

How Do We Encourage People to Prepare for Retirement?



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The Classical Economic Model



- People are sufficiently rational that they save enough for retirement
- They know how to invest their money optimally
- They know how optimally spend down the money so they will not run out

What is the Role of Pensions & Retirement Plans in this Rational World?

- Tax advantages
- Lower transaction costs (e.g., payroll deduction)
- Limit adverse selection by pooling mortality risk
- Government plan: social insurance for cases of disability or unemployment

Now, Let's Be Realistic

- Fewer than 1 in 5 can correctly compute compound interest over 2 years
- Half cannot explain difference between a stock and a bond
- On average, employees rate their employer's stock as less risky than a diversified stock portfolio



Plus, Many Cognitive Biases

- Self-control problems
- Choice overload
- Sensitivity to framing
- Naïve view of diversification



A Highly Complex Choice Environment

Complicated Problem

Many choices to make

Many options to choose from

Uncertainty about the future

+

Difficult Choice Context

Limited financial literacy

Limits to learning from experience

The Result?



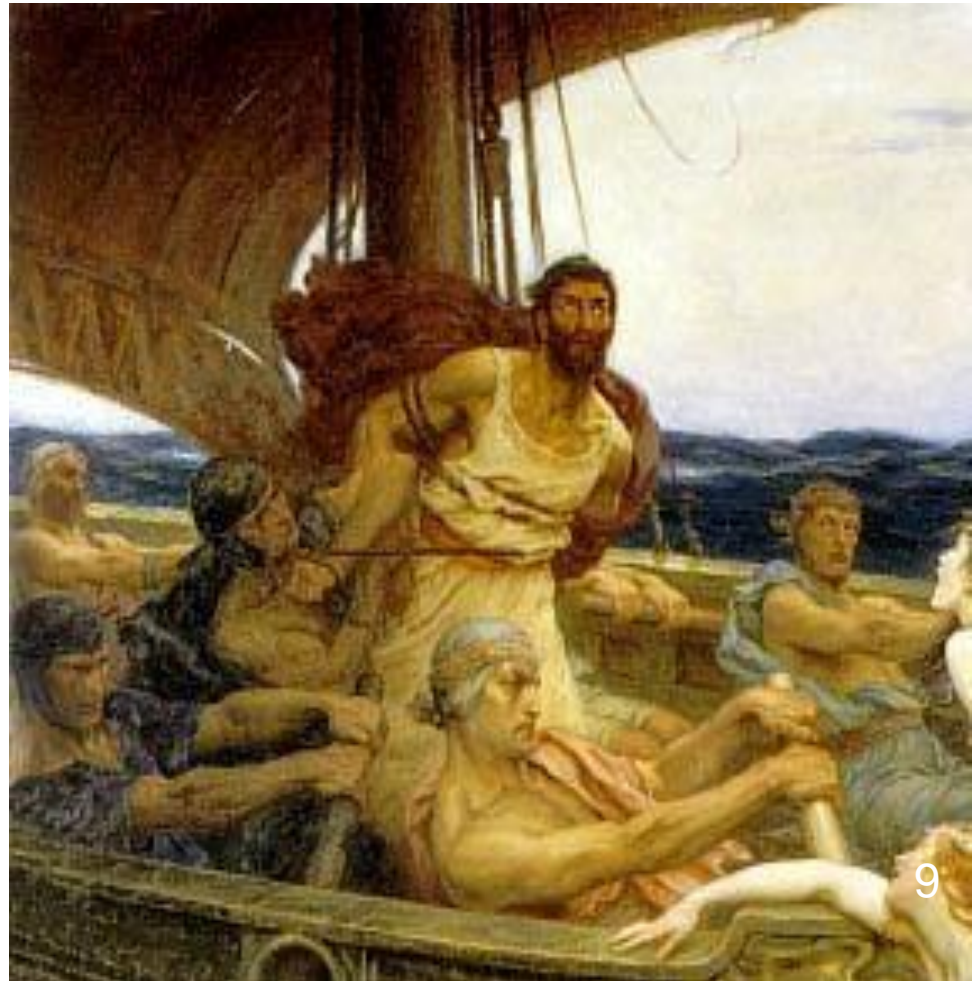
Cognitive Biases

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The Story of Odysseus (Ulysses) and the sirens

He ordered his men to
tie him to the mast
and not let his future
self free no matter
how much he begged

“Commitment Device”
to overcome self-
control problems





Clocky is an alarm clock for people who have trouble getting out of bed. When you hit the snooze button, Clocky will roll off of the nightstand, fall to the floor, and runaround the room, searching for a place to hide.

Costly Commitments Even More Effective



Financial Commitment Devices

- Payroll Deduction
- Automatic enrollment
- Automatic escalation
 - “Save More Tomorrow”



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Too Many Choices?

Shoppers in upscale grocery store encounter tasting booths for jams:

6 jams: (40% stopped); **30%** bought

24 jams: (60% stopped); **3%** bought

(Iyenger & Lepper, 2000; B. Schwarz, 2000)



Too Many Investment Options

- More choices also means that individuals are less likely to make *any* decision
 - For every 10-option increase, individuals' participation probability declines by about 2%
 - (Iyengar & Jiang, 2005)
- Key Lessons
 - Provide *structured* choice
 - Diversified funds as default option



Cognitive Biases

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Which Would You Favor?

- Imagine that the US is preparing for the outbreak of an unusual Asian disease which is expected to kill 600 people.
- Two alternatives have been proposed for the of the
 - A : have estimates
 - B : WS: saved
 - pro two-
 - thir
- Which
- 72%



Which Would You Favor?

- Imagine that the US is preparing for the outbreak of an unusual Asian disease which is expected to kill 600 people.
- Two alternative plans have been proposed by the government. The estimates of the consequences of each plan are as follows:
 - A : If 400 people die
 - B : If 200 people die
- Which plan do you favor?
- 78% of the respondents



Framing length of life

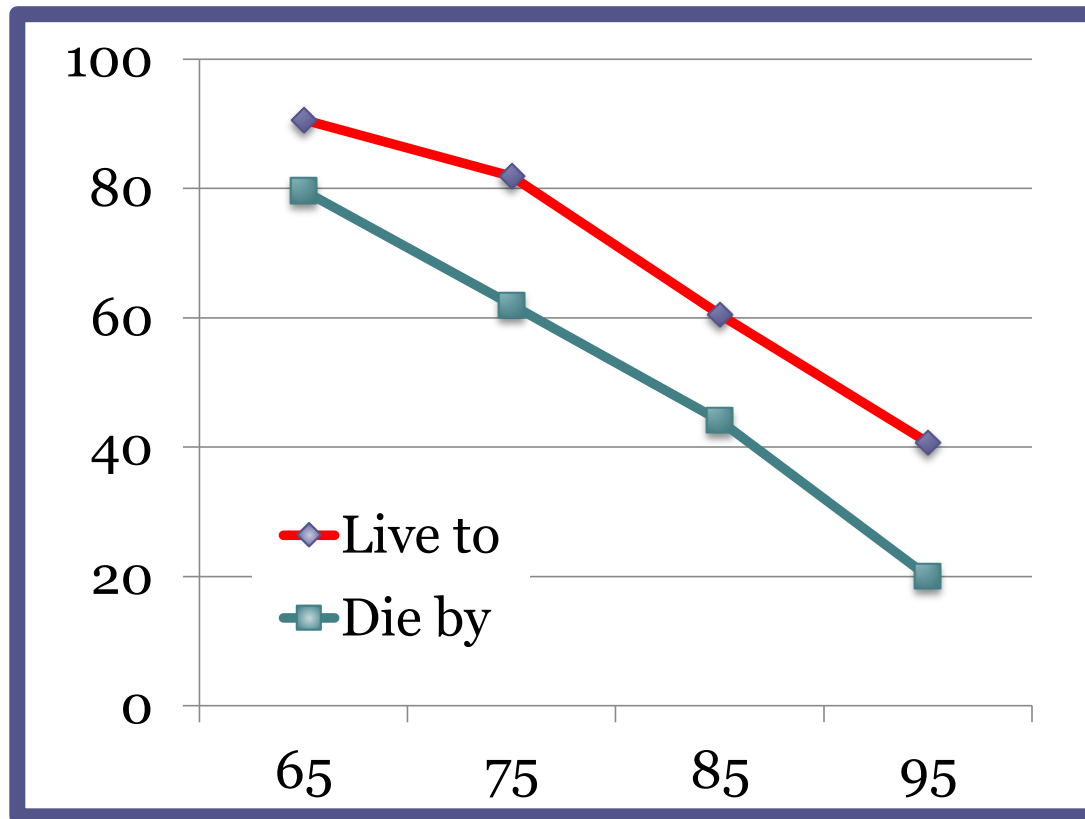
What is the chance that you will **live** **to** age:

65?

75?

85?

95?



What is the chance that you will **die** **by** age:

65?

75?

85?

95?

Source: Payne et al. (2012) "Life Expectancy as a Constructed Belief"

Framing Annuities

- In an *investment frame*, annuities look unattractive
 - They appear risky
 - They are illiquid
- In a *consumption frame*, annuities look like a valuable form of insurance
 - Guarantees consumption no matter how long one lives



Results

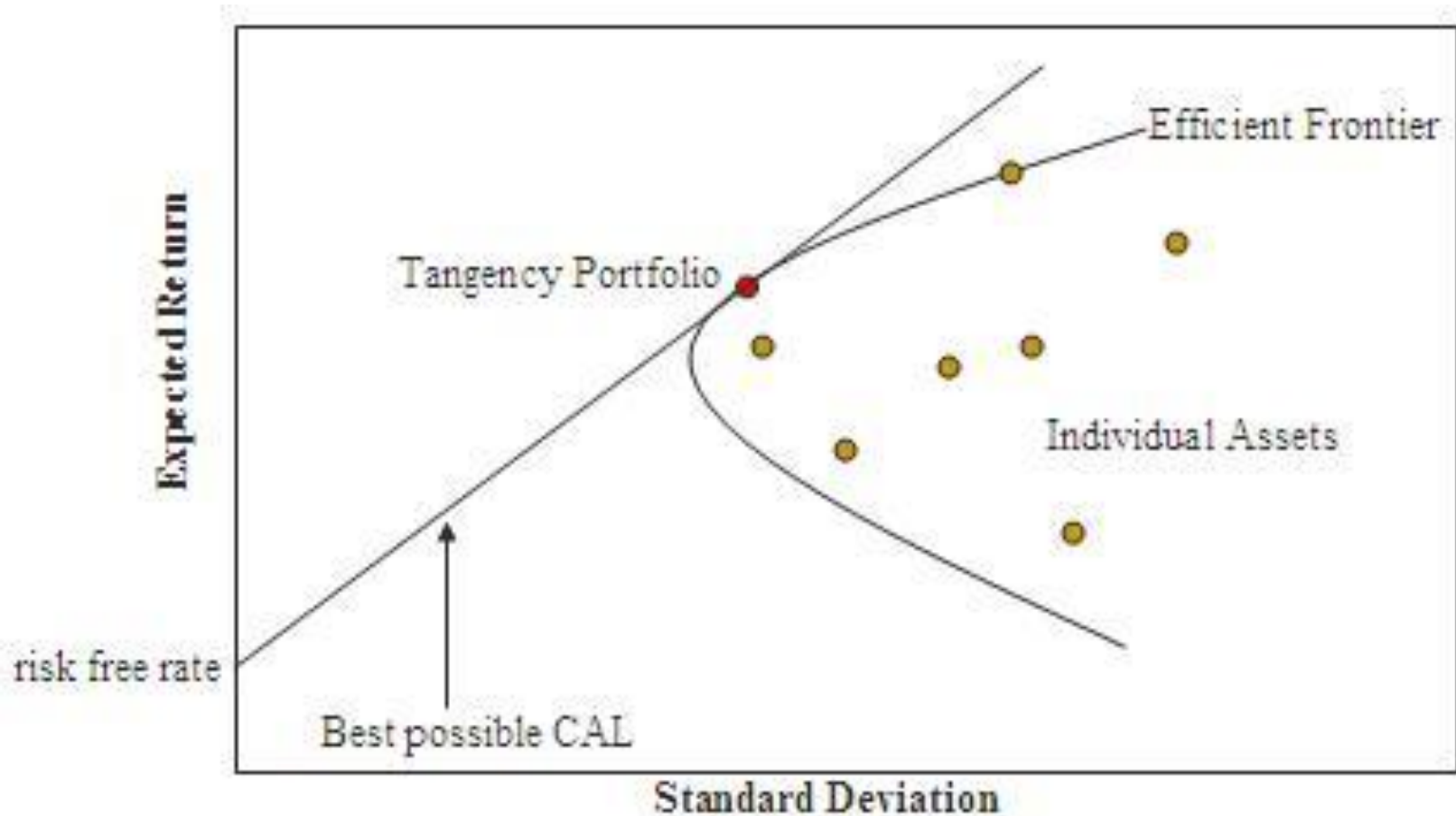
- When annuities presented in an investment frame, *only 20% of consumers preferred an annuity to traditional savings vehicle*
- When presented in a consumption frame, *70% preferred the annuity*



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How Financial Economists Say We Should Diversify



How Real People Diversify

- If there are 5 options, put 1/5 of money in each!
 - “Naïve Diversification”
- No attention paid to covariances, correlations, etc.
 - If offer more equity funds, more money goes to equity. If offer more bond funds, more money goes to bonds. *This is true even if risk-return frontier unchanged!*
 - (Brown, Liang & Weisbenner, 2007)



An Experiment in Portfolio Diversification



- Sample: Harvard MBA and Wharton undergrads
- Offered ability to allocate money across four mutual funds
 - Each of the four funds was an S&P 500 index fund
 - All were offered by reputable mutual fund families
 - Provided with a prospectus for each fund
 - Fee structure differed
 - Front-load versus annual expense charge

Allocating a Portfolio

- The optimal / rational / efficient answer?
 - All funds mirroring same index - so investments virtually identical
 - Thus, rational response is to allocate 100% of assets to the lowest expense fund
- What did they do?
 - Most allocated across all four funds!



So How do We Encourage Unsophisticated Individuals to Plan for Retirement?

Answer: Plan Architecture

1. Put on Auto-Pilot

- Automatic enrollment
- Automatic escalation
- Automatic diversification
- Automatic rebalancing



2. Simplify

- Offer fewer options
- Make choices easy to compare on dimensions that are most relevant
- Simplify enrollment process

How to Simplify a Choice

To enroll in the Helpful Corporation Savings Plan, check below and return this form

☐ Yes, please enroll me in the Helpful Corporation Savings plan at a 5% contribution rate invested in a diversified target retirement date fund.

Note: you may enroll with other contribution rate and investment options online at any time <http://www.helpful.com/benefits/savings>

3. Planning Aids

1. **Select a 30 minute time slot right now to complete the online contribution to your Supplemental Retirement Account (SRA) during the next week.**
2. **3 minutes. Check to see if you have the following materials: a) worksheet in your benefits packet ✓, and b) the name and social security number of a beneficiary ✓.**
3. **Select the amount you want to invest for 2006 (minimum: \$16/month, maximum: \$1,708.33/month), even if you don't know your take-home pay in your first month. If you want, you can change this amount at a later date. This voluntary contribution is tax-deferred, you will not pay taxes on it until you withdraw the funds.**
4. **5 minutes. Select a carrier. If you do not select a carrier, the non-voluntary portion of your funds will be invested in a Fidelity Freedom Fund, a fund that automatically changes asset allocation as people age.**
5. **5 minutes. Now you are ready to complete your worksheet. Complete the worksheet even though you may be unsure of some options. You can change the options in the future.**
6. **Take your completed worksheet to a computer that is available for 20 minutes. If you like, you can use the one in the Human Resources office.**
7. **15-20 minutes. Log on to Flex Online and complete your online SRA registration within the 20 assigned minutes. Be sure to click on the investment company (TIAA-CREF, Fidelity, or Calvert) to complete the application. You need to set up your account – otherwise your savings will not reach the carrier.**



U.S. has Adopted Many of These

- The 401(k) defined contribution plan is the dominant retirement plan in the US today
- Due to better choice architecture:
 - Nearly 80% of eligible workers participate
 - Median total contribution rates = 10% of salary
 - This is up substantially, especially among low income workers, over the past 15 years
 - Use of balanced funds has increased & use of employer stock has dropped

Thank you!

Questions?

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