datasets, including the Health and Retirement Study (HRS), that have recently been made available (the HRS is discussed more below).

In their analysis, Phillip Levine, Mitchell, and Moore conclude that older women on the verge of retirement are projected to have less income when retired than their male counterparts. Reasons that older women are more vulnerable include the fact that they are in worse health than men; they had weaker labor force attachment over their lifetimes; and they spend more time caring for other family members. The chapter reports that differences in health and labor market history explain most of the differences in pro-

jected wellbeing in retirement, with labor market histories dominating for whites and nonmarried persons. On this basis it appears reasonable to project a narrowing of future differences in economic wellbeing between men and women.

Related research by Robert Willis and David Weir, and by Marjorie Honig, devotes further attention to the situation of women and minorities in retirement. To the extent that both groups experience lower wages and have fewer years of employment than white men, consequent pension benefits will be lower and widowhood could leave them devastated. Using the HRS data, which enable researchers to focus especially on minorities, these authors show just how vulnerable to poverty many older minority workers will be. For example, minorities more than white men face the need to cut consumption as they move into retirement. To some, these facts will reinforce the key importance of a social insurance safety net in retirement. Others might take away a different policy implication, namely, that time spent away from the job market has negative consequences for later life that reach beyond wages alone.

Early retirement windows are one way that corporations seek to use incentives to induce workers to leave, and Charles Brown takes advantage of the HRS to explore who takes the windows, who does not, and why. He finds that only one third of window offers are accepted; furthermore, among those who accept the offers, most do not withdraw completely from the workforce but rather find employment in another demanding job.

A different kind of shock — namely illness — worries many older people as they move into retirement, but few have a very clear idea of what risks they bear, and what the likely costs of treatment might be. To this end, Anna Rappaport's analysis supplies a useful compendium of the major health costs and utilization patterns by age, and it should update concerned readers on the possible shape of healthcare risk with age. How health shocks affect retirement behavior is the topic of the research by Deborah Dwyer and Jianting Hu. Their analysis explores the question of how retirement expectations mesh with (or diverge from) reality, and how poor health forces people to change their retirement plans. As expected, declining health and acute health problems are more likely to elicit changes in retirement plans than chronic, long-term problems. They also show that the effect of health shocks on people's retirement plans is as important as the effects of economic variables.

## **Methodological and Data Issues in Retirement Research**

The empirical studies in this volume share a reliance on new data sets focused specifically on people who are retired or preparing for retirement. Many of these studies use the Health and Retirement Study, a novel dataset developed at the Institute for Social Research (ISR) at the University of

TABLE 1: Estimated Sample Sizes by Cohort

Birth Cohort	Total	Longitudinal Interviews				Baseline Interviews	
		HRS Wave 4		AHEAD Wave 3		CODA	War Babies
		Living	Deceased	Living	Deceased	Living	Living
1890–1923	6,317	108	9	5,249	948		3
1924–1930	3,833	821	53	588	27	2,324	20
1931–1941	8,398	8,057	194	75	4		68
1942–1947	3,055	1,099	9	21			1,926
1948+	916	430	2	10		17	457
Total	22,519	10,515	267	5,943	979	2,341	2,474

Source: ISR (1999).

Michigan. First fielded in 1992, this survey of 12,000 older Americans is “the most extensive, complex, and complete data collection effort ever undertaken on a nationally representative cohort of aging people” (ISR 1997). The study was devised by collaborative teams of economists, psychologists, sociologists, medical experts, and other scientists, and funded by several agencies, including the National Institute on Aging (NIA), the Social Security Administration (SSA), the U.S. Department of Labor (DOL) and the U.S. Department of Health and Human Services (HHS).

One reason that the HRS is so valuable to retirement researchers is that it was designed to be longitudinal, and as of this writing four waves have been fielded (1992, 1994, 1996, and 1998). Each time, the survey has gathered extensive information on wealth, health, family structure, and some fascinating questions about people’s expectations regarding their own future health, longevity, and resources.<sup>1</sup> A companion study called the Assets and Health Dynamics of the Oldest Old (AHEAD) study, gathers similar data on approximately 8,200 persons born prior to 1924, first surveyed in 1993 when they were age 70 and older along with their spouses (see Soldo, et al. 1997). In addition, people who grew up during the Great Depression (born 1924–1930) and people born during and just after World War II (1942–1947) were also included to ensure that the ongoing panel would be representative of the entire U.S. population age 50 and over. The front runner baby boomers, termed “Early Boomers” (born 1948–53), will be added in 2004, and “Middle Boomers” (born 1954–59) are scheduled to enter the study in 2010 (ISR 1997). Sample sizes for the baseline and longitudinal samples for HRS and AHEAD appear in Table 1. In the future, researchers will be able to compare behavior across cohorts to determine how behavior is changing in ways of interest to policymakers and researchers.

Another reason that the HRS is so valuable for retirement research is that the respondent questionnaires have been linked with various other valuable

files. Specifically, data were gathered from employers regarding the pension and health insurance plans provided at the workers' place of business,<sup>2</sup> and we have also obtained data on respondents' earnings and benefits histories from the Social Security Administration<sup>3</sup> (both subject to respondents' consent). These files afford the researcher an invaluable addition to knowledge about retirees' social security and pension benefits, and are described by Mitchell, Jan Olson, and Thomas Steinmeier in one study, and also in a companion study by Alan Gustman, Mitchell, Andrew Samwick, and Steinmeier.

## Conclusion

As we move into the twenty-first century, many new retirement-related opportunities and risks confront individuals, employers, and policymakers. Opportunities include the exciting prospects of living longer, living healthier, and living a more productive life than ever before. But the risks are also huge, including the challenge of setting an income adequacy goal and then saving enough for retirement, investing wisely in a time of financial turmoil, and planning carefully for a long period of time in retirement.

The work presented in this research volume will spur future analysts to investigate additional questions. For example, retirement ages under social security and pension programs are currently changing, and the impact of these changes can be evaluated as additional data on retirement patterns are collected. Further, new information on people attaining their 50s in different periods will permit invaluable comparisons of how retirement age changes affect behavior before the transition, during it, and afterward.

There are no easy answers to the problems and questions facing us as we experience population age shifts and the consequent pressures on old-age support systems. However we are fortunate in having the new HRS data, as well as new databases from corporate pension sponsors and providers, that offer the opportunity for analysts to devise and test exciting new theories and applications in the years to come. Much talent, effort, and resources have been devoted to developing these data thus far, along with the time and energy of thousands of cooperative respondents. The research we offer here, drawing from this rich source of information on health, wealth, and retirement in America, will help us make better decisions and better policy, as policymakers, practitioners, and eventually retirees in the twenty-first century.

## Notes

1. See, e.g., Smith (1995); Wallace and Herzog (1995); and Soldo and Hill (1995).

2. ISR will make available to researchers under restricted conditions a computer software program to compute pension benefits as well as a pension wealth file. Interested analysts should visit the ISR web page at [www.umich.edu/~hrswww](http://www.umich.edu/~hrswww) for more information, or see Mitchell, Olson, and Steinmeier (this volume).

3. Social security restricted data are also described as in note 2; see also Gustman, Mitchell, Samwick, and Steinmeier (this volume).

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# **Part I**

## **Looking Ahead to Retirement**