Center for Financial and Economic Decision Making

A LABOR AND POPULATION PROGRAM

Asking for Help: Survey and Experimental Evidence on Financial Advice and Behavior Change

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Financial Advice

- How to help households make “better” financial decisions
- Some (not-exclusive) approaches to decision support
  - Changes to choice architecture
  - Increase basic decision making skills / financial literacy
  - Access to expert financial advice
- However, relying on experts for (costly) advice can be tricky
  - Supply side: Potential conflicts of interest and incentives
  - Demand side: Do people actually seek out and use information?

Do individuals actually improve their financial behavior in response to advice?

Background Literature

- Many studies of advice-seeking and advice-discounting with conflicting results
  - Uncertainty about decisions predicts advice seeking (Gibbons, 2003)
  - Unsolicited advice can be significantly discounted (Bonaccio and Dalal, 2006; Yaniv, 2004a ; Yaniv, 2004b) or even lead to negative responses(Deelstra, 2003; Goldsmith, 2000; Goldsmith and Finch, 1997)
  - Individuals who pay for advice are more receptive to advice (Gino, 2008)
- Few studies linking individual investor behavior and advice
  - Agnew (2006) study of 401(k) plan participants: trading activity is correlated with advice, but no causal relationship
  - Kramer (2009) study of Dutch investors: portfolio allocations vary with advice, but performance does not
  - Hackethal, Haliassos, Jappelli (2009) study of German investors: in theory, advisors compensate for poor financial literacy but in practice, find the opposite - wealthy and more able investors "outsource" financial management to others

Complementary Analysis Survey+ Experimental Data

Observational study	Experimental study
• Able to measure self-reported use of advice and outcomes in ALP sample of DC plan participants, estimate correlations	•Able to use only simple simulated advice and measure only hypothetical plan choices
•However, problems with selection + reverse causality that are difficult to resolve	•No problems with selection + reverse causality, estimate causal relationships
• Able to measure self-reported interest in advice if offered as employee benefit	• Able to measure actual takeup of advice in hypothetical scenario

The RAND American Life Panel

Research-driven	• Online panel of now 5000+ households established since 2006 with NIH support. All data ultimately public
Representativeness	• Probability sample with corresponding weights, households recruited without internet given connections
Retention	• Households receive compensation to participate in monthly (or more frequent) surveys
Resources	• Previously collected data on demographics and other financial information is already available for matching
Randomization	• Easy, transparent ways to implement even complex designs
Rapid Results	• For standard surveys, turnaround < 2 weeks

Survey results

- **In June 2009, administered survey to 618 individuals with DC plan; subset also matched to previous surveys on financial literacy**
  - **History, contributions, investment allocation, experience and preferences for financial advice**
- **More than half of the sample had made at least one "mistake": Mottola and Utkus (2009) define four mistakes based on commonly-accepted principles of investing**
  - **Holding a *zero balance in equities***
  - **Holding an equity balance of less than 40% (*overly conservative*)**
  - **Holding more than 95% equity (*overly aggressive*)**
  - **Holding a portfolio that is 100% in one asset class (*underdiversified*)**

Who uses financial advisors?

- **17-22% of plan participants consulted an advisor about DC plan and almost 75% say they would take it up if offered as a benefit**
- **Most respondents placed the highest value of an advisor in giving advice in investing (vs setting overall contribution goals or other retirement goals planning)**
- **Of all demographic characteristics including measured and self-assessed financial literacy, only marital status significantly predicts use of an advisor**
- **Those who use an advisor are more likely to make contributions, to meet employer match, to have reduced their contributions in 2008 (as compared to 2007), to hold less stocks and more bonds, and to make fewer investment "mistakes"**
  - **But once we control for demographics and financial literacy, these differences aren't significant**

Relationship between advice and outcomes?

- **No selection on the usual suspects (including financial literacy) but cannot rule out selection on unobservables**
- **Reverse causality problem: we also find that experiencing losses in one's portfolio in 2007 or reducing one's contribution is significantly correlated with takeup of advice in 2008**
- **Attempted IV similar to Hackenthal et al (2009) but poor results…**
  - **# of financial advisors per capita in the state**
  - **Voter participation in state**
  - **Log 2006 median state income**
  - **Fraction of population with college degree in state**
- **We also have no way of establishing quality or quantity of advice**

Experimental Design

- **Although restricted to a hypothetical situation, experimental analysis allows uniform advice and reverse causality does not arise**
- **2070 ALP members completed the experiment from June-July, 2009**
- **Hypothetical portfolio allocation task : invest $10,000 in a money market fund, a bond market index fund, an S&P 500 index fund, a small cap value index fund, a REIT index fund, and a global equity index fund**

Sample Screenshot of Task Description

In this section, we have some questions for you about possible investments in mutual funds. A mutual fund is a form of investment that pools money from many investors and invests their money in stocks, bonds, and/or other securities.

Suppose you were offered the following selection of mutual funds for investing your money in a retirement savings account(s). Below is a table that provides a brief description of the mutual funds, showing the annual fee charged by each fund and the annual rate of return on each fund over the past 5 years.
Suppose you have six options in which to invest.

Fund Choices	Fees	1 Year Return
Money Market Fund	0.21%	2.04%
Total Bond Market Index Fund	0.20%	1.96%
S&P 500 Index Fund	0.18%	-43.32%
Small Cap Value Index Fund	0.23%	-45.54%
REIT Index Fund	0.21%	-57.05%
Global Equity Index Fund	0.72%	-53.12%

On the next screen, we'll ask you what percentage of your money you would like to allocate to each fund.

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Choice Treatment

- **Participants were randomly assigned to three groups:**
  - ***Control:*** **No advice further information or support**
  - ***Default Treatment*****: All receive advice**
  - ***Affirmative Decision*** **Treatment: Choose whether or not to receive advice**

Screenshot of Task Description for Affirmative Decision Treatment

In this section, we have some questions for you about possible investments in mutual funds. A mutual fund is a form of investment that pools money from many investors and invests their money in stocks, bonds, and/or other securities.

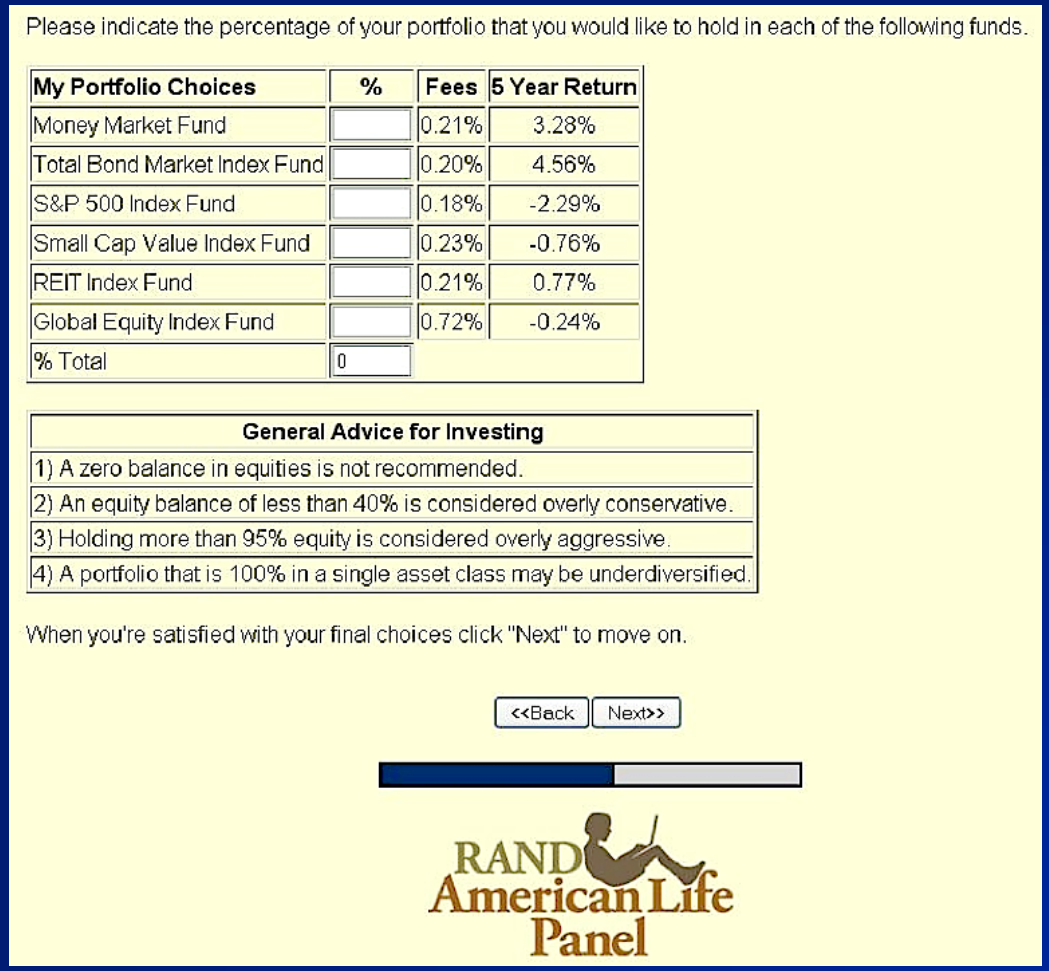
Suppose you were offered the following selection of mutual funds for investing your money in a retirement savings account(s). Below is a table that provides a brief description of the mutual funds, showing the annual fee charged by each fund and the annual rate of return on each fund over the past 5 years.
Suppose you have six options in which to invest.

Fund Choices	Fees	5 Year Return
Money Market Fund	0.21%	3.28%
Total Bond Market Index Fund	0.20%	4.56%
S&P 500 Index Fund	0.18%	-2.29%
Small Cap Value Index Fund	0.23%	-0.76%
REIT Index Fund	0.21%	0.77%
Global Equity Index Fund	0.72%	-0.24%

On the next screen, we'll ask you what percentage of your money you would like to allocate to each fund. Would you like to get some general advice while making these choices?

- ○ Yes
- ○ No

Screenshot of Task Screen: Rules Treatment



Please indicate the percentage of your portfolio that you would like to hold in each of the following funds.

My Portfolio Choices	%	Fees	5 Year Return
Money Market Fund		0.21%	3.28%
Total Bond Market Index Fund		0.20%	4.56%
S&P 500 Index Fund		0.18%	-2.29%
Small Cap Value Index Fund		0.23%	-0.76%
REIT Index Fund		0.21%	0.77%
Global Equity Index Fund		0.72%	-0.24%
% Total	0		

General Advice for Investing
1) A zero balance in equities is not recommended.
2) An equity balance of less than 40% is considered overly conservative.
3) Holding more than 95% equity is considered overly aggressive.
4) A portfolio that is 100% in a single asset class may be underdiversified.

When you're satisfied with your final choices click "Next" to move on.

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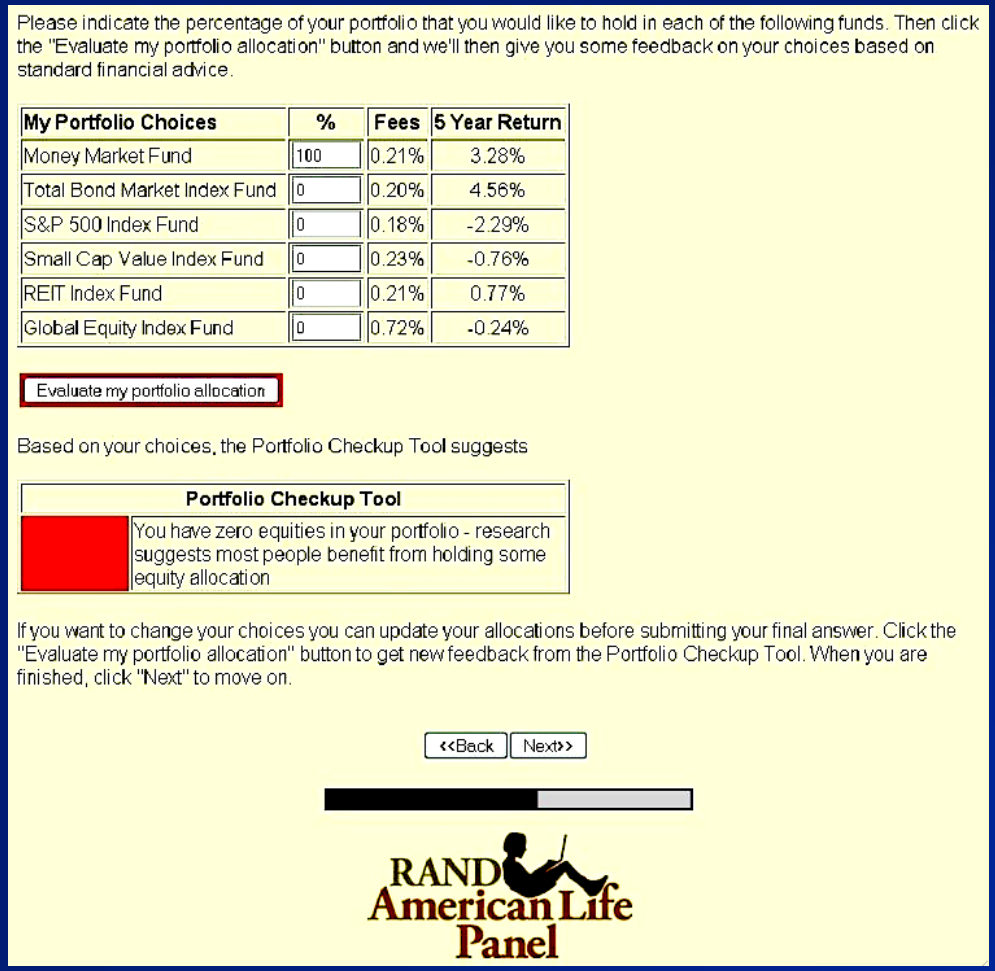
Screenshot of Task Screen: Portfolio Checkup Treatment



Please indicate the percentage of your portfolio that you would like to hold in each of the following funds. Then click the "Evaluate my portfolio allocation" button and we'll then give you some feedback on your choices based on standard financial advice.

My Portfolio Choices	%	Fees	5 Year Return
Money Market Fund	100	0.21%	3.28%
Total Bond Market Index Fund	0	0.20%	4.56%
S&P 500 Index Fund	0	0.18%	-2.29%
Small Cap Value Index Fund	0	0.23%	-0.76%
REIT Index Fund	0	0.21%	0.77%
Global Equity Index Fund	0	0.72%	-0.24%

Evaluate my portfolio allocation

Based on your choices, the Portfolio Checkup Tool suggests

Portfolio Checkup Tool	
	You have zero equities in your portfolio - research suggests most people benefit from holding some equity allocation

If you want to change your choices you can update your allocations before submitting your final answer. Click the "Evaluate my portfolio allocation" button to get new feedback from the Portfolio Checkup Tool. When you are finished, click "Next" to move on.

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Who Chooses Advice?

- About 65% of those in the affirmative treatment choose to receive advice
- Significantly fewer mistakes between advice and no advice
- Likely role of selection on observables and unobservables
  - Those who choose advice are likely to be older and wealthier
  - However, those who choose advice are also significantly less financially literate. This is even more true for self-reported literacy status than measured literacy.
  - Relatively low R-squared of models predicting advice seeking based on financial literacy and other demographic characteristics.

Treatment Effects

- Average outcomes for *default advice* treatment are not significantly different than the control.
- On the other hand, the *affirmative advice* group are less likely to make mistakes relative to the control
  - Effect is larger when controlling for individual characteristics including financial literacy
  - To control for selection on other unobservables, we pool control and affirmative decision and use treatment assignment as IV for advice, find smaller but positive effect
- No difference between those receiving either treatment format, but use of portfolio tool seems to help the least literate.

Summary

- **No consistent statistically significant predictive relationship between reported use of an advisor and plan related outcomes; in particular, use of an advisor not predicted by financial literacy**
- **Experimental evidence suggests that policies that giving people advice by default may not have the desired effect : unsolicited advice did not work**
- **Offering very basic advice can have a positive compensating effect for poor financial literacy (although this is likely to be modest)**
- **However a large fraction of observed differences between those taking up advice and those who do not should be attributed to selection. Selection on unobservables such as motivation is still poorly understood (by us at least).**


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