



**TIAA INSTITUTE FELLOWS SYMPOSIUM SUMMARY**

# **Improving outcomes: boosting financial resilience and retirement readiness**

 **TIAA**  
Institute

 **Wharton**  
UNIVERSITY of PENNSYLVANIA

Pension Research Council

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## Foreword

Surya P. Kolluri, Head of TIAA Institute

Olivia S. Mitchell, Executive Director, Pension Research Council, University of Pennsylvania,  
TIAA Institute Fellow



Forty percent of American households are projected to have insufficient financial resources to maintain their living standard in retirement, according to the Employee Benefit Research Institute. Contributing to the challenge, more than half of Americans lack a basic understanding of how long they may live in retirement, an insight from TIAA Institute research. Workers with lower longevity literacy are less likely to plan and save for retirement than those who have a better understanding of their possible lifespan. Lower levels of financial literacy also negatively impact life-long financial security.

This symposium, held on April 26, 2024, explored how to meet the looming retirement crisis, largely through a behavioral finance lens. The symposium was hosted by the TIAA Institute and the Pension Research Council/Boettner Center of The Wharton School of the University of Pennsylvania, as part of a long-term and fruitful partnership of these two organizations.

Read on for summaries of six rigorous research projects presented by TIAA Institute Fellows and other scholars all published in March and April, 2024. Each sheds light on how to increase financial wellness and retirement readiness—and move us closer to our primary goal of enhancing all Americans' retirement security.





## Morning session papers: Strengthening financial wellness

The symposium's morning session featured papers investigating financial wellness from unique angles and life stages—including, for example, the effects of certain personality traits on financial well-being, what it takes to get students to attend financial aid counseling, and how to help workers manage both student debt repayment and saving for retirement.

The researchers' methods were creative and the findings weren't always predictable. All sparked robust discussion and will inform practitioners, policy makers, administrators and others devoted to improving financial wellness.

## Measures and drivers of financial well-being

Jennifer Coats, Colorado State University

Vickie Bajtelsmit, Colorado State University, TIAA Institute Fellow

Financial well-being (FWB) arises from a combination of closely related factors, each of which contributes in a unique way to an individual's sense of FWB. The varied roots of FWB are reflected in the many approaches used to assess it: surveys of individual perceptions (e.g., financial satisfaction or stress), objective outcomes indicative of FWB (e.g., wealth accumulation), behaviors influencing FWB (e.g., budgeting), and metrics representing composite scores across different dimensions of FWB.

### Methodology

Efforts to promote improvements in FWB require a detailed understanding of factors contributing to its variety of measures. Coats and Bajtelsmit identified drivers of FWB, systematically investigated their relationship to composite measures of FWB, and analyzed the behaviors, perceptions and quantifiable outcomes indicative of FWB.

#### FINANCIAL WELL-BEING: INDICATORS USED AS DEPENDENT VARIABLES IN THE ANALYSIS

- CFPB (Consumer Financial Protection Bureau) Financial Well-Being Scale
- Self-perceptions of FWB
  - Financial satisfaction
  - No financial stress
  - Manageable debt
  - Retirement preparation
- Quantifiable outcomes indicative of FWB
  - Homeowner
  - Household wealth
  - Nonhousing wealth
- Behaviors believed to influence FWB
  - Financial planning
  - Saving and investing
  - Credit management
  - Budgeting and spending
  - Seeking help with finances

#### FINANCIAL WELL-BEING: BROAD CATEGORIES OF DRIVERS AND CONTROLS INVESTIGATED

- Time value of money (discount rate) and risk preferences
- Personality traits
- Numeracy, financial literacy, and efficacy
- Experiences and opportunities (e.g., employment and health status)
- Demographics
- Education
- Race/ethnicity
- Household income

## Key findings

### PERSONALITY TYPES: EFFECTS ON FWB



Conscientiousness  
Extroversion



Openness  
Neuroticism

The positive effect of higher financial literacy levels is clear across self-perceptions of FWB, all quantitative measures of FWB, and nearly three-quarters of the behaviors that positively influence FWB—but not for composite FWB.

### Confidence by itself is not the ticket to FWB:

The best outcomes accrue to those with confidence in their ability to make financial decisions and achieve financial goals *and* who are financially literate.

#### Higher discount rate

- 100% likely to lower positive financial behaviors
- Lessens the positive effects of financial literacy

#### Education level

- Positive effect on feeling prepared for retirement
- Increases (worsens) perceptions of financial stress

## Implications

Many policy initiatives take a holistic approach to improving financial well-being. While helpful, a more effective strategy would be to focus on specific areas identified in the study:

- Given the broad negative influence of high individual discount rates on FWB, financial literacy programs should aim to increase understanding of the time value of money.
- Financial literacy programs also should aim to increase financial decision-making confidence, with the caveat that confidence absent financial knowledge can be problematic.
- To be most effective at improving financial well-being, financial advisors can help individuals focus on developing positive behaviors that best align with their personalities, as opposed to attempting to change deep-seated traits.



## Do additional dollars buy engagement? Effects of monetary incentives on attending financial aid counseling for at-risk students

James C. Cox, Daniel Kreisman and Stephen Shore, Georgia State University

To help students navigate the complex world of student financial aid, including grants and loans, the Office of Student Financial Services (SFS) at Georgia State University (GSU) has a Student Financial Management Center that provides financial counseling. Yet, despite the availability of these services, many students—even those in dire need of financial assistance and despite proactive outreach from the Center—never come for counseling. The authors' research was designed to test whether financial incentives can improve uptake of counseling, and whether counseling improves student outcomes.

### The experiment

Students at risk of being withdrawn from classes due to inability to pay were randomly assigned to either a control group or to one of 10 evenly divided groups offered the experiment's treatment: a payment ranging from \$10 to \$100, in \$10 increments, for attending a financial counseling session. Otherwise, all received the same emailed invitation from SFS (a known and trusted source).

### Results

Student engagement is very low, but money helps.

#### PERCENTAGE OF INVITED STUDENTS WHO ATTENDED COUNSELING:

**1.3%** with no incentive      **3.7%** with \$10 incentive      **9.5%** with \$100 incentive

Every \$10 in incentives increased the likelihood that students scheduled an appointment by not quite one additional percentage point.



Monetary incentives are particularly effective at inducing students of color to attend.

#### COST TO GET EACH ADDITIONAL STUDENT TO ATTEND COUNSELING:

**With \$10 incentive:** \$22 per additional attendee  
**With \$100 incentive:** \$130 per additional attendee

#### PERCENTAGE OF STUDENTS WHO REENROLLED THE FOLLOWING TERM:



**BUT** regression analyses reveal that the higher reenrollment is unrelated to whether the students received the financial incentive to attend the counseling. Rather, the impact of counseling on reenrollment is entirely driven by self-selection.



**BOTTOM LINE:** Students who attended counseling because of the incentives did not reenroll at higher rates the following semester than those who attended without a financial incentive, regardless of how much was paid to induce them to attend.

## Implications

The low rate of attendance is particularly concerning given that the students invited to a financial counseling session—and in most cases offered an incentive—were identified as those at risk of dropping out for financial reasons.

We know that many students struggle financially to remain in school and that a college degree has an important and positive effect on later life earnings—which holds significance for addressing intergenerational poverty. Thus the effort to increase counseling and the motivation for this experiment. Further investigation is needed to identify how best to provide counseling to financially at-risk students.

“ A college degree has an important and positive effect on later life earnings, which holds significance for addressing intergenerational poverty.





## Estimating the effect of employer matching contributions offsetting student loan debt

Olivia S. Mitchell, University of Pennsylvania, TIAA Institute Fellow  
Vanya Horneff and Raimond Maurer, Goethe University

**Nearly 50 million Americans owe over \$1.75 trillion in student loan debt**, and most young workers start their work lives facing the burden of these obligations. To mitigate the concern that indebted workers may be unable to save in their employer-provided retirement accounts, the SECURE 2.0 Act of 2022 contained a policy allowing workers to repay their student loans and receive matching employer contributions in their tax-qualified retirement plans.

The goal is to help employees manage both debt repayment and saving for retirement, so as to maximize their lifetime financial well-being. Whether workers will achieve this goal is, as yet, unknown: the new policy went into effect just this year, in 2024. This research offers the first economic assessment of the legislation.

**According to the 2019 SCF, 30% of all college-educated respondents had both a student loan and access to a retirement account:**

Age	% college educated with both a student loan and retirement account
20 – 29	62%
30 – 39	54%
40 – 49	35%
50 – 59	24%
60 – 69	11%
70+	4%
<b>Total</b>	<b>30%</b>



**>50%**

of college-educated workers ages 20 – 39 have student loan debt and a retirement account

Source: Survey of Consumer Finances 2019 (weighted)

### Methodology

Mitchell, Horneff and Maurer focused on college-educated workers who both hold student loans and have access to a workplace Defined Contribution (DC) plan. They developed a life cycle model embodying key aspects of U.S. tax and benefit regulations, and calibrated it using data from the Survey of Consumer Finances (SCF).

Comparisons of the life cycle model's simulations and the empirical data for college-educated males and females by age confirmed that the simulated outcomes for both retirement assets and outstanding student loans are remarkably close, validating the model.





## Key findings

The model predicts that SECURE 2.0 employer student loan payment matches will:



**Cause levels of outstanding student debt after age 30 to fall far more slowly than before,** because workers will make significant less use of one-time payoffs (which would mean forgoing the employer match).



**Reduce workers' retirement savings contributions by almost 50%**—but account balances will differ very little because of the higher employer matching contributions for loan repayments.



**Lower nonretirement asset balances** only slightly.  
**Enhance pre-retirement consumption by up to 3%** as a result of lower retirement contributions.

## Implications

The SECURE 2.0 Act has substantial potential to lessen the burden of student loan repayments and improve retirement well-being.

- To achieve SECURE 2.0's potential, employers will need to voluntarily provide the loan repayment match, and plan service providers will need to allow that to happen in practice.
- Employers gain by offering the loan repayment match:
  - Student debt is known to contribute to financial distress and mental health problems, affecting workers on the job.
  - The loan repayment match can help attract and retain workers in a tight labor market.



## LUNCHEON FIRESIDE CHAT

### Helping people successfully navigate longevity: The future of advice

What is the future of advice in a world where people are living longer and longer—and where a focus on finances alone falls woefully short of providing people the guidance they want and need? Joseph Coughlin, director of the MIT AgeLab, and Surya Kolluri, head of the TIAA Institute, engaged in a thought-provoking conversation about how best to help people successfully navigate the challenges and uncertainties they'll face beyond what traditionally has been considered retirement age.

Increasing life expectancies, they agreed, call for a new, holistic approach to advice that goes beyond finances to encompass factors such as health, social connections, and day-to-day practical concerns—all aimed at helping ensure quality of life, not just a long life. Coughlin and Kolluri call this new approach to advice “longevity planning”.

The Institute has posted a blog on Surya and Joe's fireside chat [here](#).



“ Longevity planning is the transformation of the financial services and retirement planning industries into a holistic business of advice and services to help people navigate a 100-year lifespan.

—Joseph Coughlin, director, MIT AgeLab

## Afternoon session papers: Retirement timing and outcomes

The symposium's afternoon session built on the morning's focus on financial wellness by delving into questions surrounding retirement, such as how financial resilience can help people overcome threats to their long-term economic security, key drivers of the timing of retirement, and how people choose to draw down their retirement wealth.

As with research presented earlier in the day, the studies were based on rigorous analyses of data and modeling to produce key findings to inform practitioners, policymakers, administrators and others devoted to improving retirement outcomes.

## Financial fragility, financial resilience and pension distributions

Robert Clark, North Carolina State University, TIAA Institute Fellow

Olivia S. Mitchell, University of Pennsylvania, TIAA Institute Fellow

To investigate Americans' financial robustness during the Covid-19 pandemic, the authors used measures of financial fragility, their own financial resilience index, and data from Understanding America Study (UAS) surveys done in 2020, 2021 and 2022.

The aim was to assess whether higher levels of pre-pandemic financial resilience led to better outcomes during the period under study. Analyses also examined the effects of financial literacy on financial resilience, and the effect of financial resilience on retirees' pension distributions choices.

### Key terms

**FINANCIAL FRAGILITY** is based on whether a household can come up with \$2,000 within a month when facing an unexpected need. Accordingly, financially fragile people are those who did not plan nor make provisions for such shocks in advance.

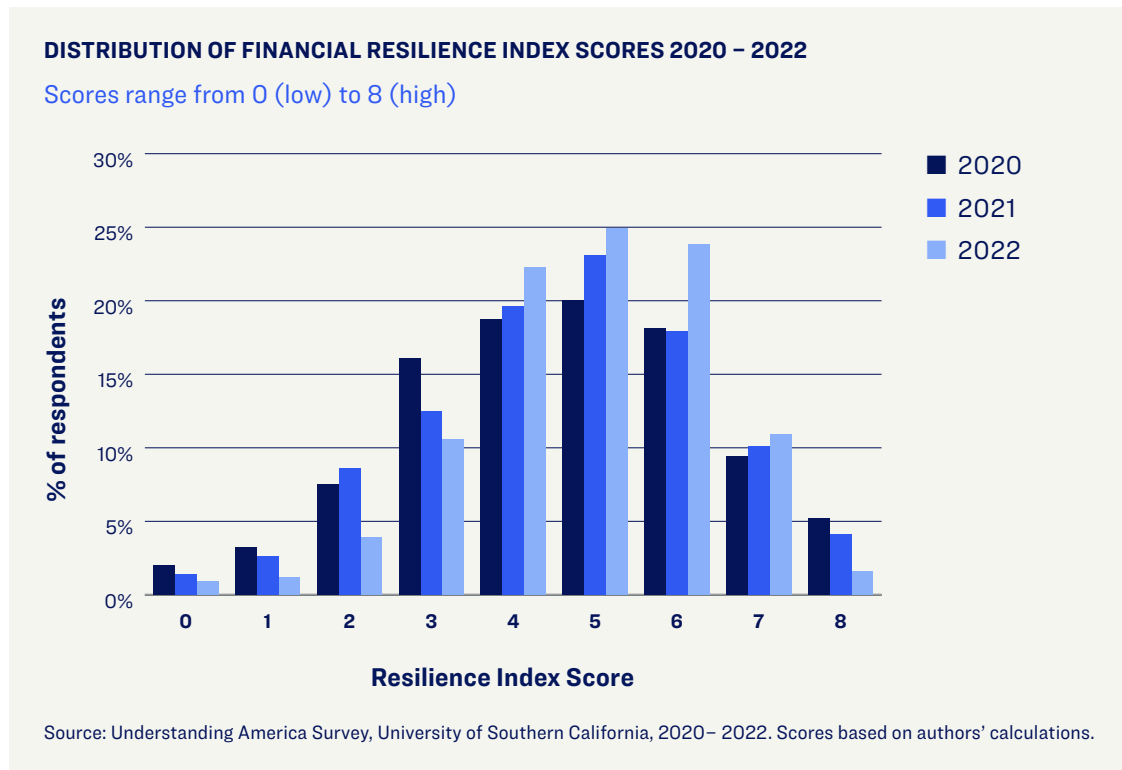
**FINANCIAL RESILIENCE** is based on an eight-question index developed by Clark and Mitchell indicating how prepared households are for economic shocks. Questions fell into four categories:

- Ability to respond to unexpected expenses or job loss
- Have a retirement and spending plans, and track spending
- Perceptions of current debt level and its effect on medical spending
- Level of concern about finances



### Key findings

The average household’s financial resilience remained quite stable during the pandemic. This may be due to the expansion of unemployment benefits and government stimulus checks distributed during the pandemic.



- More financially resilient households are less likely to be financially fragile. Same for older persons, and better educated and higher-income households.
- Black and Hispanic respondents’ financial resilience during the pandemic was the same as that of White respondents



**Greater levels of financial literacy (FinLit) led to higher levels of financial resilience**

**1 point = 10%**  
 FinLit Index more likely to be financially resilient



Higher financially resilient households are more likely to take pension account payouts as retirement annuities instead of lump sums.

- **Greater financial literacy** is associated with better information about one’s pension plan and pension plan payout choices.

### Implications

**These findings point to useful policy recommendations:**

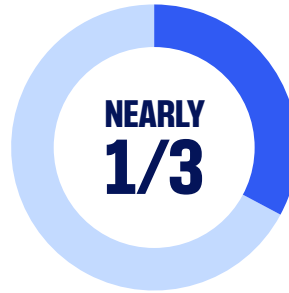
- Programs designed to enhance financial resilience could help households better withstand economic shocks and address income needs in times of crisis.
- Boosting financial literacy efforts could enhance retirement well-being by:
  - Increasing financial preparedness for economic shocks prior to retirement
  - Lowering the chances of being financially fragile later in life
  - Improving the economic behavior of older Americans



## How do life events affect retirement timing? Evidence from expectations data

Aspen Gorry and Jonathan M. Leganza, Clemson University

The timing of retirement is a major determinant of lifetime income and, likewise, a crucial factor affecting financial security. Yet people face uncertainty about the timing of their retirement. Understanding how people navigate this uncertainty and how life events influence when they choose to retire is important to helping them achieve financial security.



of workers retire five years earlier or five years later than expected

### The study

Gorry and Leganza used data from the Health and Retirement Study (HRS), a survey of older Americans, to study how retirement expectations evolve as workers age. The HRS contains information on workers' retirement expectations and their perceived probabilities of working past 62, 65 and 70. Moreover, it contains detailed information on demographics, health, family characteristics and employment. It also tracks participants over time.

Analyses of the data reveal how retirement expectations evolve with age, and differences across groups. The data also helps estimate how changes in health, family characteristics, and employment influence retirement expectations.

### Key findings



**Retirement expectations do not fluctuate substantially with age**, but older workers tend to expect to work to an older age than younger workers.

- Workers closer to 60 are more likely to expect to work past age 62 (Social Security eligibility) and 65 (Medicare eligibility).
- Women at age 50 expect to retire earlier than men at that age, but their retirement expectations increase as they age.



Individuals with **good health, high income and high wealth** tend to expect to work longer as they age, compared to those with worse health, lower income and lower wealth.

Many **health shocks**, such as a cancer diagnosis—as well as a decline in one's subjective health level—**play a key role in shaping expectations and inducing early retirements.**



Compared to the effects of health shocks, there is **little evidence that, on average, the birth of a grandchild or a divorce affect retirement expectations.**

**People respond differently to substantial increases in earnings:** Some retire sooner than expected, for others, higher wages make continuing to work more attractive.

## Implications

Shedding light on how different events during a person’s working life impact their retirement expectations helps guide both policymakers and retirement plan design:

- The probabilities of when people will retire are particularly relevant for federal policymakers concerned with Americans’ retirement income security: Age 62 is Social Security’s early eligibility threshold, and 65 is Medicare’s eligibility age. Adverse events—particularly health shocks that cause people to retire before reaching these crucial age thresholds for public benefits—often lead Americans to financial insecurity in retirement.
- The findings clearly highlight the prevalence of retirement timing uncertainty. Yet retirement timing is a key input in the design of retirement target date funds. Plan administrators can help by offering more flexibility for workers to adjust how their savings are invested after life events that change their retirement expectations.

“ Despite the importance of the retirement date for financial planning, individuals face substantial uncertainty about when they will eventually retire.



## Retirement, Social Security and life annuity demand

Sita N. Slavov, George Mason University, TIAA Institute Fellow

Decisions about how to draw down on retirement wealth can have major implications for retirement security.

For someone approaching retirement with both Social Security and private pension wealth, decisions must be made about when to claim Social Security, and how and when to tap into pensions—typically by taking a lump sum, withdrawing at regular intervals, or purchasing a life annuity.

Standard life cycle models suggest that life annuities are valuable in insuring against longevity risk. But people don't annuitize their retirement benefits to the extent the models predict—behavior sometimes referred to as the “annuity puzzle.”

This research examines determinants of the decisions individuals make on drawing down their retirement wealth.

### The study

Slavov used data from the 2018 wave of the Health and Retirement Study (HRS), an in-depth survey of adults aged 51 and older, and their spouses. She analyzed a sample of individuals born between 1928 and 1950 who have evidence of private pension wealth and have claimed Social Security. Everyone's Social Security claiming age, life annuity start age and retirement age were known.

A range of factors were examined—including Social Security rules, employer-sponsored pension rules, health status, health insurance, demographic and socioeconomic characteristics, and the real interest rate—to gauge how they're related to the likelihood of retiring, claiming Social Security and starting a life annuity at any given age.

“ An individual who delays claiming Social Security receives a larger future monthly benefit, indexed for inflation, for life. This increase in the monthly benefit represents the annuity purchased by forgoing current benefits.



## Key findings



The likelihood of pursuing a “parallel strategy”—either retiring and claiming Social Security at the same time, or starting Social Security and a life annuity at the same time—has declined over time.



Likelihood of claiming Social Security, retiring and starting annuities at different ages.

At any given age, women, divorced individuals, primary earners, singles and college-educated individuals are **less likely to initiate a parallel strategy**.



- The growing gains from delaying Social Security may incentivize delaying benefits beyond retirement.
- Higher real interest rates are associated with a greater probability of retirement (by increasing the value of retirement assets) and incentivizing annuity purchases (by lowering annuity prices).

## Implications

- The study’s findings can help researchers and financial planners better understand people’s retirement income choices—and, likewise, help identify ways to help them improve their long-term financial security.
- For policymakers, the findings can inform the design of Social Security. It seems, for example, that gains derived from delaying Social Security are incentivizing delaying claiming benefits. On the other hand, we know that repeal of the retirement earnings test in 2000 for people at or above the full retirement age has accelerated Social Security claiming—although it has had no statistically significant effect on labor force participation.



These effects, and others, have important implications for the future of America’s largest safety net for retirees.



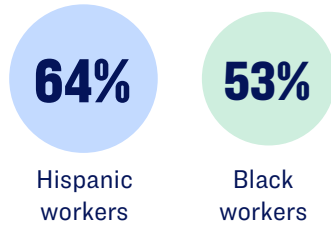
## TIAA Retirement Bill of Rights

Raoul Marchand, TIAA Senior Director, Public Policy

The American retirement crisis is real, and it affects all of us—our families, our friends, our neighbors. It threatens the sustainability and vitality of the economy we all share.

### 55 million

Americans don't have access to a retirement plan at work—nearly half of all private sector workers, including:



Social Security beneficiaries are expected to face a **20% benefit cut by 2033.**

To promote retirement security, employees need better education and options for converting their retirement savings into lifetime income, including annuities.



### CHALLENGES FOR WOMEN'S FINANCIAL SECURITY AND HEALTH



Women are less financially secure than men for many reasons, including caregiving, which falls disproportionately on women and exacerbates their emotional and financial stress, negatively affecting their health.



Caregivers, on average, have **\$7,200** in out-of-pocket costs annually.

#### RETIREMENT SAVINGS



By age 65, women have saved 30% less than men, on average, for retirement. They live approximately six years longer than men, but suffer from more chronic diseases.

Source: TIAA Institute, *Playing the long game: How longevity affects financial planning and family caregiving.* [Link](#)

Every American worker should be able to retire with dignity. That's why TIAA developed the Retirement Bill of Rights to help guide the public and private sectors toward commonsense solutions to the retirement crisis.

#### TIAA Retirement Bill of Rights

- 1 Every worker in America has a right to save for and achieve a financially secure retirement.
- 2 Every worker should have access to low-cost investment options that help provide ample income for a dignified retirement.
- 3 Every worker deserves clear information that allows them to compare savings and income options, make informed choices, and meet their retirement goals.
- 4 The public and private sectors share responsibility for helping every worker access retirement income that will last the rest of their lives.

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## Resources

[\*Measures and drivers of financial well-being\*](#)

Jennifer Coats and Vickie Bajtelsmit, Colorado State University

[\*Do additional dollars buy engagement? Effects of monetary incentives on attending financial aid counseling for at-risk students\*](#)

James C. Cox, Daniel Kreisman and Stephen Shore, Georgia State University

[\*Estimating the effect of employer matching contributions offsetting student loan debt\*](#)

Olivia S. Mitchell, University of Pennsylvania, and Vanya Horneff and Raimond Maurer, Goethe University

[\*Helping people successfully navigate longevity: The future of advice\*](#)

Surya Kolluri, TIAA Institute and Joseph Coughlin

[\*Financial fragility, financial resilience, and pension distributions\*](#)

Robert Clark, North Carolina State University, and Olivia S. Mitchell, University of Pennsylvania

[\*How do life events affect retirement timing? Evidence from expectations data\*](#)

Aspen Gorry and Jonathan M. Leganza, Clemson University

[\*Retirement, Social Security, and life annuity demand\*](#)

Sita N. Slavov, George Mason University

[\*An unrecognized barrier to retirement income security: Poor longevity literacy\*](#)

Paul Yakoboski, TIAA Institute, and Andrea Sticha and Annamaria Lusardi, GFLEC, The George Washington University

[\*Preparing for 100-year lives\*](#)

Benny Goodman, TIAA Institute

[\*Longevity perceptions and implications for financial decision-making: Racial and ethnic differences\*](#)

Abigail Hurwitz and Orly Sade, Hebrew University of Jerusalem, and Olivia S. Mitchell, The Wharton School University of Pennsylvania

[\*Want to know when you can retire? It's about what you'll spend, not what you've saved\*](#)

Jeffrey Brown, University of Illinois

[\*Financial well-being and literacy in a high-inflation environment\*](#)

Paul Yakoboski, TIAA Institute, and Andrea Sticha and Annamaria Lusardi, GFLEC, The George Washington University

[\*Differences in retirement preparedness and security by race and ethnicity\*](#)

Brent J. Davis, TIAA Institute

[\*From longevity literacy to longevity fitness\*](#)

Surya Kolluri, TIAA Institute

[\*TIAA Institute—GFLEC Personal Finance Index \(P-Fin\)\*](#)

Paul Yakoboski, TIAA Institute

## About the TIAA Institute

The TIAA Institute helps advance the ways individuals and institutions plan for financial security and organizational effectiveness. The Institute conducts in-depth research, provides access to a network of thought leaders, and enables those it serves to anticipate trends, plan future strategies, and maximize opportunities for success.

**To learn more, visit [tiaainstitute.org](https://tiaainstitute.org).**

## About the Pension Research Council

The PRC sponsors research on the entire range of private pension and Social Security programs, as well as related benefit plans in the United States and worldwide.

**Learn more at [pensionresearchcouncil.org](https://pensionresearchcouncil.org).**



To continue the conversation, please follow the TIAA Institute and the Pension Research Council on X at [@TIAAInstitute](https://twitter.com/TIAAInstitute) and [@PensionResearch](https://twitter.com/PensionResearch).

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