BEHAVIORAL ECONOMICS AND RETIREMENT SAVINGS OUTCOMES

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What is Behavioral Economics?



Behavioral economics incorporates insights from economics and other behaviorally oriented disciplines including psychology, sociology, anthropology, and cognitive neuroscience,

to enrich standard economic models in ways that improve our ability to understand and predict human behavior, market outcomes, and public policy





What is Behavioral Economics?

Which Horizontal Line is Longer?



Which Horizontal Line is Longer?



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



Choice Architecture

Choice architecture

The design of the environment and context in which choices are made



- Process around the choice
- Structure of options
 - Number of options
 - Order of options
 - Framing of the options/the choice
- Timing of choice
 - When is choice made
 - Frequency of the choice
- Location of the choice

The Choice Architecture of Food





What to eat, and how much to eat, impacted by:



Order of food

- On a menu
- In a cafeteria line
- Size of serving bowl
- Size of plate onto which food is served
- Variety of food
- Description of food
 (e.g., beans vs. farmfresh green beans)

Choice Architecture:

The Process Around Choice



Opt-In

Initial default: Save nothing





Initial default: Save something



The Impact of Automatic Enrollment on Savings Plan Participation



Why Does Automatic Enrollment Work So Well?

- Most people want to save
 - But saving optimally is a complicated decision
- Automatic enrollment makes taking an action that most people want to take simple
- Automatic enrollment simultaneously tackles several different behavioral biases
 - Complexity
 - Present bias (tendency to procrastinate)
 - Bounded rationality (limited financial literacy)
 - Limited attention



The Impact of Active Choosing on Savings Plan Participation



Savings Plan Enrollment Aid

- Steps to Enroll
- Time for each step
- Tips

- Select a 30 minute time slot right now to complete the online contribution to your Supplemental Retirement Account (SRA) during the next week.
- <u>3 minutes</u>. 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 _√_.
- 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.
- <u>5 minutes</u>. Select a carrier. If you do not select a carrier, the non-voluntary portion of your funds mill be invested in a Fidelity Freedom Fund, a fund that automatically changes asset allocation as people age.
- <u>5 minutes</u>. 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.
- 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.
- <u>15-20 minutes</u>. 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.

















The Impact of Planning Aids on Savings Plan Participation







Fraction of Current Pay Allocated to Retirement









Face aged to 2047 with the app AgingBooth

Choice Architecture:

The Structure of the Options



The Number of Investment Options



More investment options \rightarrow

Procrastination

- Give more weight to the default option
- Give more weight to the familiar (home bias)
 - Higher investment in local firms
 - Higher investment in employer stock
 - Lower investment in foreign firms
- Focus on options that are easier to evaluate
- Focus on options listed at the beginning and the end
- Focus on the size of different categories as signals of how to invest

Number of Investment Options





Complexity Attempts to Simplify

The Number of Investment Options



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\$5.00	\$5.00
\$3.50	\$8.75
\$0.00	\$13.50



\$5.00	\$5.00		
\$4.50	\$7.75		
\$4.00	\$8.25		
\$3.50	\$8.75		
\$3.00	\$9.50		
\$2.50	\$10.00		
\$2.00	\$10.50		
\$1.50	\$11.25		
\$1.00	\$11.75		
\$0.50	\$12.50		
\$0.00	\$13.50		

Simple option is least risky



•	•	•••	• • • •	•••	
\$0.00	\$0.00	\$0.00	\$10.00	\$10.00	\$10.00
\$1.50	\$9.25	\$8.75	\$7.00	\$0.75	\$1.25
\$4.25	\$5.50	\$9.75	\$8.50	\$0.00	\$0.75

Simple option is least risky



Simple option is most risky



The Number of Investment **Options**



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Other Simplifying Heuristics

Future Value of SEK1000 Invested Today





Year-End Contribution Rate

Savings Rate Choice



Year-End Contribution Rate

Savings Rate Choice



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?



Savings experiment in India

- Low income country
- Cash wage low-skilled, low-income laborers

Can we help them save?

What Will Help People Save More?



A low savings target ...

... or a high savings target

What Will Help People Save More?



...two separate "accounts"

A single "account"

2 Amounts 40 INR (low) vs. 80 INR (high)



Low vs. High Target



One vs. Two Envelopes



Source: Soman and Cheema (2011). "Earmarking and Partitioning"

Likelihood of Opening Each Envelope



Choice Architecture:

The Timing of 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 <u>http://www.helpful.com/benefits/savings</u>





Monthly Spending Cycles



Fresh Start Moments

Conclusions

