

# The Role of Information on Retirement Planning: Evidence from a Field Study

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# Field Study

- 10-hour online financial education course
  - 45 credit unions randomized to provide offer
- Baseline 'Wave 1' Survey Sep 2009
- Oct-Dec 2009 Fall Cohort
  - Treatment
- Follow up 'Wave 2' Survey Dec-Jan 2009-10
- Feb-April 2010 Spring Cohort
  - Control
- Follow up 'Wave 3' Survey May 2010

# Information Shifting Savings Behavior

- Signal of focus on retirement planning: using a budget or spending plan.
  - Mechanism helps people to limit consumption in order to allocate income towards savings.
- Use employer-based benefits (accounts, life insurance coverage and other benefits)
- Non-employer based account such as an Individual Retirement Account (IRA).
- Designating savings for an emergency that is the equivalent of 3 months income; avoid savings plan being derailed

# Estimating Effects

- 1,052 employee surveys
- 729 in the control group
- 323 in treatment group

Actual employer-based retirement account contributions for 220 employees.

- Jan 2009 to Dec 2012 (24 periods)

## Panel Specification

$$y_{it} = \beta_1 T_i + \beta_2(W_2) + \beta_3 T \times W_2 + \beta_4 W_3 + \beta_5 T \times W_3 + X_i + \epsilon_{it}$$

X = controls including income, assets, age, sex, minority, college, homeownership, test score and number of children.

# Survey Questions

## *Financial Knowledge:*

- ① How much do you know about credit scores and credit files?
- ② How much do you know about investing for retirement?
- ③ How much do you know about interest rates and loans?
- ④ How much do you know about stocks and bonds?

## *Financial Behaviors:*

- ① Do you have an IRA retirement savings/investment account?
- ② Do you have a weekly or monthly spending plan or budget?
- ③ I am taking advantage of all my retirement and insurance benefits at work.
- ④ I have at least three months expenses set aside in a readily accessible account (e.g. money market mutual fund).

# Overall Means

	N	Mean	StDev
IRA	1079	0.516	0.500
Budget	1083	0.416	0.493
Insurance/benefits	1089	0.779	0.415
3 Months Savings	1089	0.479	0.500

# Group Differences

	Control	Treatment	Total
Married	0.736* (0.441)	0.684 (0.466)	0.720 (0.449)
Child Dummy	0.703*** (0.457)	0.788 (0.410)	0.728 (0.445)
College	0.324*** (0.468)	0.236 (0.425)	0.297 (0.457)
Age 18-35	0.404* (0.491)	0.343 (0.476)	0.386 (0.487)
Observations	700	301	1001

Figure: Having IRA by Age and Wave

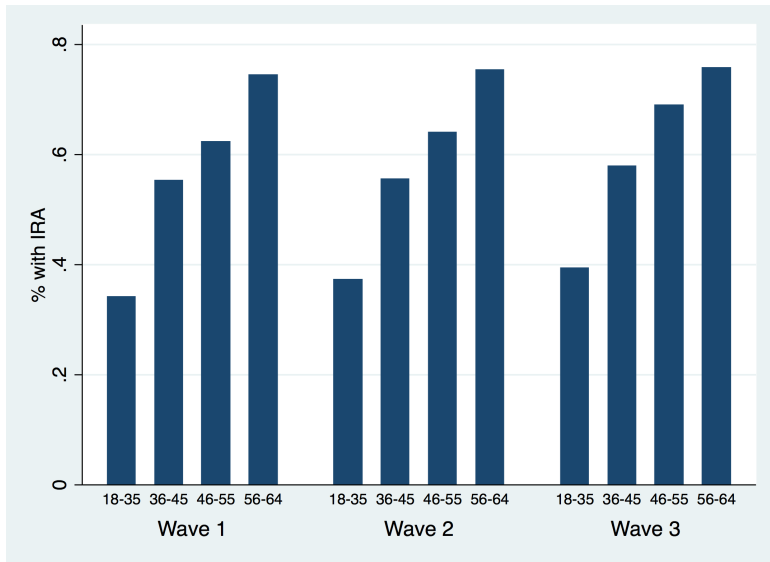




Figure: Retirement Knowledge (Self-Assessed)

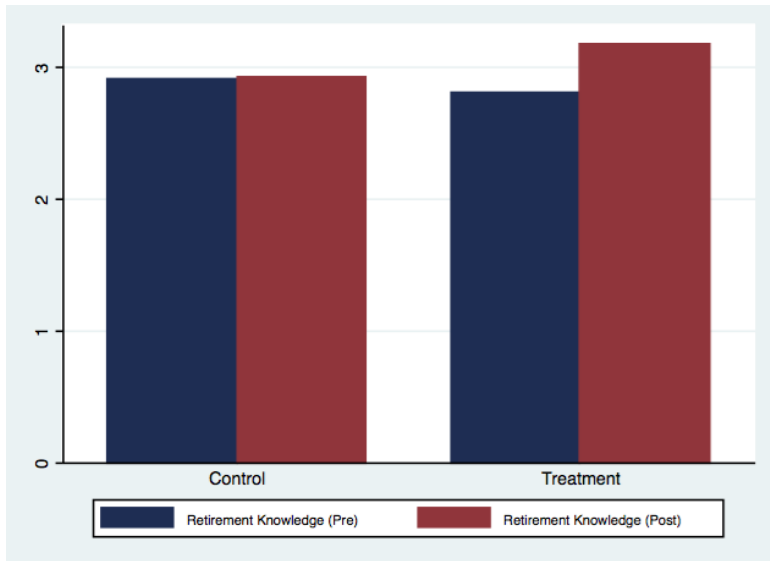
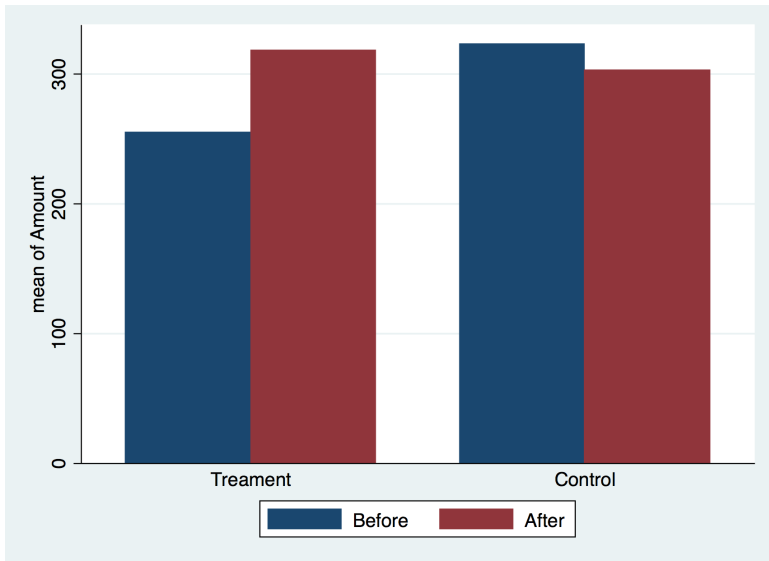


Figure: Retirement Amount Changes: Only Cash Contributions (actual)



	Self-Assessed Knowledge Type (scaled between 0 and 1)			
	Credit Score	Interest Rate	Stock and Bond	Investment
	(1)	(2)	(3)	(4)
Wave 2	-0.0122 (0.0151)	-0.0179 (0.0144)	-0.0202 (0.0134)	0.00498 (0.0135)
Wave 3	0.0386** (0.0151)	0.0285* (0.0146)	0.147*** (0.0125)	0.144*** (0.0129)
Treatment	-0.0471** (0.0196)	-0.0438** (0.0192)	-0.0378** (0.0169)	-0.0231 (0.0174)
Treat × Wave 2	0.0472* (0.0276)	0.0383 (0.0268)	0.168*** (0.0232)	0.120*** (0.0239)
Treat × Wave 3	-0.00608 (0.0287)	0.00626 (0.0285)	0.00700 (0.0233)	0.00522 (0.0235)
Observations	2826	2826	2826	2826

Robust standard errors in parentheses. Controls include income, assets, age, sex, minority, college, homeownership, test score, children.

	Dependent Variable equals one if individual has the following			
	(1)	(2)	(3)	(4)
	IRA	Budget	3 Mos Saving	Enrolled in Benefits
Wave 2	-0.00310 (0.0131)	-0.0162 (0.0154)	0.00549 (0.0154)	-0.0184 (0.0161)
Wave 3	0.0142 (0.0127)	0.0529*** (0.0163)	0.0647*** (0.0164)	0.0329** (0.0159)
Treatment	-0.0589* (0.0309)	0.0171 (0.0341)	-0.0576* (0.0305)	-0.0553** (0.0278)
Treat × Wave 2	0.0743*** (0.0233)	0.0506* (0.0297)	0.0759*** (0.0274)	0.0820*** (0.0296)
Treat × Wave 3	0.0536** (0.0251)	-0.0602* (0.0328)	0.00478 (0.0325)	-0.00612 (0.0346)
Constant	0.133* (0.0683)	0.314*** (0.0899)	0.307*** (0.0785)	0.420*** (0.0959)
Observations	2801	2812	2826	2826

# Dropping Wave 3

Dependent Variable equals one if individual has the following				
	IRA	Budget	Insurance	3 Months Saving
	(1)	(2)	(3)	(4)
Wave 2	0.000680 (0.0254)	-0.0161 (0.0264)	-0.0227 (0.0204)	0.0104 (0.0220)
Treatment	-0.0543* (0.0308)	0.0208 (0.0344)	-0.0582** (0.0273)	-0.0588** (0.0274)
Treat $\times$ Wave 2	0.0710 (0.0432)	0.0531 (0.0487)	0.0872** (0.0376)	0.0694* (0.0390)
Observations	1952	1961	1972	1972

# Employer Retirement Account Contributions

	(1)	(2)	(3)
	Logged Amount	Logged Amount	Logged Amount
Treat1	-0.324** (0.132)	-0.285** (0.135)	
Post1	-0.0704 (0.0557)		-0.0651 (0.0551)
Treat1*Post1	0.565** (0.251)		0.474* (0.284)
Post2	-0.114*** (0.0397)	-0.172*** (0.0535)	-0.122*** (0.0396)
Treat1*Post2		0.575** (0.265)	0.140 (0.254)
Constant	5.488*** (0.0641)	5.473*** (0.0653)	5.488*** (0.0641)
Observations	3188	3188	3188

220 accounts at 10 credit unions from January 2009 to December 2010

# Non-Retirement Behaviors Not Changed

	(1)	(2)	(3)
	EducationSaving	LateFee	AutoSaving
Wave 2	-0.0104 (0.00887)	-0.00540 (0.0126)	-0.00387 (0.0180)
Wave 3	0.00229 (0.00977)	-0.0354*** (0.0124)	0.0191 (0.0189)
Treatment	-0.00301 (0.0201)	0.0464* (0.0263)	0.0191 (0.0298)
Treat × Wave 2	0.00395 (0.0144)	0.00134 (0.0260)	-0.00571 (0.0327)
Treat × Wave 3	-0.0151 (0.0157)	-0.0183 (0.0280)	-0.0187 (0.0338)
Constant	0.0176 (0.0481)	0.152* (0.0892)	0.234** (0.0943)
Observations	2802	2809	2808

# Heterogeneous Effects? IRA Use

	(1) All	(2) No Coll	(3) Female	(4) Parent Fin	(5) Lo Score	(6) Under 46
Wave 2	-0.00214 (0.0132)	-0.00639 (0.0166)	0.00164 (0.0149)	0.0124 (0.0236)	-0.0239 (0.0288)	-0.00743 (0.0168)
Wave 3	0.0152 (0.0127)	0.0210 (0.0160)	0.0169 (0.0144)	0.0424* (0.0228)	-0.00410 (0.0276)	0.00548 (0.0162)
Treatment	-0.0572* (0.0316)	-0.101*** (0.0370)	-0.0609* (0.0348)	-0.0918 (0.0559)	-0.114** (0.0532)	-0.100** (0.0395)
Treat × Wave 2	0.0751*** (0.0232)	0.0839*** (0.0283)	0.0689*** (0.0263)	0.0561 (0.0364)	0.0744* (0.0418)	0.0847*** (0.0299)
Treat × Wave 3	0.0568** (0.0251)	0.0606* (0.0311)	0.0521* (0.0281)	0.0404 (0.0391)	0.0780* (0.0411)	0.0643** (0.0290)
Constant	0.188*** (0.0659)	0.143* (0.0768)	0.213*** (0.0618)	0.187** (0.0885)	0.150 (0.0984)	0.110 (0.0704)
Observations	2801	1948	2273	856	819	1714



# Findings

- Use of IRA: 7-8 percentage point increase (baseline 52 %)
- Use employer benefits: 9 percentage points (baseline 78 %)
- Saving three months of expenses: 12 points (baseline 48%).
- Average employer sponsored monthly contribution: increased about 56% (or \$145)

## Approach:

- Longitudinal data
- Intention-to-treat

Even among employees working in the financial industry; financial education program has potential to influence financial behaviors.

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