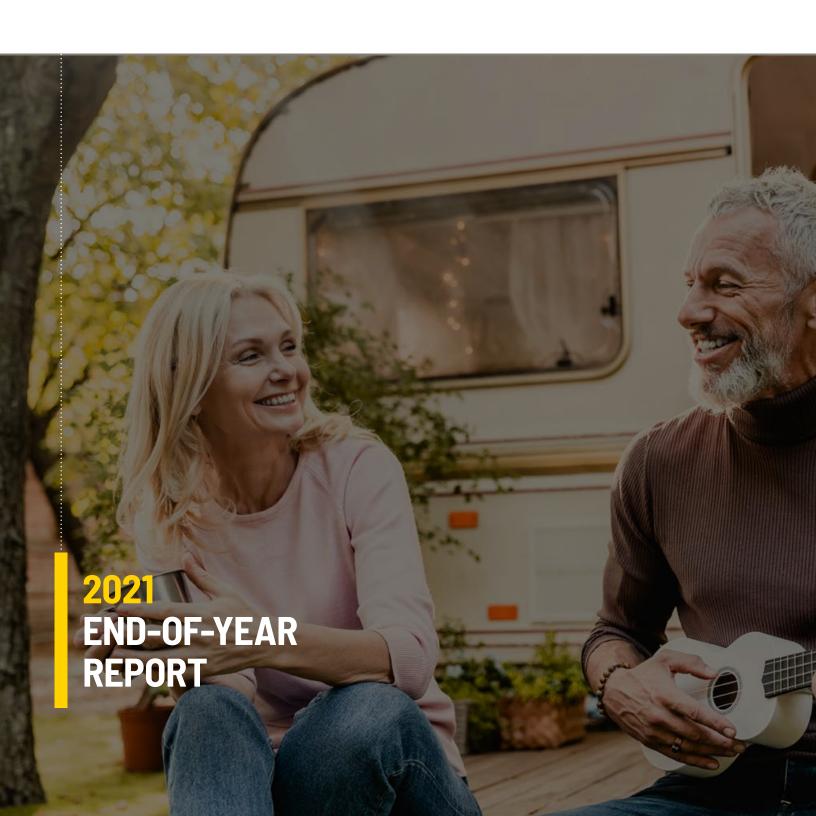
RETIREMENT INCOME INSTITUTE

Alliance for Lifetime Income



The Retirement Income Institute is a scholarly research and thought-leadership program of the Alliance for Lifetime Income. Founded in 2020, the Institute facilitates and fosters private-sector innovation to shape a future in which Americans are able to retire with less risk, more confidence, and greater retirement security. Over the past two years, the Institute has assembled some of the world's leading academics and experts in protected income and retirement security to conduct research and pursue solutions to one of the great societal challenges of our time: many Americans lacking sufficient, reliable, and protected retirement income that will last for the rest of their lives.

WHAT'S INSIDE

In the following pages, you will find:

- significant research that the Institute has conducted over the past year in collaboration with the leading scholars and private sector companies,
- the research the Institute currently has in progress,
- and ways that researchers and interested organizations can get involved to further the Institute's mission and research agenda.



INTRODUCTION

The Institute's mission is to create a bridge from ideas, research, and evidence to action related to protected lifetime income—by retirement savers, the Alliance's member companies, employers that sponsor retirement plans, financial professionals, and other key participants in the United States' retirement ecosystem. The core of that mission is to sponsor and otherwise foster new research and analysis, as well as new ideas and insights supported by data and evidence, about protected lifetime income for Americans' retirement. The Institute supports research aimed at a wide audience, including academics, financial professionals, journalists, and policymakers. In this way, the ideas and information that the Institute aims to produce are intended to be translated into action that benefits individuals, families, and our society.

REACHING NEW HEIGHTS

In the second year of operation, the Institute has built upon the foundation laid in the first year and reached new heights. The Institute has sponsored a growing quantity of new research while continuing to produce translational products related to retirement security and protected income retirement strategies. While the Institute has primarily focused these efforts on the retirement industry landscape, the Institute recognizes that public policy changes play a vital role in improving the nation's retirement ecosystem, and therefore has recently branched out to address public policy issues related to equity and access to wealth.

The Institute also recognizes the need to provide educational and research opportunities to the next generation of academic scholars and financial professionals. The Institute has formed two educational partnerships. Our partnership with the University of Wisconsin-Madison Center for Financial Security will provide support to mentor junior scholars (late-stage PhD students, post-doctoral scholars and early-stage assistant professors) as part of a training program to develop a pipeline of researchers who study retirement issues and protected income.

Our other university partnership will help educate the next generation of financial professionals. The University of Texas-Austin McCombs School of Business Wealth Management Center connects the academic community with the wealth management industry, creating a unique opportunity to train the next generation of financial professionals. The partnership will provide educational instruction, lead cutting-edge research and convene forums for professionals to network and innovate alongside students and faculty.

WHAT'S NEXT

The Institute plans to grow its success in 2022. The Institute's 2022 call for papers is planned for mid-summer. This call for research of multiple types will include an announcement of the Institute's 2022 research agenda, which will build off the successful 2021 research agenda. We strongly encourage any interested scholar or other retirement experts to review these calls and submit their relevant works to the Institute for our consideration. Calls for papers will be published on the **Institute's web page**. The Institute also will send the calls for papers to potential authors by email in advance of publication. If you would like to be added to the Institute's email list, please send the relevant information to **institute@alincome.org**.



Scholars Advisory Group; Associate Professor of Economics and Public Policy, University of Virginia Department of Economics Retirement Industry Advisory Group; former CEO of Jackson National Life Insurance, and member of the Board of Directors for Zurich Insurance Group Alliance for Lifetime Income & Retirement Income Institute; Scholars Advisory Group; and Vice President & Chief Economist, Bipartisan Policy Center

Sadly, one of the Institute's founding co-chairs passed away in 2021. Professor Jonathan Forman will forever be remembered by the Institute for his contributions to the Academy, scholarship, passion and friendship. Please take a moment to read the Alliance for Lifetime Income **press release** of Jon's passing.

The co-chairs receive valuable advice from distinguished academic, think-tank, and industry experts during quarterly meetings of the Institute's Scholars Advisory Group (SAG) and Retirement Industry Advisory Group (RIAG).

Interested readers may review the memberships of the SAG and the RIAG at the links below:

- Scholars Advisory Board
- Retirement Industry Advisory Group

Both the SAG and RIAG have played essential roles in defining the Institute's research agenda and developing and reviewing research proposals. SAG members also have contributed to the list of scholarly works funded and supported by the Institute over the past two years.

TYPES OF RESEARCH FUNDED AND SUPPORTED BY THE RETIREMENT INCOME INSTITUTE

In 2022, the Retirement Income Institute will continue funding and otherwise supporting five categories of scholarly work:

- **Original Scholarly Research:** Original scholarly research papers present new research from scholars in the field that is empirical, experimental, or otherwise evidence-based.
- Scholarly Works in Progress: A "scholarly work in progress" is an ongoing and original scholarly research project already in progress that is empirical, experimental, or otherwise evidence based. The Institute seeks to fund relevant projects that otherwise might not come to fruition absent additional funding or that could be expanded with additional funding into new areas that will advance the Institute's Research Agenda.
- Literature Reviews: A "literature review" is a synthesis of approximately 2,500 to 5,000 words in length of the current state of scholarly research in the topic area. Literature reviews funded by the Institute must be written in plain English with the expectation they will be read and understood by non-scholars in the American retirement ecosystem, including retirement savers, financial professionals, and employees of the Alliance's member companies, among others. Most important, literature reviews assess the prominent scholarly articles related to a topic, describe the results and insights in those articles, and offer the author's unique assessment of the existing literature.
- Essays: An "essay" is a scholarly writing of approximately 2,500 to 5,000 words in length that is final and ready for publication. Essays focus on ideas that are relevant to the topic and reference the most prominent and important writings that are relevant to the topic. Most important, essays are expressions of the author's original insights, ideas, analyses, and solutions relating to the topic. Essay authors are strongly encouraged to include in their essays recommendations of additional research that would further increase and expand knowledge about their topic.
- Retirement Income Insights: Retirement Income Insights or "Insights" are translations of scholarly articles about retirement income and annuities. Insights glean findings from individual scholarly articles, or similar articles on the same topic, and describe those findings in plain-English terms so that they are easily understandable and actionable for an audience (or audiences) within the retirement ecosystem such as, retirement savers, financial professionals, annuity manufacturers, and asset managers.

COMPLETE LIST OF SCHOLARLY WORKS

Funded and Supported by the Retirement Income Institute

The following is a complete list of scholarly works funded or supported by the Institute, organized according to the topics on the Institute's 2021 research agenda. This list includes a brief abstract or summary of each work. Interested readers may click on the titles of already-published works to read the full work. The works described as "forthcoming" are still in progress and should be published in the coming months.

ORIGINAL RESEARCH

Ashton, Bruce and Reish, Fred

"The Retirement Income Challenge in 401(k) Plans: Overcoming Legal Obstacles" [Forthcoming]

The first generation of participants in 401(k) and other participant-funded and directed retirement savings plans are retiring and need to use those defined contribution benefits to provide sustainable lifetime income in retirement. Unfortunately, most participants do not have the knowledge, education or experience to evaluate the issues such as life expectancies, withdrawal rates, investing for decumulation, and use of insured income products. To remedy that situation, participants need education, services, investments and insured products to help them understand those considerations and to generate sustainable lifetime income from their retirement savings.

Plan sponsors have been reluctant to offer some of the available products- such as annuities -in their retirement plans because of concerns about the fiduciary responsibility to prudently select and monitor insurance companies and insured lifetime income products and about possible fiduciary liability if the insurer becomes insolvent. Historically, the Department of Labor's guidance was so demanding and, in some regards, vague, that plan sponsors either felt that they could not satisfy the standard or were reluctant to rely on it because of a lack of certainty. And, to compound the problem, there were few consultants who would serve as fiduciary advisors to plan sponsors for that purpose.

In addition, the practical solutions developed by the retirement plan industry apparently were not viewed by plan sponsors as efficient or effective in response to the perceived problems (e.g., portability of benefits, and processes for evaluating insurance companies and their insured products).

The adoption of the SECURE Act at the end of 2019 added legal protections and practical solutions designed to overcome the perceived legal hurdles and plan sponsor concerns. Those include a fiduciary safe harbor for selection of insurers, portability to preserve benefits where an insured product will no longer be supported by a plan, and illustrations of retirement income for participants.

Because of the SECURE Act, plan sponsors can now offer insured income products to enable their participants to convert retirement savings into sustainable retirement income with little, if any, actual fiduciary responsibility for selection and monitoring the insurer and with a specified fiduciary process for selecting the particular insured product.

Biggs, Andrew

"Comparing Retirement Preparation for Current and Future Americans of Different Races" [Forthcoming]

Savings for retirement make up a substantial share of households' total financial assets. And those savings are distributed unequally among Americans of different races and ethnicities. In the Survey of Consumer Finances, whiteheaded households have roughly nine times the median retirement account balances of Black or Hispanic-headed households. But what will this savings inequality mean for the retirement outcomes of Americans of different races and ethnicities? Conclusions depend upon understanding both conceptual and data issues.

Conceptually, retirement savings differ from something like household incomes. For incomes, more is nearly always better than less. But it is as possible to oversave as it is to undersave. Saving is nothing more than deferred consumption, such that higher levels of retirement savings imply lower levels of expenditures and a lower level of household well-being during that household's working years. The goal of retirement savings for

households of all colors is not simply to amass wealth, but to enable that household to maintain its standard of living as it transitions from work into retirement. Thus, inequality of savings in dollar terms is less important than measures such as ratios of retirement assets to annual earnings, which attempt to capture the household's ability to replace lost earnings in retirement.

Moreover, retirement account data such as from the SCF can be misleading, for three reasons. First, a significant portion of the U.S. workforce continues to be employed by government at the federal, state and local levels, where defined benefit pensions rather than retirement accounts are the predominant means of preparing for retirement. Whites are underrepresented and Blacks overrepresented in government employment relative to their shares of the population. Second, Social Security is a large and progressive source of income in retirement, with accrued Social Security benefits topping \$40 trillion and being tilted toward lifetime low earners. A low-income worker seeking to achieve a given retirement income milestone, such as replacing 70 percent of his or her prior earnings, would rationally save less in financial assets due to Social Security's progressive benefit formula. Finally, the lowest-income Americans may rely upon means-tested government transfers in retirement, such as Supplemental Security Income. These programs may present incentives such that holding significant financial wealth by low-income households would not be optimal.

To account for both conceptual and data issues, the research will analyze preparedness for retirement by race using publicly-available projection data from the Urban Institute's DYNASIM microsimulation model. As the Urban Institute describes the model, DYNASIM "projects the size and characteristics—such as financial, health, and disability status—of the US population for the next 75 years. Using the

best and most recent data available, it helps sort out how the profound social, economic, and demographic shifts that are transforming retirement will likely affect older adults, taxpayers, business, and government." While DYNASIM is used to explore the effects of policy changes, such as to Social Security benefits, the Urban Institute makes publicly available a large number of output tables under its baseline set of projections. I would rely upon these tables in writing the paper.

Blanchett, David

"It's Good to Have Options: The Potential Benefits of Allocating to Protected Wealth Strategies"

[Retirement Income Institute Original Research-#002-2021]

Recent market volatility and low bond yields have left many investors considering new ways to capture market upside while limiting their losses. One potential approach would be to use options (e.g., calls and puts), either through a direct purchase or through some type of prepackaged product, an approach we generalize with the term "protected wealth strategy" (PWS). PWSs effectively reshape the potential return distribution of an underlying financial instrument, such as the S&P 500, which some investors find attractive. Using a utility-based resampled optimization framework, we find that PWSs have the potential to improve portfolio efficiencypotentially significantly—depending on the strategy attributes and investor circumstances. This is especially true of strategies that involve selling out-of-the-money put options (i.e., buffer approaches). Before implementing any type of PWS, though, an investor needs to understand the unique risks and costs associated with each respective strategy, especially when considering a prepackaged product. A PWS can be implemented by a household (or by a financial advisor) through the direct purchase and sale of individual options. Alternatively, there are prepackaged versions available, such as a fixed indexed annuity (FIA) or registered index-linked annuity (RILA), which we collectively refer to as a prepackaged protected wealth strategy (P-PWS). An FIA provides principal protection (i.e., no downside risk) with some potential upside, while RILAs can provide more upside in exchange for the policyholders' willingness to absorb some risk of loss.

Blanchett, David and Michael Finke

"Adverse Selection and the Welfare Impact of Immediate Annuities in Retirement Plan Investment Defaults" [Forthcoming]

Retail annuity buyers live longer than average Americans. Annuities are priced using current rates of return on bond investments and the expected longevity of annuitants. The longer lifespan of annuity buyers reduces the value of retail annuities to average workers interested in buying guaranteed lifetime income in retirement due to adverse selection. Adding annuities to investment defaults within defined contribution plans has the potential to reduce adverse selection and improve welfare among participants in defined contribution plans. Adverse selection exists in the annuity market because buyers who expect a shorter lifespan are less likely to buy an annuity. The higher price of retail annuities reduces the welfare benefits to lower-income workers who, on average, have shorter expected lifespans (Mitchell, Poterba, Warshawsky and Brown, 1999). Pooling unknown longevity through annuities has the potential to improve welfare for even shorter-lived workers, but this improvement is negatively affected by the longevity of annuity buvers. Reduced barriers to annuitization within defined contribution plans through the SECURE Act of 2019 decrease the perceived liability risk of adding annuities to core menus or investment defaults (i.e., qualified default investment alternatives, or ODIAs). Annuities added to a defined contribution plan menu will likely be priced to account for greater expected demand from higher-income, longerlived workers (Finkelstein and Poterba, 2005). Default annuitization can reduce the welfare reduction that results from adverse selection. Lower-income workers are less likely to optout of investment defaults than higher-income workers (Goda et al., 2020). Adding annuitization to a QDIA will provide annuitization to a pool of workers with a lower expected longevity. DC plans with a large percentage of lower-income workers may be able to significantly improve employee welfare by inserting guaranteed income within a ODIA.

Fichtner, Jason and Michael Finke "Participant Attitudes Toward Guaranteed Income in a Defined-Contribution Plan"

[Retirement Income Institute Original Research-#001-2021]

Plan sponsor protections provided through the SECURE Act reduced a significant barrier to employer adoption of within-plan annuitization products. Prior academic studies found evidence of consumer interest in lifetime retirement income, but no study has

surveyed a large sample of plan participants to carefully gauge demand for a range of possible annuitization options. Such a survey would give plan sponsors a deeper understanding of preferences for product characteristics among workers including income stability, liquidity, legacy, and control over the amount of savings annuitized. We also want to gain a better understanding of differences in preference for guaranteed income among the 59% of plan participants who select automated investment vehicles such as target-date funds and managed accounts, and the majority of near-retirees who select core menu funds. In addition to evaluating preferences, we will conduct a test of guaranteed income messaging language to help plan sponsors better craft information about income products for participants.

Our objective is to create and field a survey among plan participants and create a white paper that helps plan sponsors and the industry better understand the desire for quaranteed income and preferences among a range of products characteristics. We hope to conduct the survey among a diverse sample of participants to identify employee characteristics associated with guaranteed income demand.

Finke, Michael and Pfau, Wade "Managing Market Risks in the Pre-Retirement" [Forthcoming]

The paper will then compare the cumulative performance of different annuity options against stocks and bonds held in both taxable and tax-deferred accounts over a 5-10 year accumulation period [length to be determined in relation to available options within the pool of available annuity products] in the lead-up to retirement. We will analyze the net after-tax performance using current annuity parameters based on actual products as well as capital market expectations linked to the current environment.

The paper will provide clear illustrations of the benefits and the costs of different annuity options as accumulation strategies in the years leading to retirement for an audience of consumers and advisors. Specifically, we will show how a structured return through an annuity impacts the range of wealth outcomes both on the downside and upside. Even if the overall portfolio standard deviation increases with the inclusion of an annuity, the ability to protect from downside losses, as returns for the annuity do not follow a traditional bell-shaped distribution, may provide a more attractive range of outcomes than a non-annuitized portfolio. We will conclude with quidance about how pre-retirees can choose from different

annuity options along with traditional stock and bond investments to find a satisfying balance for their retirement portfolios.

Friedberg, Leora and Webb, Anthony "Variable and Fixed Indexed Annuities -A Primer" [Forthcoming]

The goal of the project is to educate both academic economists and financial practitioners about the full range of variable and fixed indexed annuities, and their most common options, riders, and guarantees, in the hope of stimulating both relevant academic research, on the one hand, and appropriate matching of product features to customer needs, on the other hand. A major difficulty faced by both academic economists and financial practitioners is the degree of product differentiation. So, the first part of the project will start by describing key features and creating a taxonomy of the principal categories of riders and guarantees. In contrast to Pfau (2019), our focus will be on features common across products, not on classifying product types, which will allow us to build a crosswalk or cross-tabulation between product type and features. The project will highlight key similarities and differences between income annuities, with which most financial advisors are familiar, and variable/fixed index annuities. The project will further explain how the riders and guarantees in variable and fixed-indexed annuities are financed. The second part of the project will then present a simple economic model of savings and asset draw-down over the life-cycle by households facing longevity, investment, and health care risk, and explain how the riders and guarantees embedded in variable and fixed indexed annuities might potentially enhance household financial wellbeing, depending on their particular situations. The third part of the project will survey the extremely limited academic literature on variable annuities and suggest directions for future research, including research that Retirement Income Institute member companies might consider funding. Output will be a technically accurate primer of perhaps 15 pages, written in non-technical language, and aimed at an audience of academic economists and financial practitioners, along with a more academically oriented review of the relevant literature and its gaps.

Lucas, Lori (EBRI)

"Spending in Retirement" [Forthcoming]

Building off of previous research by the Employee Benefit Research Institute, the next phase of EBRI's spending in retirement research will be to examine how various races and ethnicities are faring in retirement

and how their retirement spending needs may differ — and why. As we have with the Retirement Confidence Survey and Workplace Wellness Survey, we intend to revise the Spending in Retirement Survey so that it explores both behavioral and structural factors that come to play in minorities' retirement spending. We will also oversample Black and Hispanic retirees in order to garner a sufficiently robust view of their retirement situation compared with that of White retirees. This analysis will also provide us with trend data to examine how - if at all - spending is changing over time. The goals are to:

- Gain a better understanding of retirement spending and utilization of retirement vehicles such as 401(k) plans and guaranteed-income-for-life vehicles by race and ethnicity.
- Understand the behavioral and structural influences on Black and Hispanic retirees.
- Refine our retiree profiles so that they take into account race and ethnicity.
- Explore the potential impact of retirement solutions.
- Generate longitudinal analysis across our 2020 and 2022 surveys.

Murguia, Alex and Wade Pfau Wade, Multiple Research Papers [Forthcoming]

Retirement income planning is a relatively new field within the financial advisory profession. As such, measures are needed that seek a broader approach for understanding the psychological preferences of retirees for how to position their assets to achieve retirement satisfaction. The first objective of this study is to further validate such a measure. Our proposed Retirement Income Style Awareness™ (RISA®) Profile is a comprehensive tool that is designed to measure these complexities. It identifies and formally tests for the existence of six distinct factors that describe preferences about retirement income.

The second objective in this study is to provide a predictive framework for linking the personal preferences defined from these factor dimensions to specific retirement income strategies. Defining a style and matching strategies to it provides an important step forward in making sure individuals and their retirement income strategies are aligned. This process translates retirement income preferences or styles into viable retirement income strategies. These strategies include but are not limited to the use of protected income via single premium, deferred income, fixed indexed, and variable annuities, the use of risk wrap strategies based on deferred annuities

with living benefit, the use of total-return investing strategies, and the use of time-based segmentation.

Our hypothesis is that the RISA® can quantify and validate retirement income styles which can then be used to identify and predict strategy preferences. For those individuals working with advisors, this study can aid advisor understanding about an agnostic approach to retirement income and the applicability of various strategies. For self-directed individuals, this study will identify strategies that they should first explore as they put together their retirement income plan. This investigation will attempt to create a workable model for retirement income planning by matching one's RISA Profile to different retirement income strategies. One's RISA profile provides a way for advisors and individuals to understand how a range of preferences exist and how those preferences can be identified and linked to the appropriate retirement income strategies for an individual in ways that can help to make sense of the plethora of competing views about how to approach retirement income planning. For Alliance member companies, the benefits will relate to understanding which individuals have preferences most aligned with using a company's suite of retirement income products and how to best fit those products to the individual, or to recognize individuals who would be best served with different approaches.

Sabelhaus, John

"The Changing Nature of Protected Income in Retirement" [Forthcoming]

This research paper will use HRS data to provide a historical analysis of retirees and estimate what percentage of their retirement income was protected. This analysis will provide empirical insights into the changing nature of retirement income and document the extent to which the share of protected income in retirement has changed over time.

Xu, Mengyi

"Insuring Longevity Risk and Long-Term Care: Bequest, Housing and Liquidity" [Forthcoming]

Longevity improvement and pension scheme reforms have exposed individuals to enormous challenges in financing their retirement. While there has been growing interest in retirement products such as annuities and long-term care insurance (LTCI) to address the challenges, the private markets remain thin, and product innovations are needed to improve the coverage. A crucial step to product innovation is understanding the relationship between the product demand and individual circumstances, such as their preferences and financial profiles.

The research project aims to investigate the impact of the beguest motives, home equity, and liquidity constraint on the demand for annuities and LTCI. We will build a multi-period lifecycle model for a single retired homeowner whose preference is represented by a recursive utility function. We will consider various sources of risk, including uncertain lifespan, uncertain out-of-pocket healthcare expenditure, and house price risk. Our findings will advance our understanding of how the complex interactions between financial profiles and preferences affect the demand for retirement income products. The results will provide insights into offering personalized retirement financial products to customers of various backgrounds.

SCHOLARLY WORKS IN PROGRESS

Hasler, Andrea and Annamaria Lusardi "Examining the Barriers to Annuity Ownership for Older Americans"

[Retirement Income Institute Original Research-#003-2021]

The economic impact of the current pandemic lays bare the deeply rooted financial insecurity that many Americans face on a daily basis. Even before the pandemic started, our research shows that a substantial share of households in the middleincome bracket could not face a mid-size shock, let alone the loss of income and unexpected expenses they are likely to face going forward. Not only are many Americans unable to face a shock, but our research also finds that financial fragility, i.e., the inability to cope with a mid-size shock in a short period of time, has severe longterm consequences: financially fragile households are much less likely to plan for retirement. This long-term implication augments the importance of studying financial fragility and is a crucial part of our research agenda. With the financial support provided by the Retirement Income Institute, we will complete this large project and expand our empirical analysis.

Hurwitz, Abigail, Olivia Mitchell and Orly Sade "Testing Methods to Enhance Longevity Awareness" [Forthcoming]

Past research has demonstrated that many people have only a vague notion of the concept of life expectancy and the longevity risk they face at older ages, which in turn implies that they are likely to under save for retirement. Our project uses two field experiments and two experimental surveys to investigate alternative ways to describe both life expectancy and longevity risk, to assess how these might raise peoples' awareness of possible retirement shortfalls. We also will seek to evaluate whether providing this information can promote

interest in saving activity, advice-seeking from experts, and demand for longevity insurance products, comparing behavior in both Israel and the United States. We anticipate contributing to the academic literature by investigating the consequences of introducing the concepts of life expectancy and longevity risk to actual clients of two firms in Israel and similar-aged survey participants in the U.S. Additionally, we will study financial decisions during the COVID-19 epidemic: our first experimental survey was fielded at the beginning of the U.S. epidemic, and we intend to complete a second survey toward the end of 2020, to compare potential differences in perceptions and behavior.

ESSAYS

de Cervens, Jeanne and Super, Nora "New Approaches to Finance Long-Term Care Costs in Retirement" [Forthcoming]

One of the greatest risks to maintaining financial security in retirement is the need for longterm care. Americans often underestimate the type and level of care they will need as they age, specifically the supports and services necessary to maintain the essential functions of daily life. Despite the likelihood of incurring the high cost of long-term care in retirement, fewer than 40 percent of workers and 34 percent of retirees are reserving funds for long-term care (Employee Benefit Research Institute, Retirement Confidence Survey, 2021). According to the U.S. Treasury Department, even fewer (11 percent) have taken action to more fully protect against long-term care expenses through the purchase of long-term care insurance. Building upon research and a Financial Innovation Lab conducted by the Milken Institute in 2020, "New Approaches to Long-Term Care Access for Middle-Income Households," this essay will explore potential complementary public-private long-term care insurance solutions as well as how guaranteed protected income can provide financial security for long-term care costs.

Cruz, Jeff

"Barriers and Opportunities for Latinos to Retire with Lifetime Income" [Forthcoming]

This essay examines barriers and opportunities for Latinos to increase their retirement security through increasing guaranteed lifetime income. Latinos are a growing economic force, but face significant gaps in earnings, savings, and wealth. Efforts to protect Social Security, SSI and DB plans, reduce income inequality, increase access to auto-enroll savings plans, expand access to the Savers Tax Credit, and diversify the financial services industry could all help

more Latinos obtain lifetime income and have a secure retirement. With Latinos' high online engagement, additional studies should be made on the potential impact of online outreach, education, and assistance.

Hewitt, Julia and Mackenzie, George A. (Sandy) "The Impact of Educational and Labor Market Discrimination on Wealth and Income Disparities" [Forthcoming]

The subject of our essay is the impact of educational and labor market discrimination on differences in income and wealth across races and ethnicities. The disparities across the racial and ethnic divide in income are striking (see table 1). Even more remarkable are the disparities in the wealth-to-income ratios (see table 2), and therefore in the disparities of wealth. According to the Federal Reserve's 2019 Survey of Consumer Finances (Board of Governors of the Federal Reserve System 2019), the top decile of households by income accounts for 46 percent of total income, but that same top decile by net worth holds 76 percent of the country's total net

Hewitt, Julia and Mackenzie, George A. (Sandy) "The Racial Aspects of Retirement Income Adequacy"

[Retirement Income Institute Essay #005-2021]

This essay explores the racial inequalities in retirement preparedness. Households preparing for retirement could find themselves in one of three undesirable situations: being able to maintain the standard of living in retirement achieved during working life but experiencing lifetime income below some acceptable social norm, achieving an acceptable working life income but likely to fall below that standard in retirement, and failing to achieve an acceptable income level in either period. This essay presents data implying that a large share of households of color will fall in one of these three groups. It addresses the conceptual issues that arise in evaluating a satisfactory level of retirement income and proposes possible reforms that address inadequacies.

Lucas, Lori

"Racial Inequities and Retirement Income: Contributing Factors and Possible Solutions"

[Retirement Income Institute Essay #008-2021]

A critical finding with regards to wealth in the United States is the gap that persists between White Americans' financial means/resources and that of Black and Hispanic Americans regardless of income level. Further, Black and Hispanic Americans are more likely to consider debt to be a problem for their household than White Americans across income groups, as well. The Employee Benefit Research Institute (EBRI) projects that Black and Hispanic households age 35 to 39—in other words, those with much of their career left to save for retirement—are significantly more likely to run short of money in retirement, and to have larger retirement shortfalls than their White counterparts.

In this essay, we will explore the racial disparities that contribute to differences in retirement preparedness by race and ethnicity, the impact of those disparities on retirement outcomes, as well as private-sector solutions that might effectively address these disparities.

Mackenzie, George A. (Sandy)

"The Impact of the Pandemic on the Prospects for Retirement and Annuity Markets"

[Retirement Income Institute Essay- #003-2021]

This essay addresses the economic and financial effects of the pandemic, and more specifically its impact on retirement security. As the essay will explore, the pandemic has had a major impact on the markets for retirement income products, and in particular on the market for annuities, especially the market for single premium lifetime annuities. To set the stage for the discussion of the impact of the pandemic on retirement security, the essay begins with a section on the macroeconomic and financial effects of the pandemic and policy responses. The essay then examines the pandemic's impact on retirement income, before turning to a discussion of the pandemic's impact on the market for annuities and other lifetime income instruments. The essay ends with recommendations for public policy and suggestions for future research. Because of the importance of overall economic and financial policy for the prospects for lifetime income, this concluding section addresses broad economic and financial policy issues, as well as issues more germane to retirement security and lifetime income.

Steiner, Kenneth

"A New Approach to Building a Sustainable Retirement Plan Using Proven Actuarial Principles"

[Retirement Income Institute Essay- #004-2021]

This essay outlines a recommended actuarial financial planning approach that I believe is superior to other popularly followed methods, such as the 4 percent rule, in which withdrawing only that percentage from your accounts will avoid depleting your savings, to the more complex Monte Carlo modeling techniques, which assess the likelihood of meeting retirement goals, given a range of possible market outcomes. Protecting and investing assets to meet spending goals and to maintain

a secure standard of living in retirement is a risky proposition for many households today. Actuarial science offers proven approaches and processes for assessing and mitigating financial risks as well as balancing the need to protect and grow assets during retirement.

This essay advocates a compromise solution by suggesting the building of two investment/ asset buckets to fund future expenses: a floor portfolio of low-risk assets to fund essential expenses and an upside portfolio of riskier investments to fund discretionary expenses. While calculating the present values required to implement this approach and associated processes may be difficult for some households, there are websites and blogs available that can facilitate the necessary calculations

Webb, Anthony

"What Can Scholarly Research Tell Us About Cognitive and Behavioral Impediments to Annuitization? Do These Impediments Vary with Race/Ethnicity and Gender?"

[Retirement Income Institute Essay #006-2021]

This essay surveys the academic literature on behavioral impediments to annuitization, and finds that the framing of annuitization as an investment or a consumption decision can affect whether households annuitize. Households struggle to compare lump sums with income streams, but appear to be able to make context-specific choices between a lump sum and lifetime income. Complexity has been shown to be a deterrent to annuitization, but the effects of financial literacy are unclear. This essay questions whether the results of laboratory experiments are predictive of real-life behavior, and identifies factors such as procrastination that are not captured by laboratory experiments but that could affect the annuitization decision. This essay concludes by proposing lessons for financial advisors and policymakers, and suggesting directions for future research.

Webb, Anthony

"What lessons can those seeking to narrow the racial retirement income gap draw from academic research"

[Retirement Income Institute Essay #007-2021]

Financial provision for retirement is often characterized as a three-legged stool, comprising Social Security, employer-sponsored retirement plans, and private savings. This essay reviews the literature on the racial retirement savings gap, shows how Black and Hispanic households are disadvantaged, and proposes interventions that would improve their financial preparedness for retirement. This essay argues that the three-legged stool is no longer a suitable metaphor for retirement

saving because middle-class households of all races save little outside their retirement plans. In addition, households lack an effective means of converting retirement savings into a lifetime income. The literature suggests that households in general, and Black and Hispanic households in particular, would benefit from the following: financial products that enabled them to delay claiming Social Security, improvements in access to employer-sponsored retirement plans, wider adoption of auto-enrollment and defaults into life-cycle funds, introduction of employer-sponsored programs to encourage rainy-day saving, promotion of annuitization within retirement plans, and underwriting of annuities based on zip codes.

LITERATURE REVIEWS

Liu, Junhao

"Annuities - Whose Cup of Tea? A Literature Review"

[Retirement Income Institute Literature Review-#002-2020]

This literature review aims to advance our knowledge about consumer demand for annuities and life-protected income. While the classic economic literature predicts substantial take-up of annuities, many empirical studies find the participation rate to be well below the predicted level, a situation called the annuity puzzle. An important step in solving this puzzle is to understand the decision-making processes that consumers use when considering purchase of an annuity. In this review Liu surveys and synthesizes the academic research frontier on key factors that influence the demand for annuities, drawing on empirical studies from multiple disciplines including economics, finance, insurance, marketing, and psychology. In addition to critiquing the methods and findings of studies that have been done, Liu makes suggestions for future research, prioritizing the most actionable issues for the American retirement ecosystem.

This review consists of four sections. The first reviews the demographic and economic factors that impact consumer demand for annuities. The second section examines the role of rational consumer preferences in making decisions about annuities. The third section covers behavioral impediments and the product design of annuities and life-protected income. Finally, Liu offers some concluding remarks and suggests future research.

Turner, John A.

"Understanding Private Sector Longevity Insurance Annuities"

[Retirement Income Institute Literature Review-#005-2020]

While all annuities provide retirees some longevity insurance, the term "longevity insurance annuity" refers specifically to deferred annuities that begin payment at an advanced age, such as age 82, which is a little less than the life expectancy at age 62 in the United States. These annuities provide insurance against running out of money at advanced older ages. The original social security programs in many countries, including Canada, Germany, and the United States, were longevity insurance programs. The relative merits of longevity insurance annuities compared to immediate annuities depend on several factors, including the person's life expectancy, their uncertainty as to their life expectancy, their degree of risk aversion, their degree of time preference, their amount of savings, whether they have an annuity from a defined benefit plan, and the amount of their Social Security benefits. The private sector can provide longevity insurance annuities in three ways: employer-provided pension and retirement savings plans, individual retirement accounts (IRAs), and individual purchases outside of a pension or retirement savings account. While ignorance and lack of rational behavior may explain why some workers do not choose to annuitize, the apparent prevalence of adverse selection is evidence of rational behavior.

Webb, Anthony

"What can scholarly research tell us about the merits of annuitization Vs. drawing down unannuitized wealth? Do low interest rates post Covid-19 change the rules of the game?"

[Retirement Income Institute Literature Review #004-2021]

Studies on the best ways to draw down wealth during retirement have claimed that households following the so-called 4 percent rule, which calls for consuming 4 percent a year of accumulated wealth during retirement, are at relatively low risk of outliving their wealth. This literature review investigates what, if anything, financial advisors can learn from the literature that models the relative merits of purchasing an annuity as opposed to following the 4 percent rule or other similar strategies. This review argues that the 4 percent rule and other similar rules of thumb are overly simplistic and that they fail to use household financial resources in the most effective way. In contrast, strategies that optimize the use of financial resources

are too complex for most households or their advisors to implement. Annuities likely dominate the set of drawdown strategies that households could feasibly implement. This review argues that the 4 percent rule will be even less appropriate in a COVID-induced low-interest-rate environment. At current and prospective interest rates, the 4 percent rule, if we retain such a rule at all, must become the 3 percent rule.

Webb, Anthony

"What lessons, if any, can practitioners apply from academic economists about the role of annuities in post-retirement asset decumulation?"

[Retirement Income Institute Literature Review #003-2021]

This study investigates what, if anything, practitioners can learn from the literature modeling how households can use annuities to manage post retirement asset decumulation and whether the studies reveal a need for innovative annuity products. The study concludes that a desire to retain exposure to the stock market is not a justification for shunning annuities, as annuity products exist that offer equity exposure. Households will be better off purchasing longevity annuities than simply deferring annuitization. Whether longevity annuities are preferable to immediate annuitization depends on the household's level of risk aversion and the relative expense loads of the two products. Although annuities involve a loss of liquidity that may be valuable to households facing uncertain health care cost, annuitization may nonetheless benefit such households because Medicaid treats annuities more favorably than unannuitized wealth. The focus of the literature is on immediate and longevity annuities. However, the majority of annuity purchases are of deferred annuities. Their role in retirement wealth decumulation has been under-researched and should be a focus of future research. In theory, annuities can enhance household financial wellbeing. Households facing the task of consuming wealth during retirement must trade-off the risk of outliving their wealth against the cost of unnecessarily restricting their consumption. Most households that do not annuitize will die with unconsumed wealth. Annuities can enhance household well-being by reallocating this unconsumed wealth to households that live. In practice, the household's decision is more complex. Should the household annuitize all or part of its wealth? Should it annuitize immediately, delay until the older ages at which annuity rates are more favorable, or purchase a longevity annuity? Should the household

purchase a fixed annuity or one with payouts linked to the performance of a stock fund? And how might the risk of incurring medical costs affect the calculation? This literature review surveys the literature and attempts to answer the above questions.

Wendel, Steve

"How Race Interacts with Saving Behavior" [Forthcoming]

Numerous researchers have shown how savings behavior is strongly correlated with race and ethnicity in the US (e.g., Gittleman and Wolff 2004; Wendel 2021): For example, how self-identified non-Hispanic African American ("Black") households, on average, save far less of their income than self-identified non-Hispanic European American ("White") households (Bhutta et al. 2019). However, a detailed and coherent understanding of how race interacts with retirement savings, and especially post-retirement outcomes, is lacking. In this analysis, I will gather and synthesize the existing literature to address three questions:

- How does lower pre-retirement saving among Black households affect post-retirement standards of living (Munnell et al. 2018) and happiness (E.g., Tang et al. 2019)?
- How do racial disparities saving affect postretirement financial choices, including the use of social security and lifetime income (e.g., Dushi et al. 2017; Wettstein et al. 2021)?
- Where is the literature lacking, and further work is needed to promote equitable lifetime income despite these disparities?

This process will entail both drawing on the limited post-retirement literature, and assessing where pre-retirement research might provide insight. For example, research on pre-retirement savings has demonstrated that different racial groups chose saving and investment assets differently (e.g., Choudhury 2002), and that those differences are largely driven by racial disparities in income rather than an underlying cultural preference (Gittleman and Wolff 2004; Wendel 2021). There appears to be no such analysis to date on post-retirement financial decisions, however, and this literature review will help identify specific opportunities for valuable research in support of stable retirement decumulation and lifetime income.

INSIGHTS

Anderson, Julie

"How Financial Professionals Can Incorporate Client Risk Tolerance into the Planning Process"

[Retirement Income Institute Insight #036-2021]

Financial professionals need to be familiar with a client's risk tolerance level when designing a financial plan. The closer the financial plan matches the client's willingness to accept risk, the more likely it is that the client will put the plan into action and so build enough savings for retirement. There are nine factors that influence a person's risk tolerance; financial professionals can use those factors to better understand each client's willingness to accept financial risk.

Anderson, Julie

"Improving Research Methods to Produce Better Financial Advice for Consumers"

[Retirement Income Institute Insight #039-2021]

If researchers were to design improved economic models, those models might lead to better advice from financial professionals and to improved financial products from annuity providers. And if annuity plan providers were aware of the weaknesses in research models, they could mitigate those weaknesses by improving their recommendations to clients.

Anderson, Julie

"Stock market returns and annuitization" [Retirement Income Institute Insight #026-2021]

This Insight explains that consumers should be aware that recent stock market returns could be influencing their decision as to whether to annuitize their retirement savings. Annuity plan providers should consider effects of stock returns when promoting annuities, especially in light of the commonly held belief that individuals should guard against equity exposure risk as they age. When designing policies that encourage annuitization, policymakers need to take into account the effects of recent stock returns on the individual's decision to annuitize, particularly among older Americans.

Anderson, Julie

"What Information Sources Millennials Seek to Improve Their Financial Well-Being,"

[Retirement Income Institute Insight #032-2021]

Annuity plan providers should implement three recommendations to improve the fit of their financial information to Millennials' preferences. First, annuity providers should involve Millennials in cocreating financial information. Second, companies should tailor their

communication channels to better fit Millennials' attributes. Third, providers should increase accessibility to their financial information by enhancing their mobile technology interfaces.

Bachmann, Kremena

"Can Financial Professionals Help Clients Learn Better from the Outcomes of Past Decisions?"

[Retirement Income Institute Insight #035-2021]

Financial professionals can help clients understand that financial advice, even when it is good advice, can result in bad outcomes. But a financial decision that a client makes after con-sulting with a professional can result in a strong emotional reaction if the decision results in losses; that reaction that can be even stronger than if the client had made the decision without advice. If clients experience loss from an investment after receiving advice from a financial professional, it is not enough for the professional to explain why the advice is nevertheless valid. Doing so improves clients' understanding that good advice may have bad outcomes, but it will not necessarily encourage clients to keep following good advice even after losses. To help clients avoid changing their decisions for no good reason, financial professional should consider the emotional aspects of clients' decisions, which may be related to what clients have expected from following the advice.

Cannon, Edmund and Ian Tonks

"Value for Money and Prudential Regulation of Annuities"

[Retirement Income Institute Insight-#025-2021]

In this article, lan Tonks and Edmund Cannon aim to help readers understand the interaction between selection effects and regulatory reserving for annuities. Claims that annuities are poorly priced due to adverse selection should be treated as unproven. Also, regulation of annuity products may result in them becoming more expensive.

Jamison, Linda

"Information and Engagement in Choosing Annuities: A Survey of Pre-Retirees"

[Retirement Income Institute Insight #034-2021]

Current trends show that most economically developed countries have seen public and private pension programs move away from defined-benefit plans and toward defined-contribution plans. This shift gives consumers more choices as they make investment choices and plan for retirement. These choices can range from annuity investments that offer guaranteed lifetime income, to flexible accounts that require periodic drawdowns and come with

more options. More variety can be an attractive incentive to retirement planning, but the details of individual products can be confusing if consumers do not know how products work or how to weigh the risks and benefits of specific plans. Hazel Batemen and colleagues conducted an online survey of Australian and Dutch pre-retirees aged 50-64 to understand how individuals plan to make retirement benefit decisions once they stop working and to determine whether partial or full annuitization would be more appealing to them. By providing repeated learn-ing opportunities for the participants throughout the survey, the authors were able to draw important conclusions about the factors that might predict whether consumers prefer annuities over flexible pension products.

Jamison, Linda

"The Gender Gap in Financial Matters"

[Retirement Income Institute Insight - #041-2021]

This article presents evidence that women have markedly less knowledge about financial matters than men do, regardless of age, marital status, and culture. Since women tend to live longer than men, their lower understanding of financial matters could have significant consequences. Women are likely to spend more time living alone after the death of a spouse or as single heads of households, so financial literacy is vital to help them prepare for retirement. The authors of this article examined the gender differences in financial literacy across three countries—Germany, the Netherlands, and the United States. In particular they searched for reasons for these differences in financial literacy beyond socioeconomic background, culture, and financial institutions. In addition, they dug into the deeper reasons why women are apparently less knowledgeable than men about financial matters.

Jamison, Linda

"The Important Role of Fairness in Choosing Annuities"

[Retirement Income Institute Insight #037-2021]

As retirees make decisions on how to spend down their assets, or decumulate, they face the trade-off of wanting to maintain their quality of life against the uncertainty of how long they will live. Suzanne B. Shu, Robert Zeithammer, and John W. Payne's article examines why the demand for annuities is so low, although economic data support the benefits of annuities. Shu and colleagues undertake two studies to find reasons for this puzzling behavior. They contend that, although most of the study respondents replied that they dislike annuities, they are more inclined to have a

positive opinion about them when they believe that annuity products are fair. The article discusses how the perception of fairness can guide financial professionals' advice for consumers on the best way to decumulate their assets.

Kozak, Barry

"Defined-Benefit/Defined-Contribution Hybrid Pension Plans: Helping Retirees Succeed in Their Retirement Goals"

[Retirement Income Institute Insight #038-2021]

Many individuals have two goals when planning for retirement: (1) an annual fixed income to maintain a desirable lifestyle during retirement, and (2) some wealth left over at death to bequeath to family, friends, and charities. Individuals who participate in an employer's defined-benefit plan have a greater potential for finding success with the retirement income goal, and individuals who participate in an employer's defined-contribution plan have a greater potential for finding success with the bequest goal. Yelei Gu, David Kausch, Kristen Moore, and Virginia Young's article supports the commonsense assumption that individuals who participate in an employer's hybrid definedbenefit/defined-contribution plan have the best opportunity to succeed at both goals.

Kozak, Barry

"Financial Knowledge and Behavior Improved through Education Programs"

[Retirement Income Institute Insight #040-2021]

Financial education programs are designed to teach individuals how to make appropriate decisions about their finances. Tim Kaiser and colleagues' working paper synthesizes 76 studies that evaluate the successes of a variety of education programs offered around the world. The authors conclude that programs can be designed to improve decisions about budgeting and saving and, to a lesser extent, decisions about purchasing appropriate insurance products and limiting or reducing excessive debt. Policymakers could use the authors' paper to design education programs that will specifically improve decisions over retirement income planning. In addition, this paper could offer insight for scholars when they analyze the effectiveness of education programs as implemented.

Kozak, Barry

"Optimizing the Retirement Planning Strategy: A Combination of Investments, Whole Life Insurance, and Annuities"

[Retirement Income Institute Insight #033-2021]

If a couple wants to have enough income during retirement, as well as enough accumulated wealth to leave as a bequest after both have died, there is a way for them to achieve those goals. Statistically their best strategy combines three elements: a 401(k) plan, a whole life insurance policy, and a single premium immediate annuity. During their working years they should contribute to an employer's 401(k) plan and pay premiums for the whole life insurance policy. At retirement they should purchase a single premium immediate annuity, while maintaining the insurance policy and taking systematic distributions from the 401(k) plan.

Leombroni, Matteo

"The Value of Annuities vs Lump Sum Payments for Retirees"

[Retirement Income Institute Insight #030-2021]

This Insight addresses the annuity puzzle and concludes that policymakers should explore the efficacy of more cost-effective solutions to low annuitization rates, such as making life annuities the default retirement payout choice in retirement plans.

Mackenzie, George A. (Sandy)

"Can an Experiment Shed Light on the Decision to Annuitize?"

[Retirement Income Institute Insight #031-2021]

This Insight summarizes reports on an experiment that examines the potential role of the default setting, and also addresses the potential attractiveness of a deferred or longevity annuity. Experiments are a relatively new development in empirical economics.