Recalibrating Retirement Spending and Saving

EDITED BY

John Ameriks and Olivia S. Mitchell

OXFORD
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Great Clarendon Street, Oxford OX2 6DP
Oxford University Press is a department of the University of Oxford.
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Published in the United States
by Oxford University Press Inc., New York

First published 2008

British Library Cataloguing in Publication Data
Data available
Library of Congress Cataloging in Publication Data
Recalibrating retirement spending and saving / edited by John Ameriks
and Olivia S. Mitchell.
p. cm.
ISBN 978–0–19–954910–8
1. Retirement income. I. Ameriks, John, 1968– II. Mitchell, Olivia S.
HG179.R337 2008
332.024′014–dc22 2008011582
Typeset by SPI Publisher Services, Pondicherry, India
Printed in Great Britain
on acid-free paper by
Biddles Ltd., King's Lynn, Norfolk
ISBN 978–0–19–954910–8
1 3 5 7 9 10 8 6 4 2

Preface

People often avoid thinking about retirement because it is a daunting, and even frightening, prospect. Insofar as many individuals will end up spending decades out of the labor market, this life phase will likely demand numerous overhauls of retirement plans, periodic recalibrations of spending and saving needs, sporadic reassessments of work and leisure opportunities, and perhaps unwillingly, frequent reevaluations of how, and with whom, people seek to age gracefully. This book offers guidance for this process, as we draw on the best thinking from an energetic set of academics, financial experts, regulators, and plan sponsors who explore how to help retirees better manage their saving and spending during their golden years.

Previous research studies directed at the Pension Research Council and the Boettner Center of the Wharton School of the University of Pennsylvania have focused on public and private pensions as well as retirement adequacy in the USA and around the world. Here, by contrast, we take a forward-looking perspective for retirement in the twenty-first century.

Specifically, our focus is to evaluate what new challenges retirees face during the 'decumulation' phase of the life cycle. We show how both the definition and the structure of work in the labor market and at home play a key role, as do Individual Retirement Accounts, Social Security, company-sponsored pensions, and annuity programs. Health care, housing needs, and long-term care concerns also represent critical aspects that must be taken into account, when thinking of how to pace the disbursement of retirement savings. Also treated are practical considerations such as tax and estate planning aspects of the decumulation process, along with a discussion of possible roles for retirement payout regulation so as to ensure solvency and credibility.

As with all of the research volumes issued by the Pension Research Council, we owe much to our contributors and coeditors. In this instance, John Ameriks from the Vanguard group served ably in both roles, and we owe him and his colleagues a debt of gratitude. The Wharton School helped support the conference where initial research findings were reported. Additional financial support was received from the Pension Research Council, the Boettner Center for Pensions and Retirement Research, and the Ralph H. Blanchard Memorial Endowment at the Wharton School of the University of Pennsylvania. The manuscript was expertly prepared and carefully edited by Hilary Farrell with help from Andrew Gallagher.

On behalf of these institutions and individuals, we thank all of our fine collaborators and supporters for their help in recalibrating the meaning of retirement.

The Pension Research Council

The Pension Research Council of the Wharton School at the University of Pennsylvania is an organization committed to generating debate on key policy issues affecting pensions and other employee benefits. The Council sponsors interdisciplinary research on the entire range of private and social retirement security and related benefit plans in the USA and around the world. It seeks to broaden understanding of these complex arrangements through basic research into their economic, social, legal, actuarial, and financial foundations. Members of the Advisory Board of the Council, appointed by the Dean of the Wharton School, are leaders in the employee benefits field, and they recognize the essential role of social security and other public sector income maintenance programs while sharing a desire to strengthen private sector approaches to economic security. More information about the Pension Research Council is available on the Internet at http://www.pensionresearchcouncil.org or send an email to prc@wharton.upenn.edu.

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List of Abbreviations

ADL	activities of daily living
AEW	annuity equivalent wealth
AGI	adjusted gross income
AHEAD	Aging and Health Dynamics
BHP	British Household Panel
BIC	bank investment contract
CAMS	Consumption and Activities Mail Survey
CEX	Consumer Expenditure Survey
CFA	Consumer Federation of America
COLA	Cost of Living Adjustment
CPI	consumer price index
CRAT	Charitable Remainder Annuity Trust
CRRA	constant relative risk aversion
CRT	Charitable Remainder Trusts
CRUT	Charitable Remainder Unitrust
CSFII	continuing survey of food intake of individuals
DB	defined benefit
DC	defined contribution
DRC	delayed retirement credit
EBRI	Employee Benefit Research Institute
EGTRRA	Economic Growth Tax Relief Reconciliation Act
EGTRRA	Economic Growth and Tax Relief Reconciliation Act
ELM	Expect to Live More
ERISA	Employee Retirement Income Security Act
ERTA	Economic Recovery Tax Act
ESA	education savings accounts
FAB	Financial Attitudes and Behavior
FDIC	Federal Deposit Insurance Corporation
FES	Family Expenditure Survey
FINPL	Financial Planners
FRA	Full Retirement Age
GAR	Group Annuity Rates
GIC	guaranteed investment contract
GLB	guaranteed living benefit
GMAB	guaranteed minimum accumulation benefit
GMIB	guaranteed minimum income benefit
GMWB	guaranteed minimum withdrawal benefit

HIPAA	Health Insurance Portability and Accountability Act
HMR	high and medium risk
HRS	Health and Retirement Study
HSA	health savings account
IAA	Investment Advisers Act
ICI	Investment Company Institute
IRA	individual retirement accounts
IRC	Internal Revenue Code
IRD	income in respect of a decedent
IRS	Internal Revenue Service
ISFB	Italian Survey of Family Budgets
LCA	Life Care Annuity
LIMRA	Life Insurance Marketing Research Association
LOGACC	log of the investor's account
LR	low risk
LTC	long-term care
LTCI	long-term care insurance
LTV	loan-to-house value
MRD	minimum required distributions
NAIC	National Association of Insurance Commissioners
NASAA	North American Securities Administrators Association
NOLHIGA	National Organization of Life and Health Insurance Guaranty Association
NSMIA	National Securities Markets Improvement Act
NUA	net unrealized appreciation
OCC	Office of the Comptroller of the Currency
OECD	Organization for Economic Cooperation and Development
PBGC	Pension Benefit Guaranty Corporation
PPA	Pension Protection Act
PPC	price-per-chance
PSID	panel study of income dynamics
Q-TIP	Qualified Terminable Interest Property
RBD	required beginning date
REA	Retirement Equity Act
RHS	Retirement History Survey
RMD	required minimum distribution
SCF	Survey of Consumer Finances
SEC	United States Securities and Exchange Commission
SEP	Simplified Employee Pension
SEPP	substantially equal periodic payment
SHIW	Survey on Household Income and Wealth
SIC	standard industrial classification
SIPA	Securities Investor Protection Act

SIPC	Securities Investor Protection Corporation
SPF	Survey of Participant Finances
SRO	self-regulatory organizations
STBR	stockbroker
TIAA-CREF	Teachers Insurance and Annuity Association, College Retirement Equities Fund
TIPS	Treasury Inflation Protected Securities
TRA	Tax Reform Act
VA	Variable annuities

Part I

Financial and Nonfinancial Retirement Circumstances

Chapter 1

Managing Retirement Payouts: Positioning, Investing, and Spending Assets

John Ameriks and Olivia S. Mitchell

> Money is of no value; it cannot spend itself.
> All depends on the skill of the spender.[1]

Around the world, population aging is on the policy agenda. The tsunami of Baby Boomers, born between the mid-1940s and the 1960s, is relentlessly moving toward and crossing the symbolic threshold of age 60, a larger age wave than ever experienced before. At the same time, of course, people are expecting to live longer in retirement than has been true for any prior generation. In rich and poor countries alike, people are slowly becoming aware that their old age is going to last a very long time indeed.

This volume explores how the new retirees will and should manage financial and other aspects of their new life-cycle phase. Many of those in this older cohort, albeit not all of them, have built up over their lifetimes a quantity of assets by dint of planning, saving, and investing (Madrian, Mitchell, and Soldo 2007). So for them the question now becomes, how will they manage to position, invest, and spend what they have, so as not to run out too soon? This volume is an exploration of how to deploy one's accumulated assets in the near and long term, so as to best meet the myriad spending, investment, and other objectives of retirement.

The complexity of this topic should not be underestimated, and the concerns are many. For instance, how do, and how should, retirees think about spending and managing their retirement portfolios? Will they begin drawing down their assets right away after an abrupt transition from work to retirement, or will they defer retirement and then gradually transition into nonwork after that? Will they use private annuities to replace extinct defined benefit pensions? What will become of the substantial wealth they hold in the form of home equity? What are the economic and other objectives driving these financial decisions, and will they run out before they die?

To address these difficult questions, we have invited a number of pre-eminent economists, finance experts, tax authorities, regulatory analysts,

and experts on human behavior to outline their views on how retirees and their advisers might successfully solve their most salient concerns. The book addresses these and related differences in a systematic and comprehensive manner. In our first section, we focus on Boomers' financial and nonfinancial circumstances as they cross the retirement threshold. Next, we take up the question of retirement plan distributions, touching on topics like inheritance, estate taxes, and payout strategies from individual retirement assets. As we show below, the question is whether people can, on their own, figure out sensible investment and payout plans, or whether additional regulatory and market developments are needed to ease the path beset by pitfalls. Finally, we focus on new financial products for retirement risk management. Throughout, our intention is to cast new light on these thorny problems to find not only optimal but reasonable and prudent solutions as well.

Financial and Nonfinancial Retirement Circumstances

To understand how people will and should position and spend their financial resources in retirement, it is worth noting that nonfinancial factors will also play an important role in retirement. Perhaps the most significant of these is the decision of whether and how much to work at older ages. A conventional view of the economic life cycle assumed that young people went to school, building skills during the first quarter of their lives; middle-aged folk worked in the labor market during the next half of their lives; and then people left work to consume their saving during the last quarter of their life cycle. That pattern remains a sensible simplification of many peoples' paths, but it leaves open very important questions around how and when important transitions occur, and the implications of change and deviations from this basic pattern.

Accordingly, it is of interest to ask whether work and retirement patterns are changing over time. The chapter by Sewin Chan and Ann Huff Stevens (2008) argues that they are, with many older individuals continuing to work even after they officially leave their main jobs. Using US data from the Health and Retirement Study (HRS), the analysis shows that one-third to half of all workers who partially or fully retire make at least one transition back into the workforce thereafter.

This unretirement pattern has important implications for how we might best think about the adequacy of retirement savings. In particular, human capital is a critically important asset for many people with perhaps more than residual value well beyond age 60. Extended capacity and willingness to work also has potential implications for how one should think about this

generation's attitude toward financial risk in retirement. If recent retirees feel they have an option to return to work, in contrast to earlier generations, today's retirees may be more willing to bear more and different financial risk than in the past. In addition, Chan and Huff Stevens note that one must also take into account the attitudes and perspectives of those who move in and out of retirement. Motivations for work in retirement also go beyond economics, as many of those who return to work after retiring state that dissatisfaction with retirement was an important factor. To the extent that some of the world's most rapidly aging countries, such as China, also have very low levels of work among those in their 60s, there is likely to be a multidimensional payoff to deferred retirement.

A related aspect of retirement decision-making that is often ignored has to do with the role of housing wealth in later life. This is particularly critical in view of recent volatility and declines in housing prices around the world. The chapter by Todd Sinai and Nicholas Souleles (2008) shows that more than 60 percent of individuals' net worth is typically tied up in housing, in the US Federal Reserve Survey of Consumer Finances. Similar high concentrations of retirement wealth in housing are characteristic of many other countries as well, ranging from Australia to Singapore to Japan (Mitchell et al., 2006).

The economic significance of housing as an asset also changes substantially over the lifetime, so a key question is how much housing wealth can be utilized to provide nonhousing consumption in retirement. To examine this point, the authors begin by noting that retirees who sell their homes must still live somewhere. In their data, the median 65-year-old household is found to have accessible only 34 percent of its housing equity, or about $36,000, while 15 percent of older households have no housing equity available. By age 90, the amount of home equity available for consumption rises to 84 percent, or about $94,000. If a reverse mortgage program were available, and given current expenses associated with these, they argue that the median 90-year-old household could spend up to 75 percent of housing equity (before accounting for fees). In other words, managing the housing asset is a critical component of the retirement decumulation process. It is therefore of interest that Japan, New Zealand, and France, just to name a few, are currently working on mechanisms to allow 'house-rich but cash-poor' older individuals to access some of their home equity.

In addition to a focus on work and homeownership, attention must be devoted to how people spend their time in retirement. Many financial planners assert that retirees must maintain a constant expenditure level, or at least an income close to preretirement levels, if they are to sustain retirement well-being. Yet the chapter by Erik Hurst (2008) challenges this notion, underscoring the key difference between welfare-enhancing 'consumption' and expenditure. As in studies with UK data, he finds that

US household spending levels do fall 10–20 percent following retirement. Yet the author does not interpret this as indicating that individuals are financially underprepared for retirement. Rather, he explores differences in the constituents components of 'consumption' between retirees and preretirees, and with this he largely resolves the puzzle. Comparing nonretired 61–65-year-olds to retired 66–70-year-olds, the author finds that the value of food consumed at home drops 8 percent while spending on food away from home falls 16 percent. Nevertheless, total out-of-pocket expenditures decline much less, only by 3 percent, and overall consumption by only 1 percent. Furthermore, much of the fall in retiree spending can be attributed to work-related expenses, primarily transportation, clothing, and food consumption. Indeed, when he looks closely at food consumption patterns, he finds that retirees shift spending on food consumed outside the home to the production of food at home. As a result, retirees are not eating less but instead are simply preparing food more economically at home. He also notes that entertainment expenditures actually increase slightly.

These results are important, inasmuch as they challenge the orthodox view that most people arrive at retirement's doorstep unprepared. And it also challenges the financial advisers' goal of a 75 percent income replacement rate for retiree targeting purposes. It should be noted, in addition, that perhaps as many as one-quarter of the retirees Hurst examines will struggle to maintain spending levels after leaving the workforce. Again relying on food expenditure data, those in the bottom quartile of preretirement wealth reported expenditure declines of 31 percent, which he worries may indicate that these retirees are actually living with less food. Hurst also raises concerns about the impact of unexpected retirements, perhaps due to health problems or other shocks, on retirement expenditures. In other words, some important percentage of retirees will be forced to draw in their belts during their golden years. Similar studies of expenditure and consumption would be well worth conducting in other countries seeking to compare how cohort well-being changes after retirement.

Retirement Payouts: Balancing the Objectives

Adverse events and risk have an important influence on financial decisions before and after retirement, particularly the risk of health shocks, the risk of living longer than expected, and the risk that prices might rise too quickly to be managed. These concerns contribute to the overall worry that many older persons confront, namely, the risk of 'running out of money.' One topic we examine is what tools retirees can use to manage these risks in retirement, including health and long-term care insurance (LTCI) as well

as immediate life annuities. Yet the question remains as to whether retirees avail themselves of these tools sensibly and efficiently.

A case in point has to do with the drawdown process from Individual Retirement Accounts (IRAs), an increasingly popular means of accumulating tax-protected retirement funds in the USA. Similar schemes are, of course, available in the UK and Canada. The work by Sarah Holden and Brian Reid (2008) is of interest in that it takes a careful look at ownership, value, allocations, and withdrawals for IRAs. Not surprisingly, the authors find that that older taxpayers hold the largest share of IRA assets which peak for persons aged 70–74 averaging over $124,000; taxpayers over age 60 account for only 30 percent of total taxpayers but account for 56 percent of IRA assets. To date, IRA withdrawals have been small: for instance, withdrawals accounted for only 4 percent of IRA assets (in 2004). Tax rules impose a 10 percent penalty for withdrawing IRA funds before the age of $59^1/_2$, so most people wait; indeed, 45 percent wait to tap them after retirement. Additional exemptions are added for first-time homeowners, medical expenses, higher education expenses, reservists, and taxpayers affected by recent natural disasters. Generally IRA withdrawals must begin by age $70^1/_2$. In their chapters, the authors develop a model to estimate the probability of IRA withdrawals using a variety of data-sets. Their projections show that current IRA withdrawal trends will continue, with higher withdrawals when the head of the household is older, nonwhite or Hispanic, or less educated. Withdrawals are also more likely in households with a mortgage compared to those that rent their homes or own them outright.

In many countries, retirement payouts are shaped by tax and inheritance regulation, a topic taken up in Victor Hallman's chapter (2008). As the USA has had high estate taxes in the past, retirees often seek income-tax-favored savings plans to pass along wealth to succeeding generations or to charity. Hallman considers Roth IRAs to be particularly useful assets, since funds held in this form grow tax-free and minimum distribution rules do not apply to the original owners. The author also discusses possible changes in tax policy that might require tax-subsidized retirement accounts to be used mainly for the support of participants in their old age. For instance, these could include eliminating the exclusion for net unrealized appreciation, life expectancy payouts for individual nonspouse beneficiaries with payouts longer than 10 years, and 'inherited IRA' payouts.

A related topic of practical interest to virtually all retirees is when they should begin collecting their Social Security benefits. Of course the age at which one may collect one's retirement benefit varies substantially across nations [Organization for Economic Cooperation and Development (OECD) 2005], and in the USA, it is being raised from age 65 to 67 for most Baby Boomers. In their chapter, James Mahaney and Peter Carlson (2008) take a hard look at recent changes in the US Social Security eligibility

rules against the backdrop of a national transition from defined benefit to defined contribution pensions, tax considerations, and low interest rates. The authors point out that workers nearing retirement should integrate their decision to claim Social Security benefits in their overall strategy for retirement decumulation. Most important is the fact that Social Security rules have recently boosted the age for full retirement and they also now provide an 8 percent increase in Delayed Retirement Credits for those who defer claiming Social Security payments until age 70. Furthermore, and not widely appreciated, there is a recently passed rule allowing married couples to file for and then suspend receipt of Social Security benefits on attaining full retirement age. Delaying taking the primary earner's benefit early increases the monthly benefit, the longer the couple waits. There is also a so-called 'tax torpedo,' which hits retirees when taxes finally come due on tax-deferred saving, triggering higher income taxes and taxes on Social Security benefits. As the authors note, it may no longer be sensible to take Social Security early. It would be of great interest to replicate this analysis in other countries, to see whether the interaction of spouse, survivor, and other dependent benefits also generates difficult-to-understand retirement incentives.

A theme running through many chapters in this volume is how to protect retirees' nest eggs against a wide range of threats. Financial literacy is a key problem in this regard, inasmuch as a wide range of international studies have shown that older individuals are not well versed in key financial concepts pertinent to wise deployment of retirement assets (Lusardi and Mitchell 2007*a*, 2007*b*). The chapter by Phyllis Borzi and Martha Priddy Patterson (2008) expresses concern that Baby Boomers approaching retirement must increasingly administer their own retirement portfolios, but for many this will be the largest sum of money they have ever been asked to manage. The authors believe those who seek to relieve retirees of their 401(k) 'burdens' require greater protection to ensure the funds last throughout the retirement period. Accordingly, this chapter lays out the legal and regulatory frameworks governing insurance products that embody a form of guarantee, and securities which are regulated but not guaranteed. Inasmuch as most efforts to date have been geared toward disclosure, consumers remain ill-informed; therefore, the discussion emphasizes the role of better financial education for retirees.

Financial Products for Retirement Risk Management

Recent years have seen a proliferation of simple 'rules of thumb' devised by financial planners who seek to guide the asset decumulation process in

retirement. A challenge to these approaches is provided in the chapter by William Sharpe, Jason Scott, and John Watson (2008). They particularly target the '4 percent rule' which has retirees spend a constant, inflation-adjusted amount equal to 4 percent of their initial wealth every year; that tactic requires funds to be invested with a constant percentage in equities ranging from 50 to 75 percent. The authors argue that this formula and others proposed by planners are inefficient, volatile, and may lead to bankruptcy or large surpluses. In their place, the authors suggest the concept of investment 'lockboxes,' which involves a spending strategy producing more efficient retiree drawdowns. In their approach, fractions of initial wealth are allocated to virtual accounts or so-called lockboxes; money in each lockbox is independently invested, and each year the retiree can spend only the contents of that lockbox designated for that year. This concept, in the authors' view, protects against age-related problems in savings and retirement spending.

Many older workers and retirees worry about health problems in later life, and these concerns naturally influence retirement spend-down patterns. The chapter by Cassio Turra and Olivia Mitchell (2008) shows how anticipated poor health would influence the decision to purchase a life annuity. Using a dynamic discrete choice economic model of behavior, they incorporate the effect of health shocks on people's valuation of lifetime income flows. One approach incorporates the effect of health via differences in survival over the life cycle, while a second posits that retirees consider both the effects of uncertain out-of-pocket medical expenses and uncertain survival when deciding whether and how much to annuitize. The authors show that differences across people in health status and anticipated health-care costs help explain why many people do not fully annuitize at retirement. For someone with health problems, a life annuity priced using annuitant mortality rates implies expected payouts that are well below the population expected value; poor health can lower annuity equivalent wealth values by almost 20 percent when retirees expect to be in poor health. When both adverse selection and uncertain medical expenses are accounted for, annuity equivalent wealth values prove to be quite low for people in poor health and about 25 percent higher for people in good health. This, the authors suggest, may be a partial explanation for why payout annuities are not more common in the retiree portfolio.

Related work by John Ameriks et al. (2008), Andrew Caplin, Steven Laufer, and Stijn Van Nieuwerburgh focuses on the demand for payout products, while taking into account both bequest motives and a potential desire to avoid the government means-tested health care provided to the poor, Medicaid. The model explicitly allows for the possibility that retirees may wish to use some assets to provide a bequest at death, while

at the same time hoping to maintain high enough wealth levels to avoid bankruptcy (and reliance on Medicaid) in circumstances where they need long-term care. This model is then used to analyze the demand for standard annuities along with newer insurance product designs including 'longevity insurance,' reversible annuities, and long-term care (LTC). They show that standard annuities are an unattractive proposition given typical costs/loads, but hybrid products could be more appealing, including longevity insurance and credible combinations of long-term policies with annuities. This implies that the inclusion of an LTC component in Social Security might encourage families to become more involved in planning for older relatives' needs.

Important developments in the variable annuity market are taken up by Moshe Milevsky and Vladyslav Kyrychenko (2008), particularly products which include a Guaranteed Minimum Income Benefit (GMIB). These riders allow plan holders to annuitize an account at a guaranteed rate for lifetime income. Their evidence suggests that people who purchase the variable annuity tend to boost their risk exposure by 20–25 percentage points when they have a GMIB, which leads some insurers to restrict purchasers' portfolio choices. The study also finds a strong distribution channel effect, with high-risk allocations of around 80 percent when sales are made by career insurance agents, financial planners, wirehouses, and banks.

The idea of creating annuities with a tier of coverage for LTC is also examined by David Brazell, Jason Brown, and Mark Warshawsky (2008), who contend that the life annuity and LTCI markets naturally attract opposing risk groups. That is, life annuities appeal to those with higher than average life expectancies, leading to problems with adverse selection in the market. Those who believe they have a greater chance of needing LTC are more inclined to seek coverage, but underwriting can prevent coverage for this population. The chapter argues that it might be effective to combine life annuities with LTCI, including a combined Life Care Annuity (LCA) product. Of course, the tax treatment of such products is critical, and unresolved issues remain with regard to the requirements and tax treatment of an LCA in a qualified retirement plan.

Conclusions

The cutting-edge research in this volume offers important insights for employees, retirees, employers, and policymakers all over the world, who seek insights for the retirement path ahead. To avoid running out of money, some older individuals will have to continue working; and, as we show, this is for some a very sensible and invigorating way to stretch retirement

assets farther. Efforts to raise retirement ages around the world are clearly a response consistent with rising longevity and the feasible extension of the worklife. In addition, there will be the need to adjust consumption, where possible substituting home-produced goods and spending less on market-purchased items.

For most people reaching retirement age in the twenty-first century, however, well-being at older ages will depend to a large degree on how wisely people use their accumulated assets to finance their retirements. A key issue that this volume reveals and emphasizes is the multiplicity of retiree needs and desires. In particular, an expressed 'need to replace income' represents many and quite diverse—even contradictory—objectives. They range from the desire to sustain one's own living standard via expenditures of time and money, to the desire for financial protection in exigent situations, and, for at least some, the attractiveness of being able to leave resources behind to loved ones and worthy causes. As the analysis here suggests, helping retirees calibrate and manage their retirement assets is a complicated challenge. To get to an optimal solution, retirees and their advisers require an understanding of investment issues, insurance matters, tax rules, regulations, features of public programs, and of course a clear understanding of financial priorities and how they must be ranked and compared. Much more attention to these issues is vital for better understanding and better decision-making.

Despite several concerns raised by this volume, there is clearly room for optimism. The fact that retirement decumulation seems so complex is, in part, attributable to the fact that so little research has been undertaken on the topic to date. We can only imagine how complex and incomprehensible the dashboard of an early automobile would seem to someone whose prior driving experience was limited to the 'control panel' on a horse! In time, society will grow more comfortable in understanding the challenges and solutions confronting retirees, and relatively simple (even if not perfectly optimal) solutions will be found. New and better financial and risk management services and products will emerge, which meet the market tests of ease of use and effectiveness. And eventually, after vigorous debate and consensus-building, sensible policy reforms will emerge.

Solving the challenges of spending and investing in retirement requires attention to new concerns never even imagined by our parents and grandparents. The important work of the scholars and practitioners gathered in this volume represents an important step toward this end.

Note

[1] Ralph Waldo Emerson (1849).

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