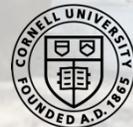


Provost's Office of Faculty Development & Diversity, 23 March 2026

---

# Retirement Income Decision Making

Suzanne Shu, Cornell University and NBER



Cornell  
SC Johnson College of Business

# Today's talk

---

**Disclaimer:** This program is not intended to provide financial advice or endorse any products or service, but to share findings from research about financial decision making.

## Resources for financial advice:

- <https://hr.cornell.edu/browse-self-service/contact-benefits-providers>
- Financial advice for endowed colleges: Fidelity, TIAA
- Financial advice for contract colleges: NYSLRS, Corebridge, Fidelity, TIAA, Voya
- Cornell-provided free financial webinars by Fidelity & TIAA
- [Cornell Academics and Professors Emeriti \(CAPE\)](#)
- <https://www.consumerfinance.gov/consumer-tools/retirement/>
- <https://www.ssa.gov/retirement/plan-for-retirement>
- <https://www.aarp.org/money/retirement/>

# Today's talk

---

**My goal:** To walk you through the biggest uncertainties, tradeoffs, challenges, and things to think about for your own retirement journey, all based on decades of research in this topic.

## **Our agenda:**

- Defining “decumulation”
- A closer look at some of the biggest uncertainties and challenges
  - Estimating your longevity
  - Thinking about Social Security
  - Illusions of wealth
  - The role of annuities
  - Making predictions about your future

# What is Decumulation?

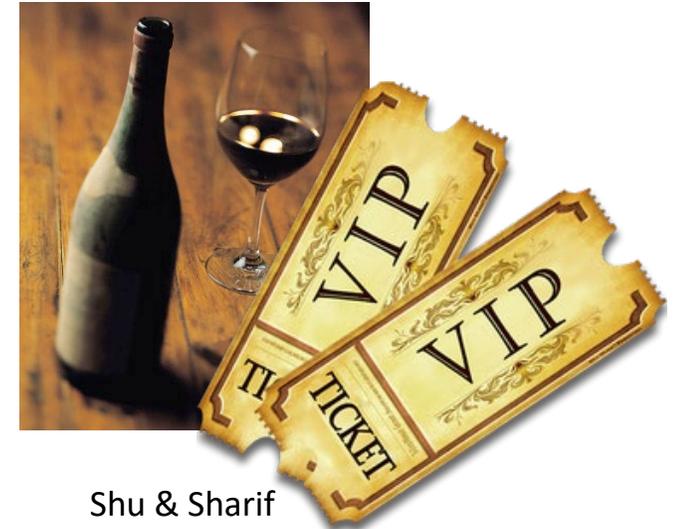
- The decision of when to consume a saved resource
  - Airline miles, vacation days, gift certificates, good wine...
  - And retirement savings!
- This is a difficult problem requiring tradeoffs between now and later



Shu 2008



Shu & Gneezy  
2010



Shu & Sharif  
2018

# The Retirement Decumulation Problem

The nastiest, hardest problem in finance.

We've made good progress on the accumulation phase of retirement saving, but the decumulation phase hasn't received nearly enough attention... The spending-down phase is even harder for individuals to solve.



Richard Thaler  
2018 Nobel Prize



William Sharpe  
1990 Nobel Prize



# Psychological **challenges** in decumulation

- Every individual's situation is different
- Multiple sources of uncertainty
- Large stakes, irreversible decisions
- Limited opportunities to learn from feedback
- Effects of decisions last for long time periods
- Difficult emotional tradeoffs

# Psychological **influences** on decumulation

- Self-control: enjoy now or save for later?
- Impatience: discounting of future outcomes
- Psychological ownership / endowment effect
- Loss aversion, especially for annuities
- Biases in prediction: uncertainty in longevity, health, etc.
- Fairness and trust

# **Challenges in getting decumulation right**

---

1. Estimating longevity
2. Big decisions during retirement
3. Predicting your future

# **Challenges in getting decumulation right**

---

## 1. Estimating longevity

- Years in retirement versus years at work
- Life expectations versus longevity

## 2. Big decisions during retirement

## 3. Predicting your future



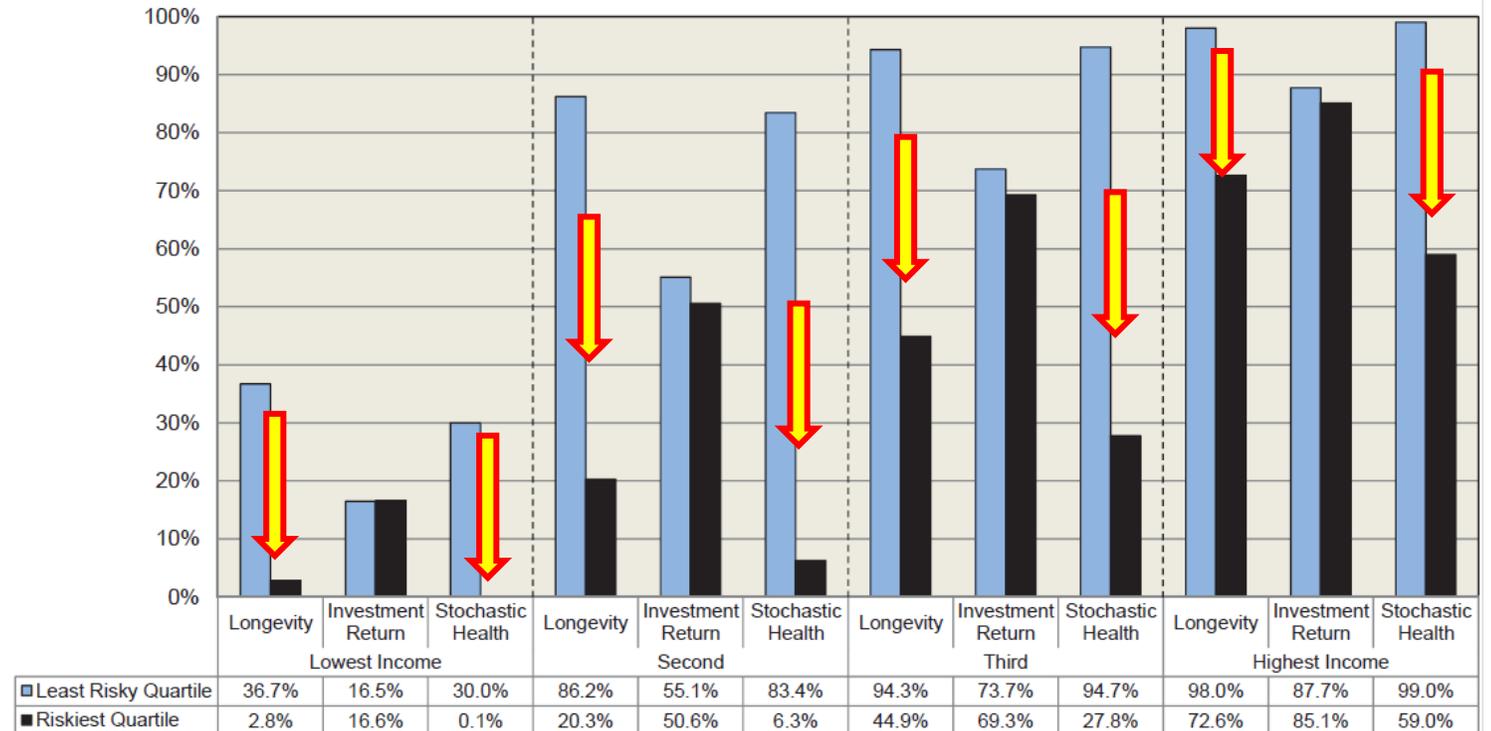
B. Smaller

*"If we take a late retirement and an early death, we'll just squeak by."*

# Winning the longevity lottery or losing the health lottery can wipe out your outcomes

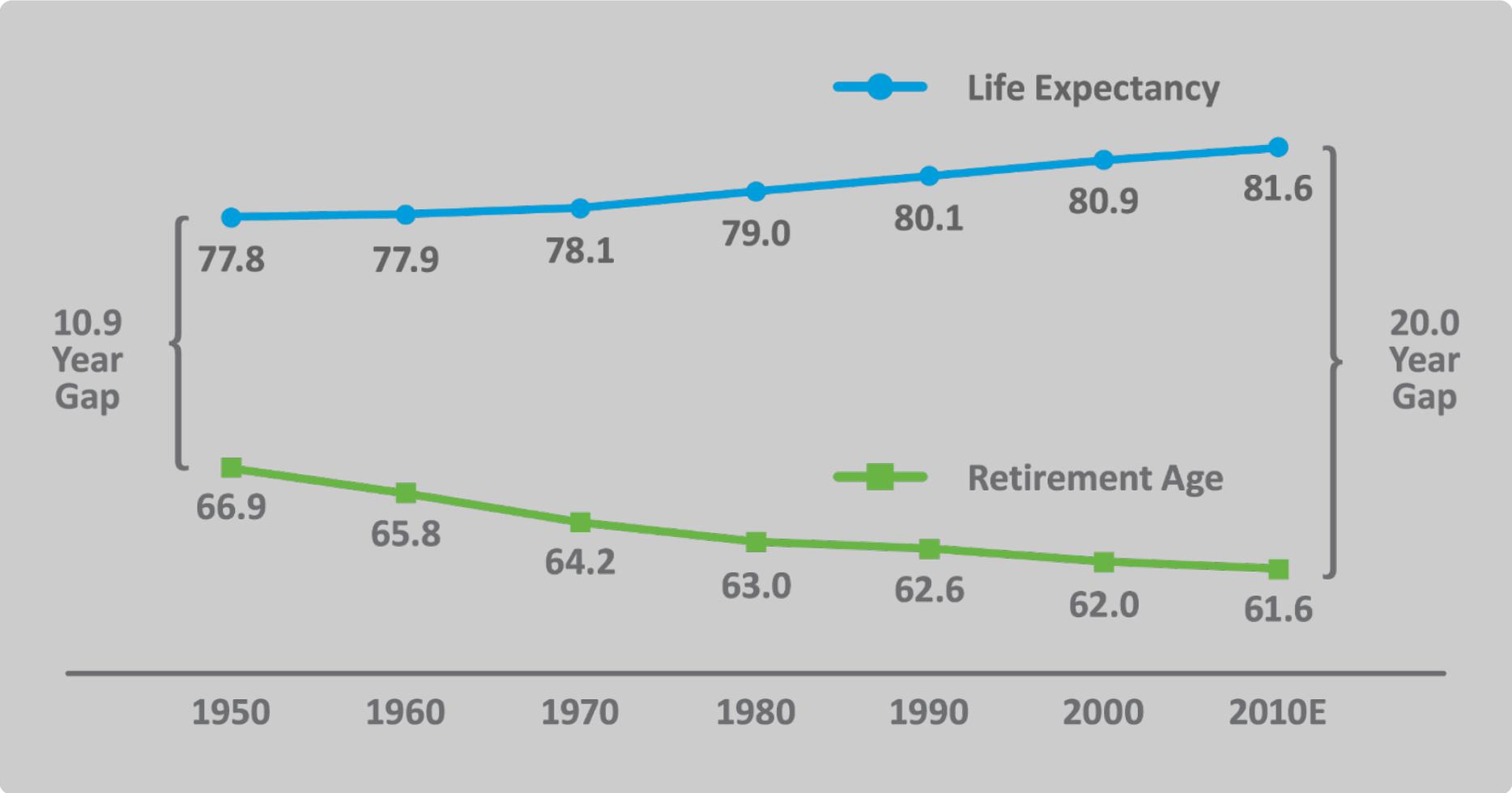
At every income level, retirement readiness decreases strongly as risk from longevity and health outcomes increases.

**2014 Retirement Readiness Ratings,™ by Preretirement Wage Quartile: Values for Riskiest and Least-Risky Quartile for the Risks of Longevity, Preretirement Investment Return, and Stochastic Health Care**



Source: VanDerhei, Jack. "What Causes EBRI Retirement Readiness Ratings to Vary: Results from the 2014 Retirement Security Projection Model." Employee Benefit Research Institute. No 396: February 2014.

# Retirement journeys are lengthening: The evolution of retirement age and life expectancy at age 65



Sources: Gendell (2001, 2008), Bell and Miller (2005)

# What is your life expectancy?

What is the probability that you will live until age 85?

What did you think about to answer this question?

What is the probability that you will die by age 85?

What did you think about to answer this question?

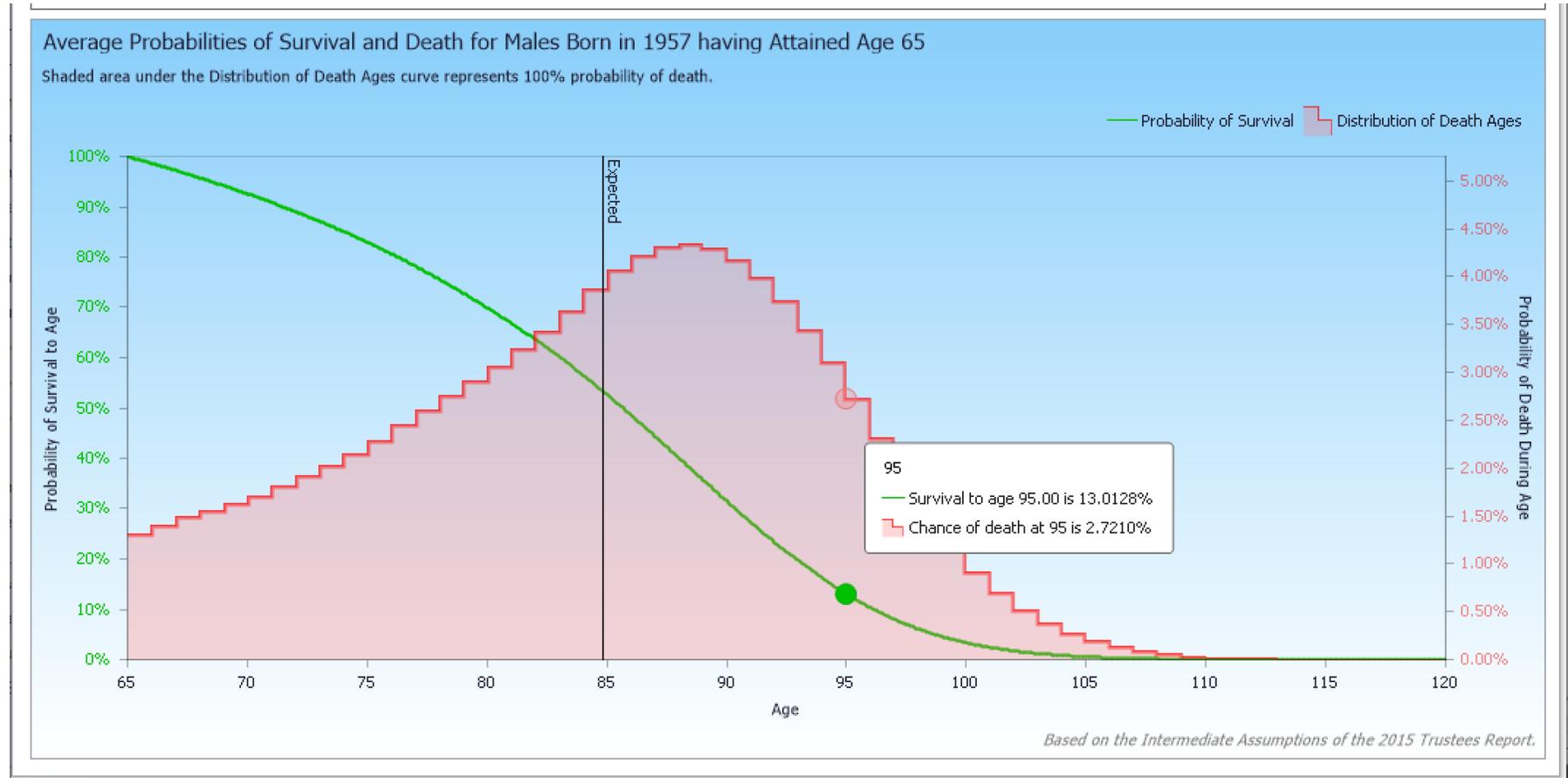
Note that your two answers *should* sum to 100%.

# Life expectancy versus probabilities

Male, current age = 65

Expected age at death = 84.1

Probability of living to age 95 = 13%



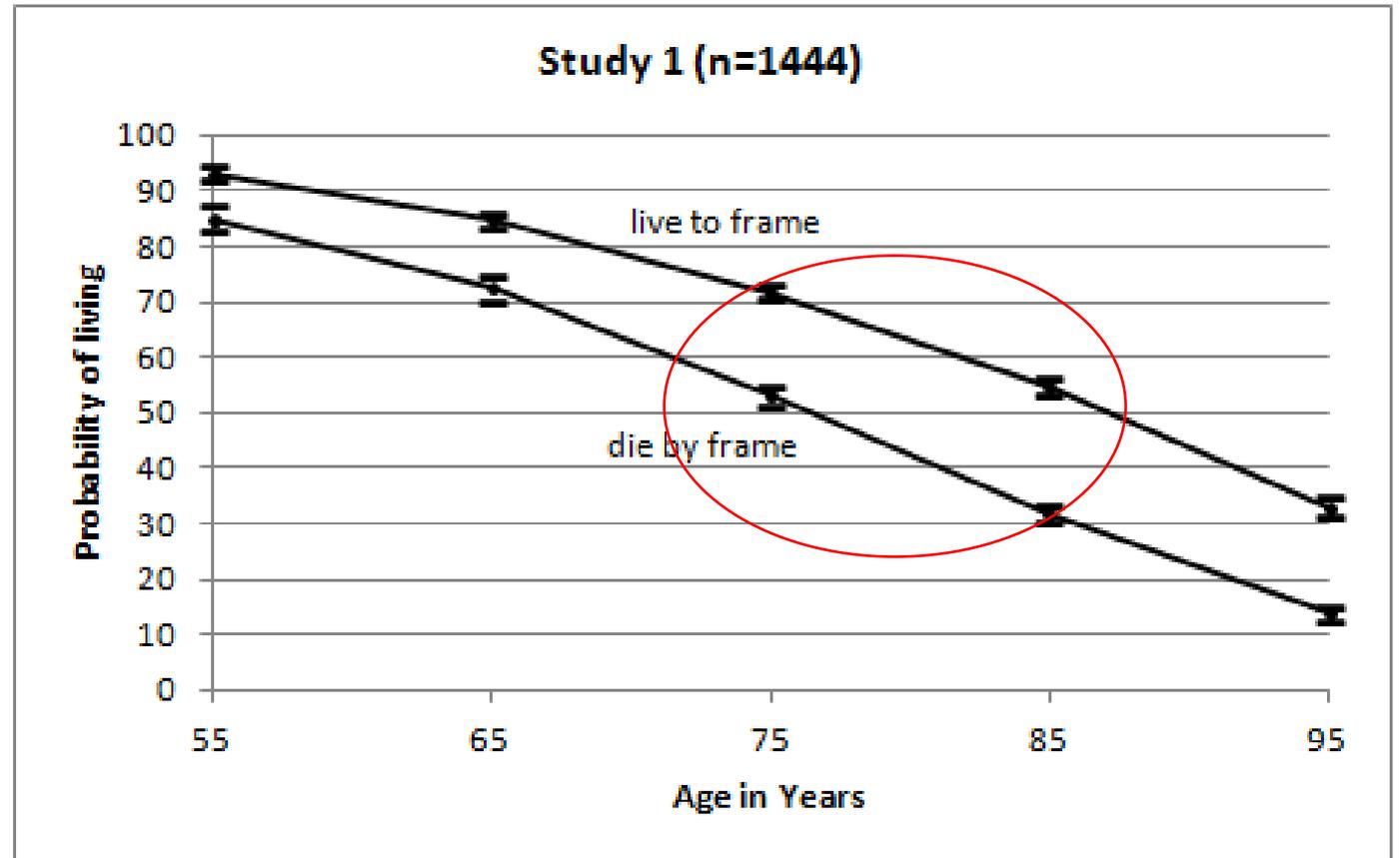
U.S. Social Security Administration's Longevity Visualizer

# How you ask changes life expectations

What's the chance you live to age 85? (average = 55%)

What's the chance you die by age 85? (average = 68%)

Ten-year gap in median expected age of death: 75 years (die-by) versus 85 years (live-to).



# Challenges in getting decumulation right

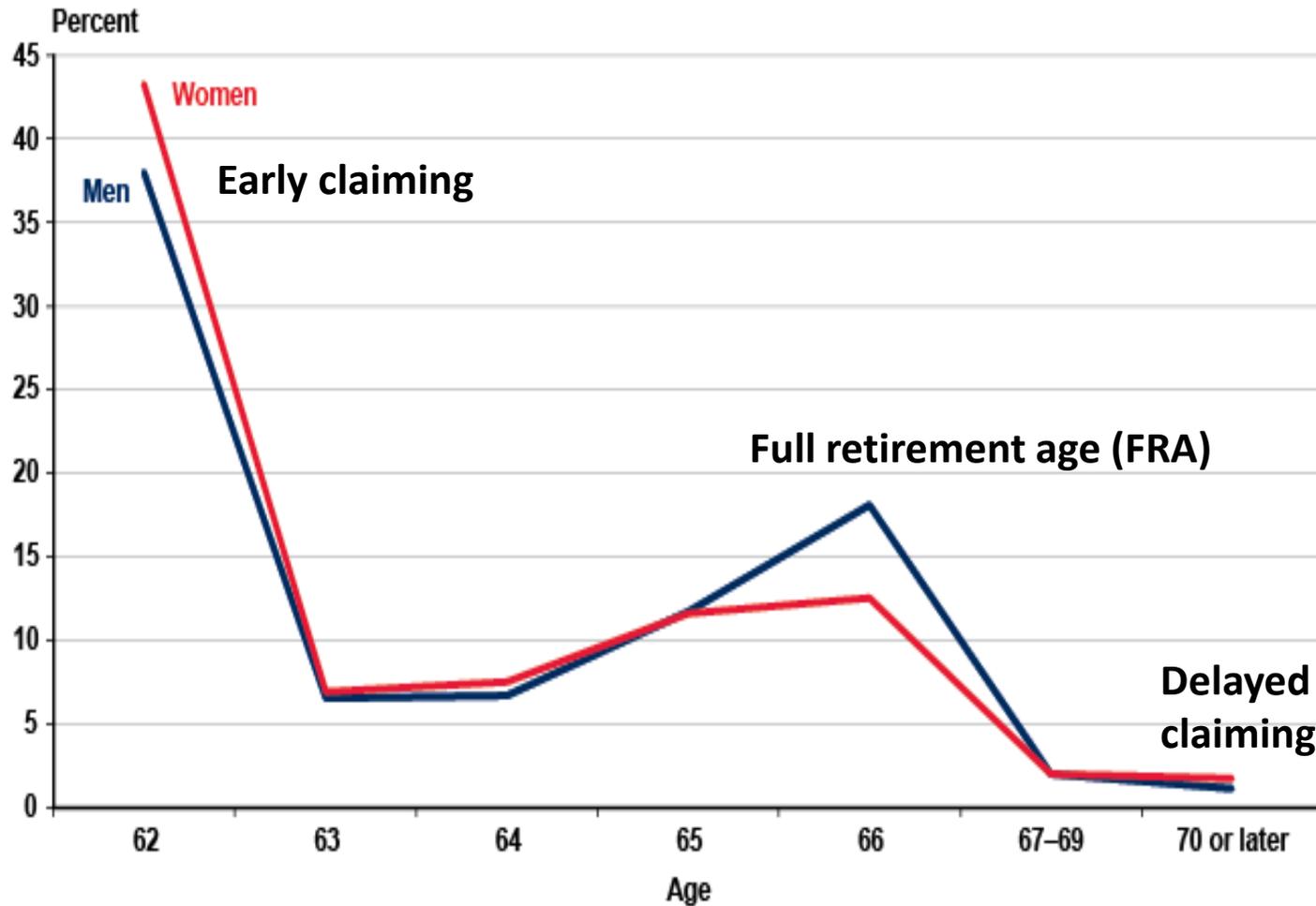
---

1. Estimating longevity
2. Big decisions during retirement
  - Thinking about Social Security
  - Illusions of wealth
  - The role of annuities
3. Predicting your future

# Two Retirement Income Options...



# Decumulation option #1: Social Security



Most Americans claim Social Security benefits as soon as they are eligible at age 62, even though there are large financial benefits to waiting until age 70

SOURCE: Annual Statistical Supplement to the Social Security Bulletin, 2013 (SSA 2014, [Table 6.B5](#)).

# Helpful resources for Social Security Claiming



**Step 1:** Explore how your claiming age affects your Social Security retirement benefits

Enter your information below to see your estimated benefits.

Date of birth

Highest annual work income

8 3 1990

\$70,000

**Get your estimates**

We base your benefit estimate on current formulas from the Social Security Administration. Your answers are anonymous. Because we do not access or use your Social Security earnings record, these are rough estimates.

## Your estimated benefits:

Select claiming ages on the graph to see how your estimated benefit changes.

Age 67 is your full benefit claiming age.

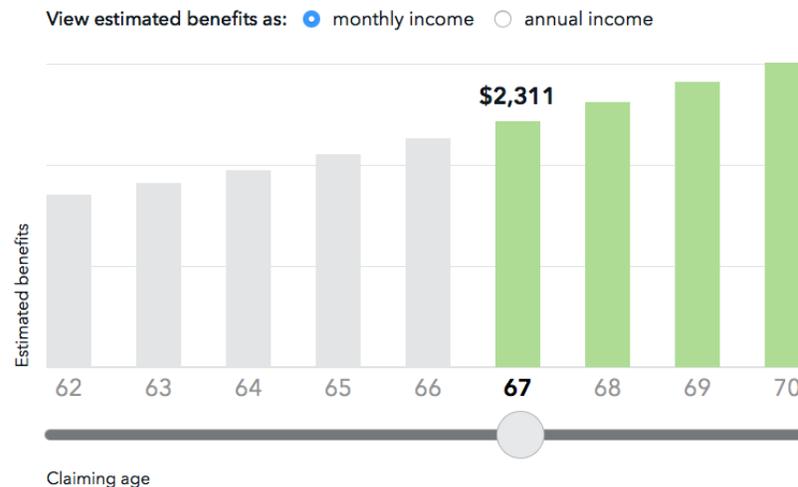
**By age 85, an average lifespan, your total benefits will be \$499,176** (in today's dollars)

### About your full benefit claiming age:

- It is based on the year you were born.
- At this age, you will receive your full benefit with no reductions.

Remember, claiming age here refers only to your Social Security retirement benefit, and not when you decide to stop working or apply for Medicare.

[Where do these numbers come from?](#)



Consumer Financial Protection Bureau:

[www.consumerfinance.gov/consumer-tools/retirement/](http://www.consumerfinance.gov/consumer-tools/retirement/)

Social Security Admin:

[www.ssa.gov/retirement/plan-for-retirement](http://www.ssa.gov/retirement/plan-for-retirement)

# Individual characteristics and individual psychology have big effects on intended claiming age



Shorter perceived life expectancy



More averse to losses



Stronger feelings of ownership

Claim SSA benefits earlier

Shu and Payne 2026

# Personalizing claiming advice

- Retirement income decisions are more personalized than retirement savings
- Can we tailor advice to the individual's needs?
  - Personalized default rules – Sunstein 2013
  - “Nudge me right” for passwords – Peer et al 2019
  - UK BIT tax letters – Halpern 2016
  - Social norms for electricity use – Costa & Kahn 2013
- We tested multiple messages alongside individual differences to see which messages had more impact and for which people

**Step 2:** Learn tips specific to your situation

Picture your life in retirement to receive claiming tips.



Are you married?



Do you plan to continue working in your 60s?



Will your expenses decrease after you retire?



Do you expect to have additional sources of retirement income beyond Social Security?



Do you expect to live a long life?

# Some Possible Claiming Messages

6 of 10 people choose to delay claiming past age 62.

Delaying is a good idea for financial well-being.

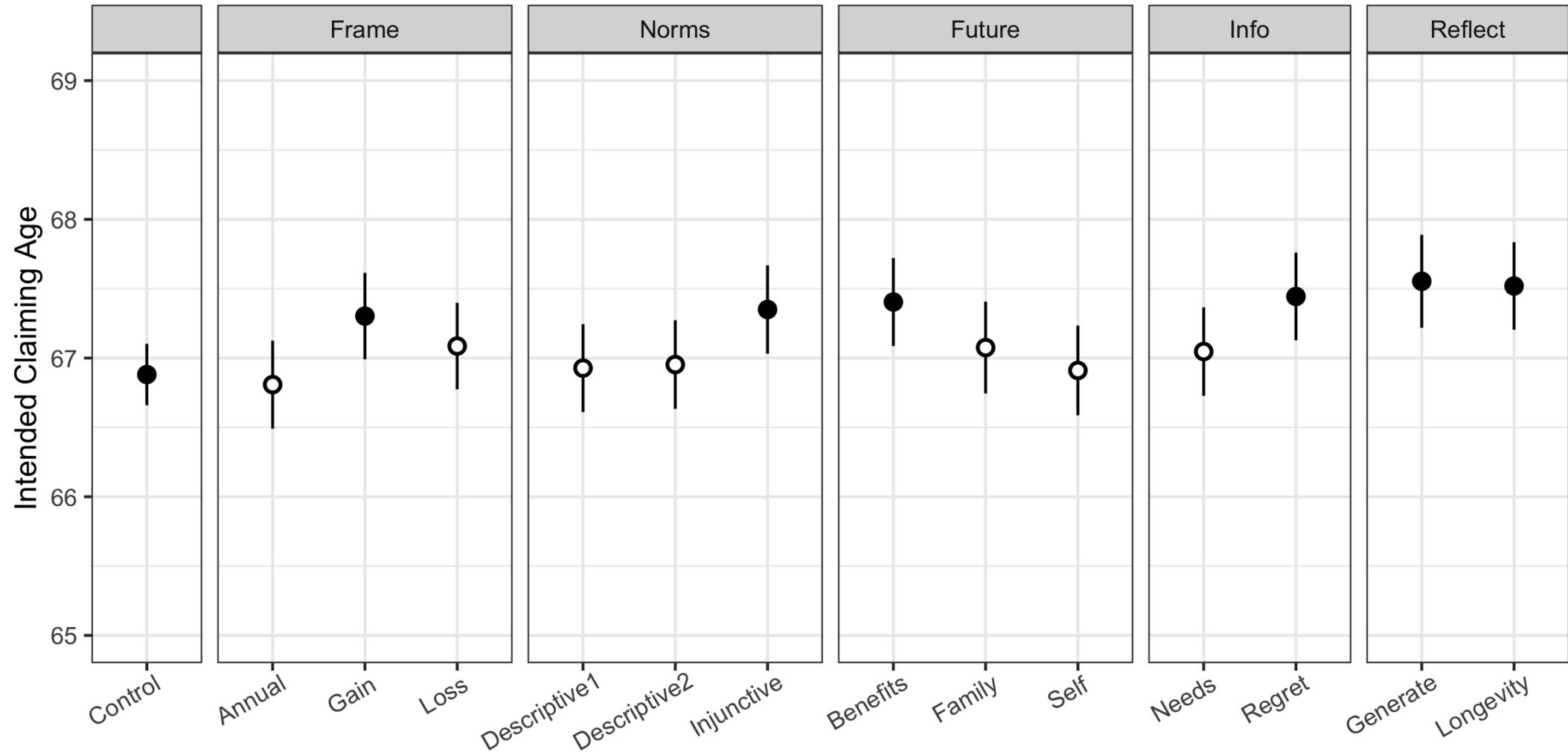
What do you expect your typical income needs will be in retirement?

Some retirees who claimed at age 62 regret having claimed too early.

What are the financial implications if you live long into retirement?

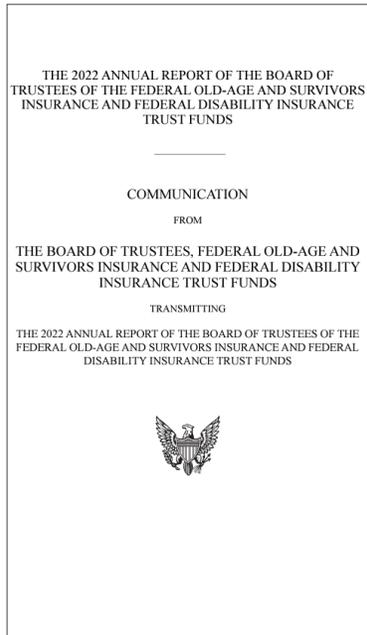
Can you think of any reasons to postpone claiming?

# Testing interventions for U.S. SSA claiming decisions



# Will Social Security Even Exist?

## The Trustees Report



The New York Times   
@nytimes

Social Security will be depleted in 2033, a year earlier than previously projected, according to a government report, as the pandemic has drained revenues and put additional strain on one of the U.S.'s most important social safety net programs.

The Motley Fool logo is in the top left. Navigation links include "Our Services", "Investing Basics", "Stock Market", "Retirement", and "Personal Finance". A yellow "FREE ARTICLE" badge is next to the text "Join Our Premium Members And Get More In-Depth Stock Guidance and Research". The main headline is "Is Social Security Actually Running Out of Money?". The author is "By Maurie Backman" and the date is "Feb 26, 2023 at 5:04AM".

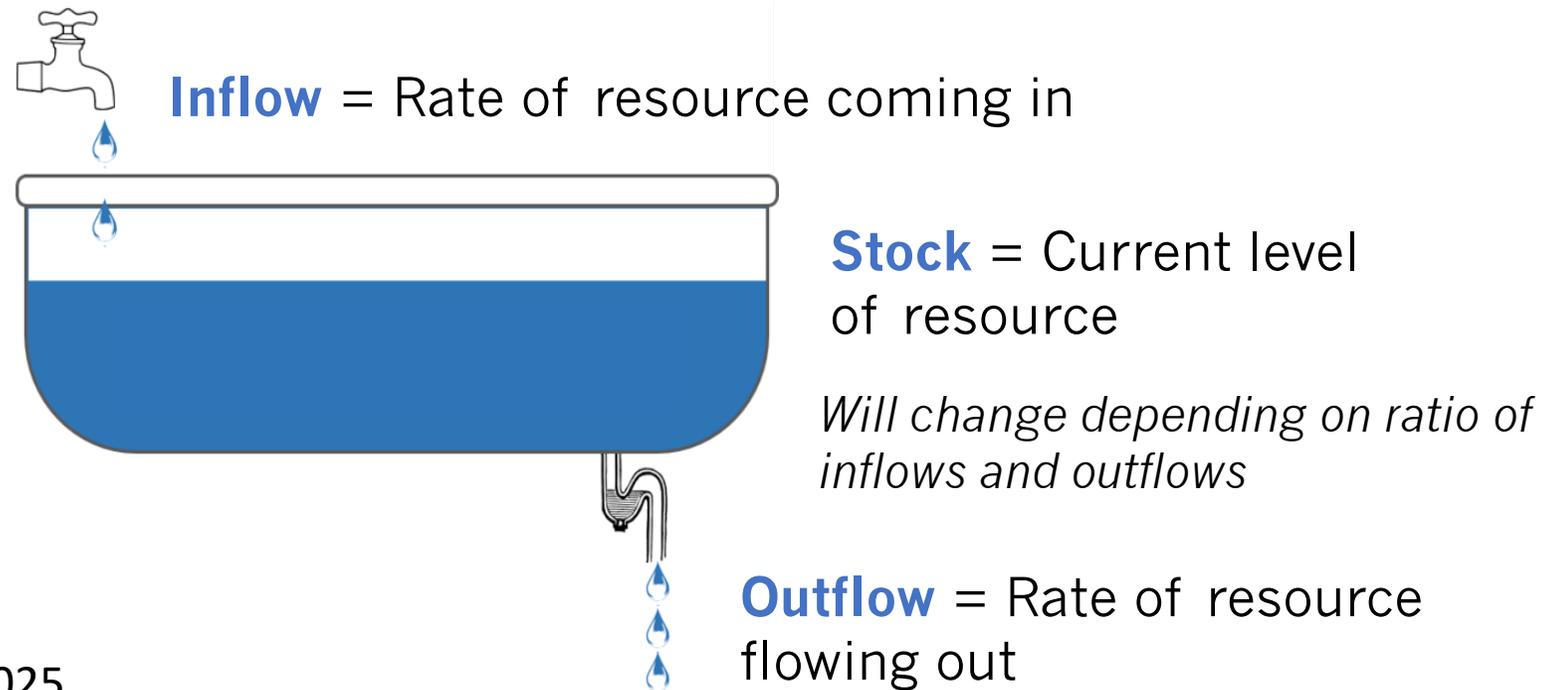
The CNN logo and "politics" are in the top left. Navigation links include "The Biden Presidency", "Facts First", and "2022 Midterms". "Audio" and "Live TV" are in the top right. The main headline is "Medicare and Social Security insolvency is right around the corner". Below the headline is a profile picture of Zachary B. Wolf and the text "Analysis by Zachary B. Wolf, CNN" and "Updated 5:48 PM ET, Thu February 9, 2023".

# The Future of Social Security

- Consider a different question: *Will Social Security continue to collect payroll taxes?*
- *If yes, what will the money be used for?*

## The reality from the Trustees:

Depletion in 2035 will still pay 80% of benefits

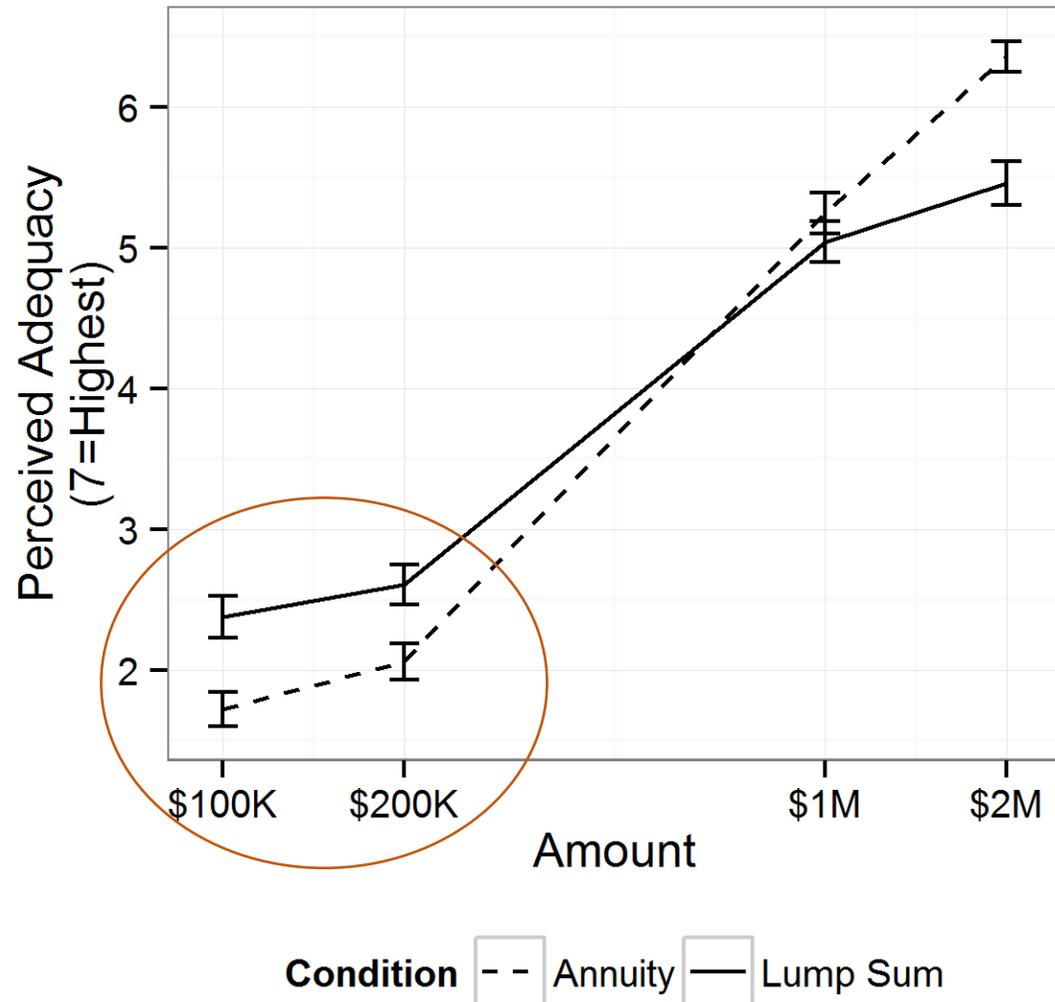


# Besides Social Security, what other retirement income should I consider?

- Social Security is estimated to provide around 40% of your pre-retirement income (for average earners)
- Advice for a comfortable retirement typically suggests aiming for 70%-80% of your pre-retirement income
- Other sources of possible income: drawdown of savings (e.g., IRA, 401k), pensions, rental properties, reverse mortgage, life annuities
- A challenge: converting a lump sum savings balance into monthly income



# Illusion of wealth for retirement savings



Is a retirement plan balance of \$200,000 enough?

Is \$1,000 monthly income enough?

Compared to monthly income, lump sums feel larger and more adequate for lower wealth amounts.



# Decumulation option #2: Life Annuities

- Life annuities allow retirees to convert a large savings amount (e.g., from a 401k or IRA) into a stream of monthly payments that continue until the annuitant dies
- Economists think life annuities should be an attractive solution for most retirees (Yaari 1965)
- Yet only 1% to 6% of retirees buy them (Kunreuther et al. 2013)
- New legislation from the US government (SECURE Act) allow life annuities to be part of 401(k) plans as a decumulation option
- We've run several studies to better understand what people like or dislike about life annuities....



# Decumulation option #2: Life Annuities



- In our studies, we find that relative to their expected value, some attributes are undervalued (annual increases) while others are overvalued (guarantees)
- In addition, a substantial proportion of respondents do not like any annuities regardless of expected value (~20% reject all options)
  - No significant effects of age, education, or income
  - Annuities disliked by individuals with highest savings (>\$150K), high risk aversion
  - Annuities most strongly disliked by those who see them as unfair

# Challenges in getting decumulation right

---

1. Estimating longevity
2. Decision making during retirement
3. Predicting your future
  - Changes in U.S. policy
  - Focusing on personal goals and risks

# A glimpse into U.S. retirement policy

---

- SECURE Act – passed & signed December 2019
- SECURE Act 2.0 – passed April 2022

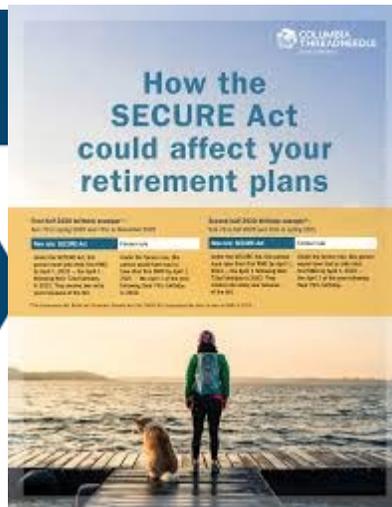


The retirement crisis in America is real, and will only get worse without easier pathways to saving and encouraging workers to start planning for retirement earlier in life.

# Annuity rollout in U.S. policy

- Included in the SECURE Act:
  - Promotion of lifetime income solutions such as annuities within employer retirement plans
  - Safe harbor protects plans that offer annuities
  - Annuities are portable across employer plans

HOW THE SECURE ACT  
CHANGES  
RETIREMENT  
PLANNING



*Guaranteed income products provide you with monthly income that will last as long as you do, like having a paycheck for the rest of your life.*

Suzanne Shu, Professor,  
UCLA Anderson School of Business

UNIVERSITY  
OF  
CALIFORNIA

INCOME  
FOR LIFE

## DEFERRED LIFETIME INCOME DECISION GUIDE

We're living longer. Our money needs to last longer, too. Meet the latest innovation to help you prepare for those extra years: **Deferred Lifetime Income**. An enhancement to the UC Pathway Funds designed to help your retirement savings last a lifetime.

Is Deferred Lifetime Income right for you? Use this guide to learn more and decide.



# Retirement Challenge: Predicting the Future

Based on a sample taste of plain yogurt, can you predict how much you'll enjoy eating a full serving of it tomorrow?

What if you had to eat it every day for a week?



When you were 15, would you have predicted that your goals would be what they are today?

## Prospective Hindsight: Using our natural ability to tell stories for things that “already happened”



You are in your 70's and living your dream retirement. Your family is comfortable and successful. How did you get here?

You are in your 70's and had to move in with your kids because you ran out of money. No one is happy about the situation. How did you get here?

# Having prioritized goals, a retiree can now think about personalized next steps, hopefully with an advisor

## 1. If financial independence is important

- Life annuities
- Optimizing SSA claiming

## 2. If lifestyle is important

- Adequate \$ for spending early

## 3. If giving back is important

- Use money and time to help others



### Giving Back

Contributing to causes important to me with my time and/or my money.



### Social Engagement

Enjoying the company of friends and family and not feeling lonely.



### Ending Life With Dignity

Preparing to experience my last days my way.



### Control

Feeling I still "drive" my own life.



### Lifestyle

Maintaining my current, or a better, lifestyle.



### Second Career

Beginning a new career, starting a business or working on my own terms.



### Self-Improvement

Investing in personal growth, such as taking classes and learning new skills.



### Family Bequests

Leaving money to my family, and doing so with minimal taxes and hassles.

Source: Benartzi and Lewin, Thinking Smarter: Seven Steps to Your Fulfilling Retirement...and Life (2015)

# Resources Reminder

---

## Resources for financial advice:

- <https://hr.cornell.edu/browse-self-service/contact-benefits-providers>
- Financial advice for endowed colleges: Fidelity, TIAA
- Financial advice for contract colleges: NYSLRS, Corebridge, Fidelity, TIAA, Voya
- Cornell-provided free financial webinars by Fidelity & TIAA
- [Cornell Academics and Professors Emeriti \(CAPE\)](#)
- <https://www.consumerfinance.gov/consumer-tools/retirement/>
- <https://www.ssa.gov/retirement/plan-for-retirement>
- <https://www.aarp.org/money/retirement/>

# 3 DECUMULATION TAKEAWAYS

---

- Decumulation decisions are complicated and interconnected, with many uncertainties to predict
  - Retirement income solutions need to be highly personalized
  - Trusted partners are an important element in delivering lifetime income solutions
- 

