
Self-Awareness, Financial Advice and Retirement Savings Decisions

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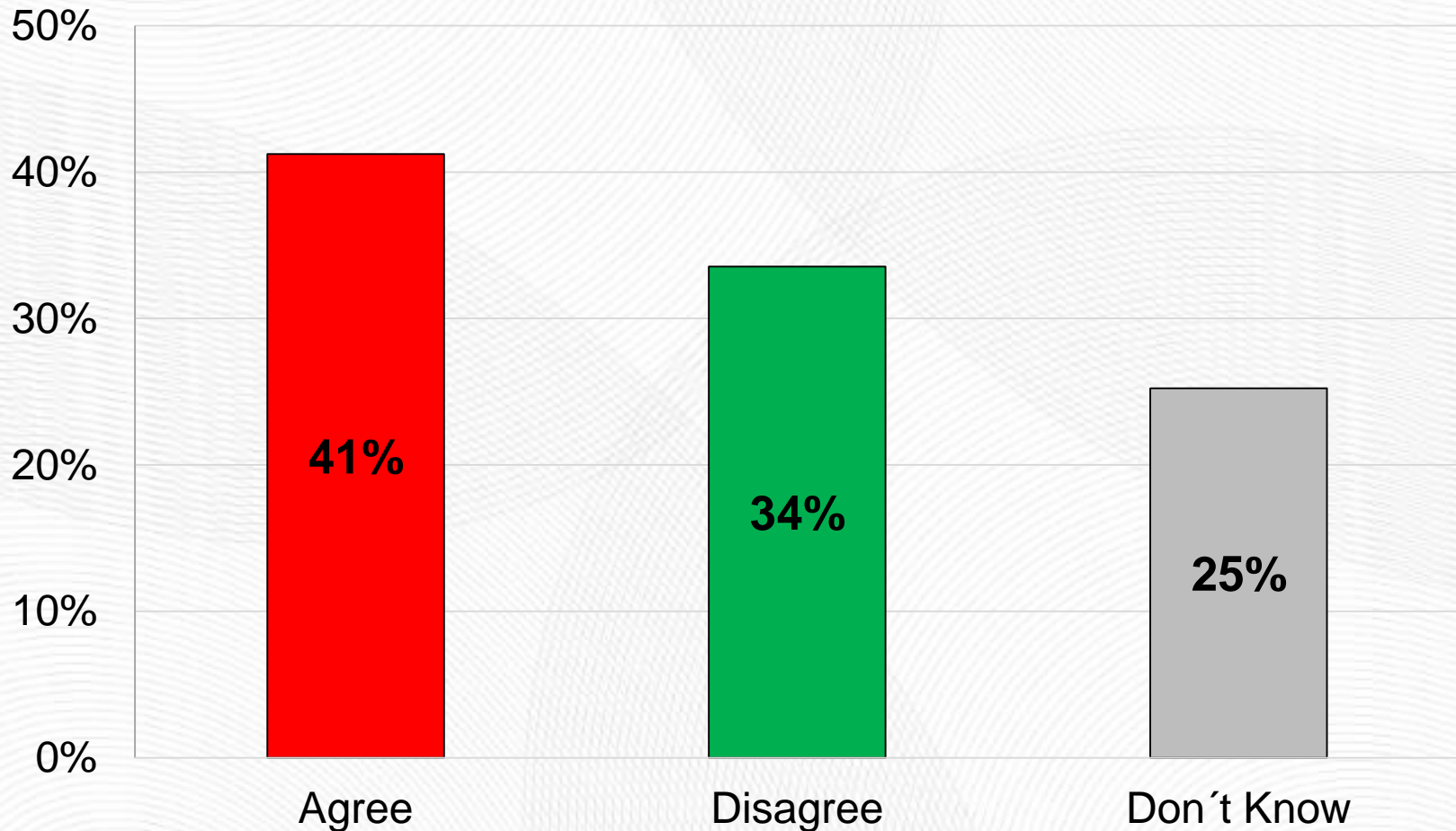
Duke University, NBER, Swedish House of Finance

Three broad categories of people in a specific domain of knowledge. Those who:

1. Know that they know
 - Have high knowledge and thus make informed choices
 2. Know that they don't know
 - Realize that they know little, and don't know how to decide
 3. Don't know that they don't know
 - Do not realize their lack of competence
- Choice architecture with default options generally works well for the first two categories
 - Our paper is about trying to establishing a link between actual retirement decisions and the 3rd category

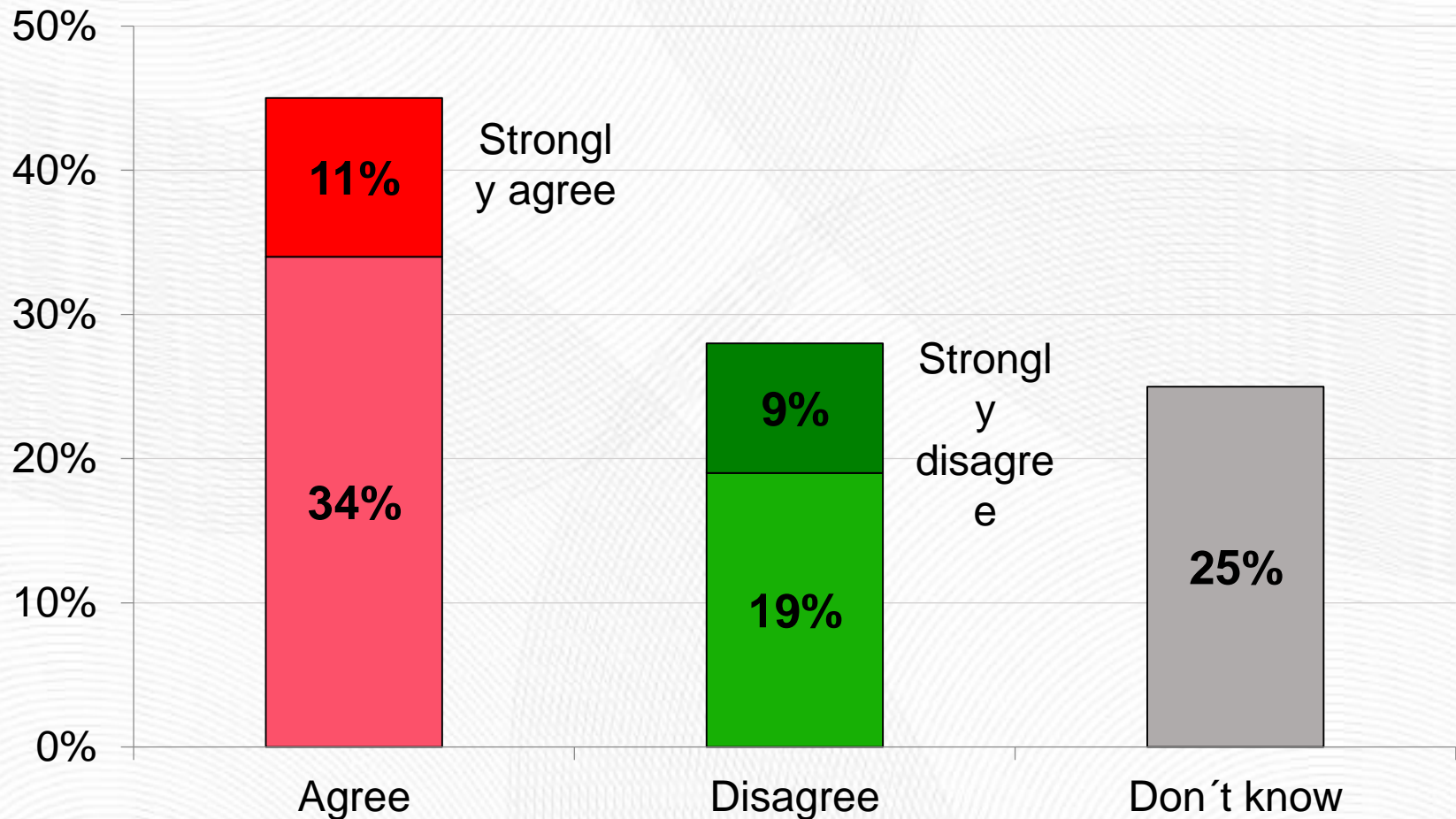
Mututal fund beliefs: U.S. LinkedIn members aged 25-65

”Past returns are more important than fees”



Mututal fund beliefs: Swedes age 18-65

”Past returns are more important than fees”



We administrate a survey through Statistics Sweden to a random sample of 12,000 Swedes aged 18-65 which we are able to match with pension choices.

- We measure knowledge and self-awareness in the cross-section (testing if they know what they know)
- Matched to socio-economic data, complete histories of pension fund choice, and a sample of coordinated changes (a proxy for advisor activity) from the full sample
- 2,502 complete survey responses remaining after matching to characteristics from Statistics Sweden and the Premium Pension Agency (PPA)



1. *Compounding.* Suppose you had \$100 in a savings account and the interest rate was 2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow? Please select one.

 - More than \$102 (92%)
 - Exactly \$102 (2%)
 - Less than \$102 (3%)
 - Don't know (2%)
 - Prefer not to say (1%)
2. *Inflation.* Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, how much would you be able to buy with the money in this account? Please select one.

 - More than today (6%)
 - Less than today (81%)
 - Exactly the same as today (3%)
 - Don't know (8%)
 - Prefer not to say (2%)
3. *Diversification.* Buying a single company's stock usually provides a safer return than a stock mutual fund. Please select one.

 - True (4%)
 - False (76%)
 - Don't know (19%)
 - Prefer not to say (1%)



4. *Saving*. Suppose you were given 10,000 as a gift and wanted to double the amount by saving the money ten years without having to touch it. What interest rate would you require to achieve this goal? Please select one.
- About 15% annual interest rate (6%)
 - About 10% annual interest rate (45%)
 - **About 7% annual interest rate (43%)**
 - Don't know (5%)
 - Prefer not to say (1%)
5. *Bond Pricing*. If interest rates fall, what should happen to bond prices? Please select one.
- **They will rise (23%)**
 - They will fall (17%)
 - They will stay the same (45%)
 - Don't know (14%)
 - Prefer not to say (1%)

Soliciting beliefs

- Subjects assign probabilities of obtaining 0-5 correct answers:

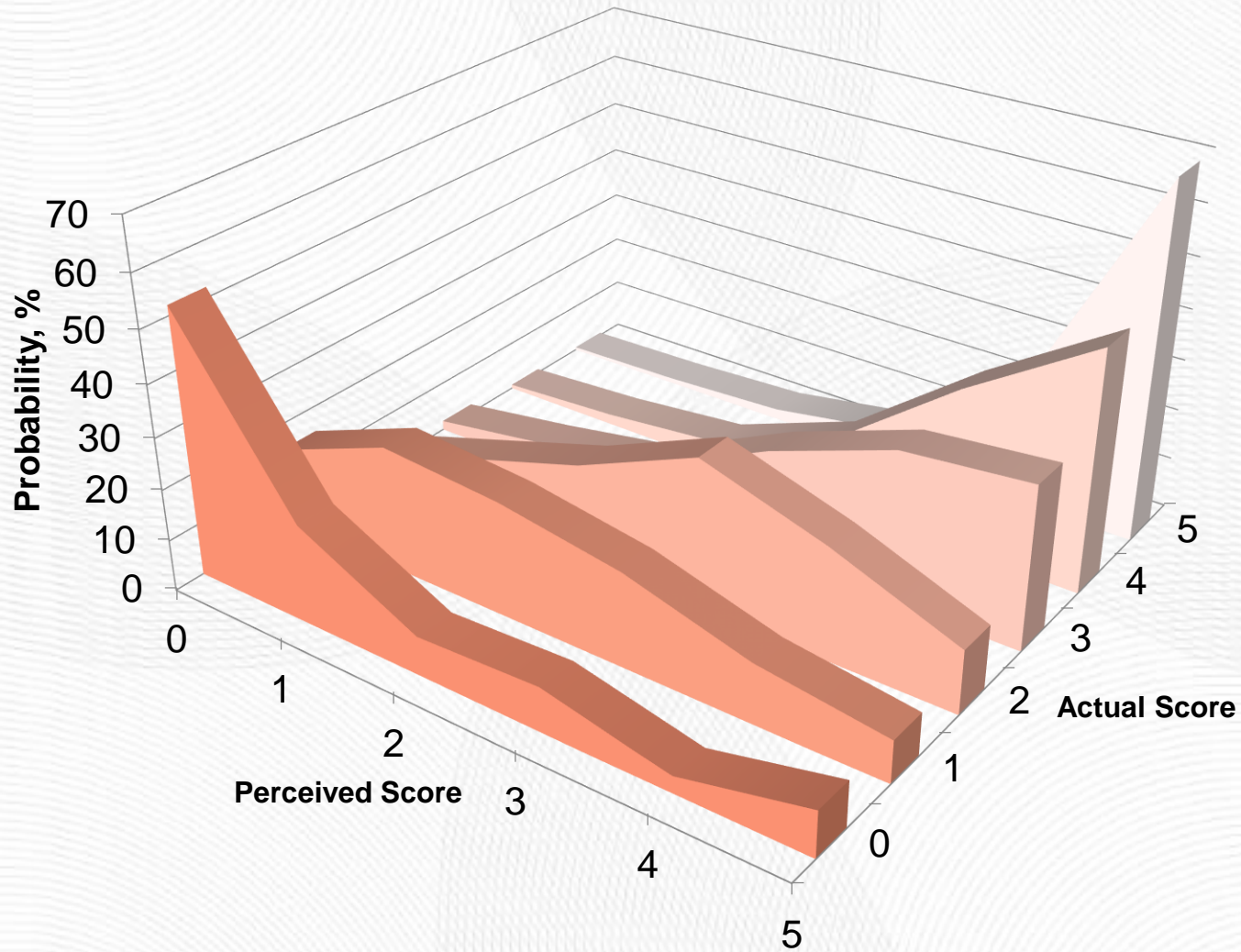
For the previous five multiple choice questions, you could have answered between zero and five correctly. We would like to know how many you think you got correct. Please assign a probability for each possible outcome below.

Enter whole numbers and total should add to 100.

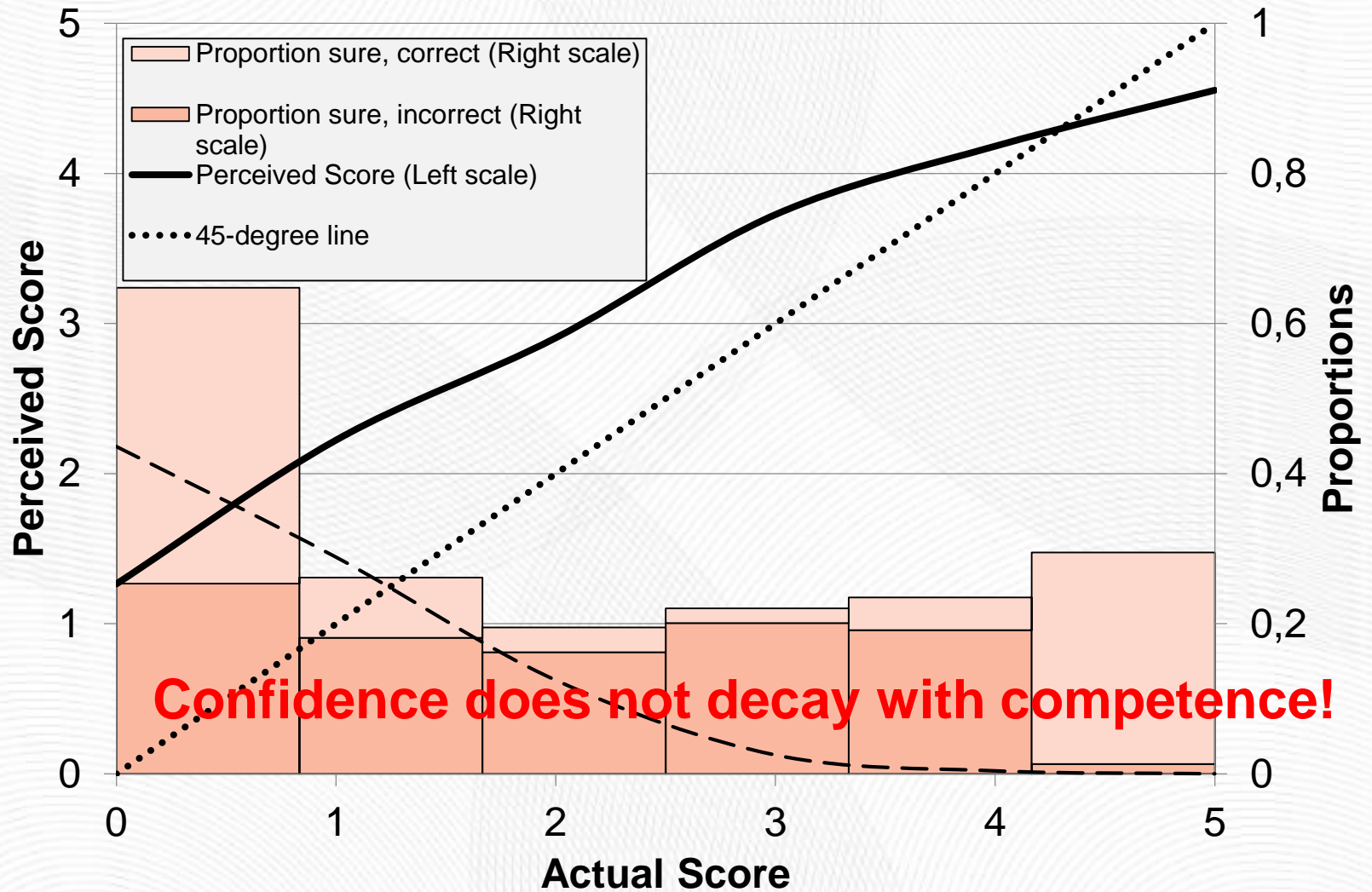
	Total
Probability that I have all five correct	0 <input type="text"/> %
Probability that I have exactly four correct	0 <input type="text"/> %
Probability that I have exactly three correct	0 <input type="text"/> %
Probability that I have exactly two correct	0 <input type="text"/> %
Probability that I have exactly one correct	0 <input type="text"/> %
Probability that I have no correct answers	0 <input type="text"/> %
Don't know	<input type="checkbox"/>
Prefer not to answer	<input type="checkbox"/>
	Total: 0 %

- "Perceived" score is a weighted average of probabilities
- Square of probabilities is a measure of precision (0.14 to 1.00)

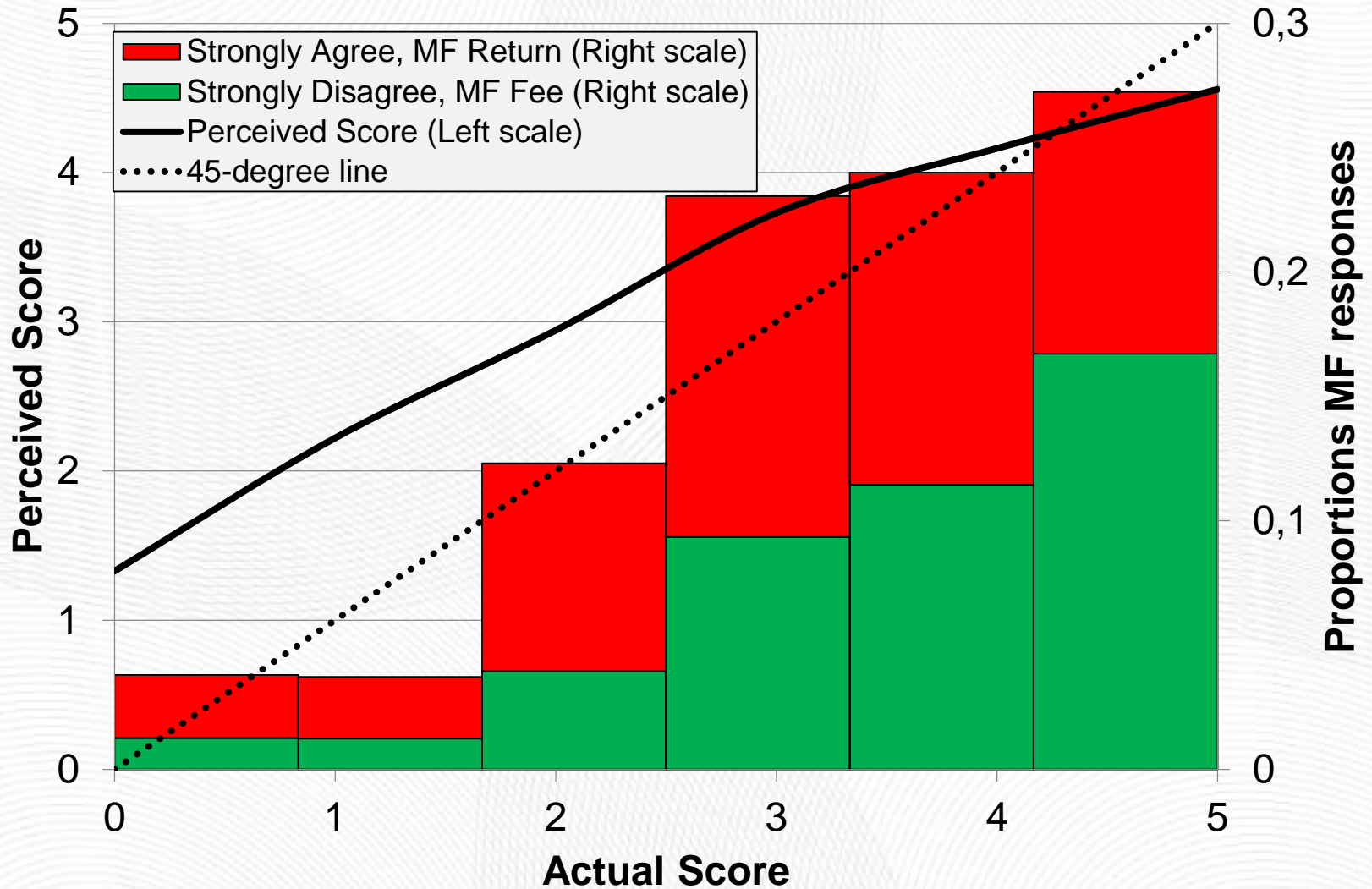
Self-assessments



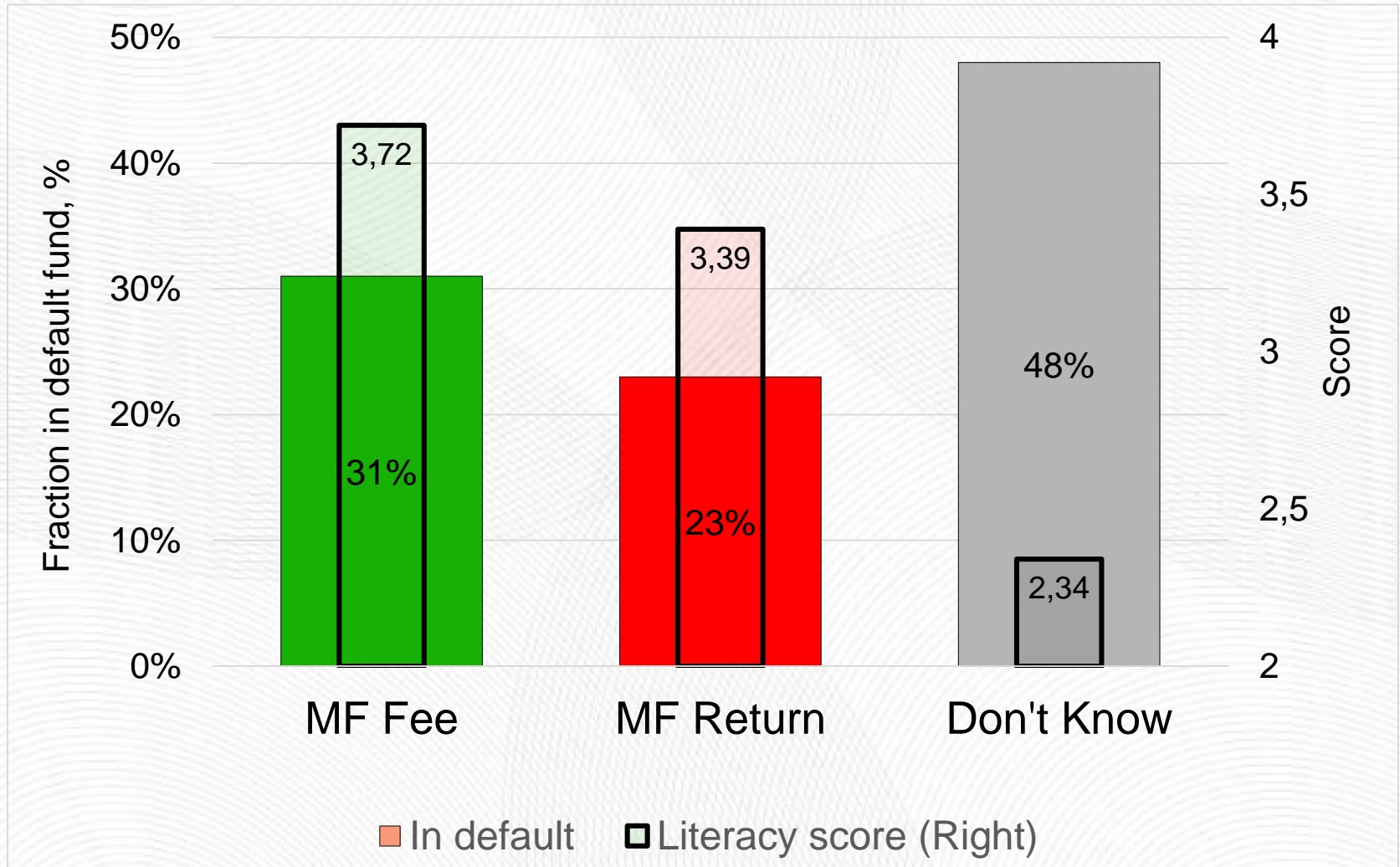
Self-assessments



MF beliefs, knowledge and self-perceptions



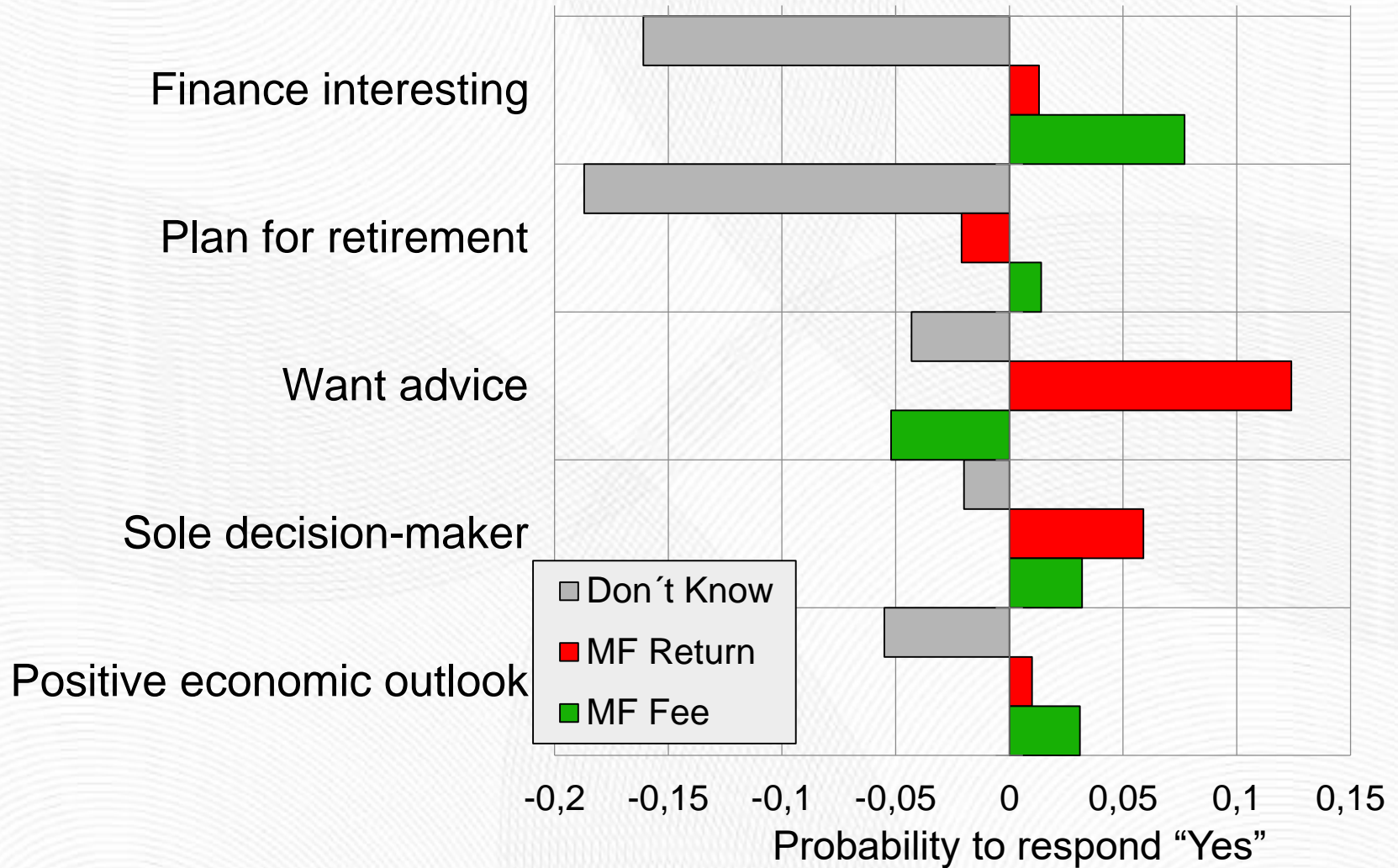
MF Beliefs, Knowledge and Staying with the Default



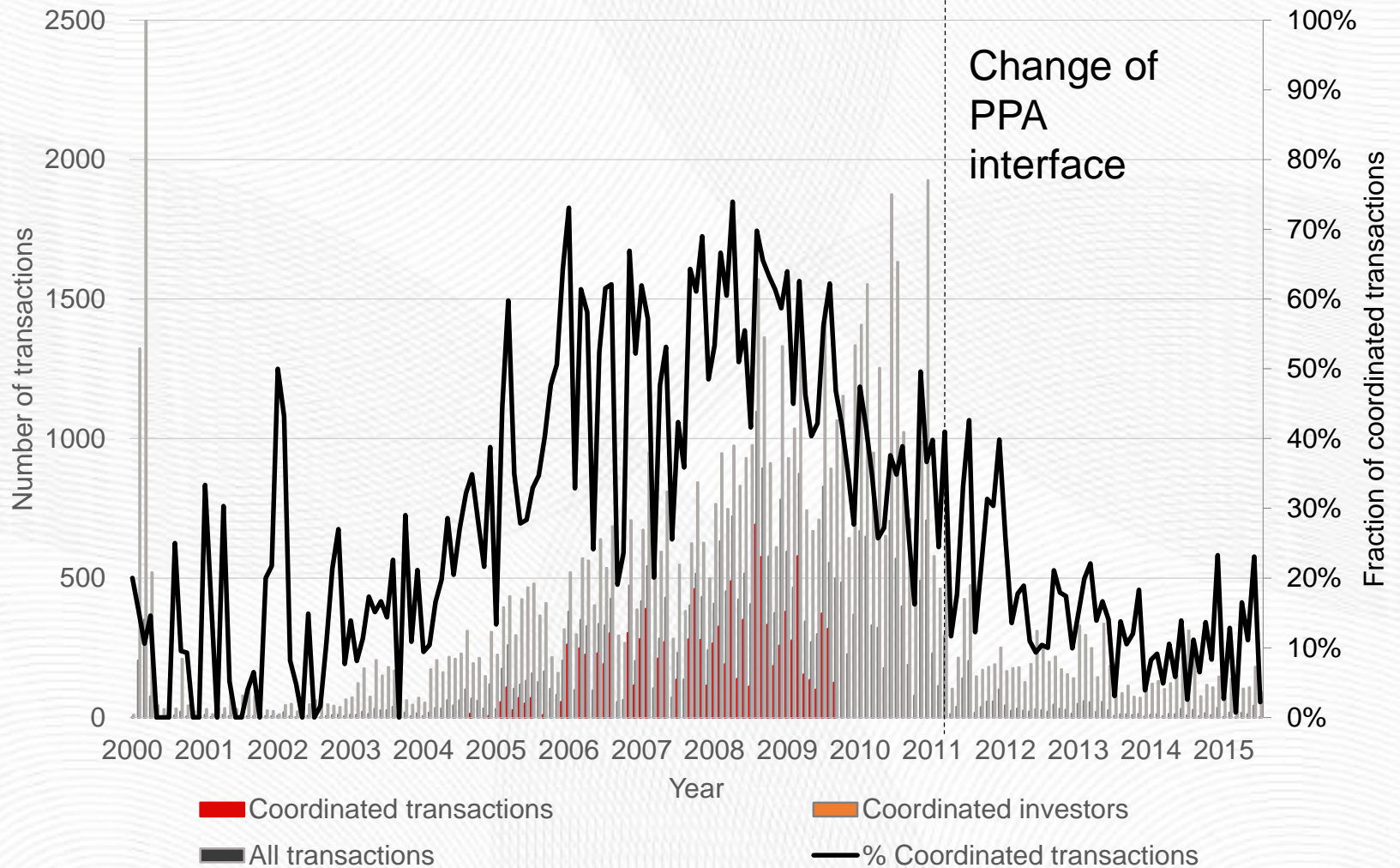
Staying with the default fund

	Default Fund, 2015			Portfolio Turnover		
	(1)	(2)	(3)	(4)	(5)	(6)
MF Return		-0.055*	-0.050		0.934	0.569
		(0.032)	(0.038)		(1.303)	(1.229)
MF Fee		0.039	0.078*		-2.170	-2.017*
		(0.037)	(0.044)		(1.483)	(1.153)
MF Don't know		0.131***	0.153***		-1.574	-1.304
		(0.027)	(0.031)		(1.180)	(1.077)
Financial Literacy	-0.009	0.008	0.010	0.360	0.224	0.337
	(0.009)	(0.009)	(0.011)	(0.372)	(0.398)	(0.458)
Married	-0.060***	-0.050***	-0.041	0.607	0.443	0.535
	(0.021)	(0.021)	(0.025)	(0.874)	(0.877)	(0.841)
Female	0.021	0.008	-0.005	-0.710	-0.543	-0.617
	(0.021)	(0.021)	(0.025)	(0.894)	(0.902)	(0.884)
Age	-0.014***	-0.014***	-0.017***	0.084*	0.082*	0.092***
	(0.001)	(0.001)	(0.001)	(0.044)	(0.044)	(0.033)
Log Income	-0.069***	-0.065***	-0.068***	0.355	0.343	0.375
	(0.019)	(0.018)	(0.019)	(0.565)	(0.566)	(0.478)
University	0.011	0.006	0.001	-1.413	-1.324	-1.413*
	(0.023)	(0.023)	(0.027)	(0.935)	(0.936)	(0.838)
Observations	2,502	2,502	2,502	1,678	1,678	1,678
Pop. weights	No	No	Yes	No	No	Yes

Household planning



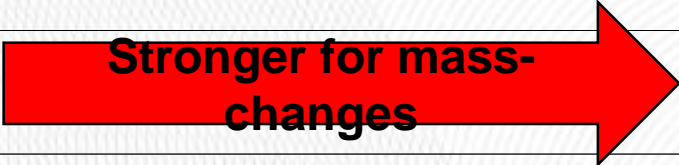
Identifying identical transactions made the same day



Advisor activity

	Coord.	Coord 25	Coord 50	Coord 50
Activity	1,000 trades	3,076 trades	12,535 trades	12,535 trades
MF Return	0.012 (0.023)	0.016 (0.022)	0.042** (0.021)	0.060* (0.031)
MF Fee	-0.026 (0.023)	-0.015 (0.023)	-0.017 (0.019)	-0.056** (0.028)
MF Don't know	-0.027 (0.018)	-0.013 (0.018)	-0.004 (0.015)	0.028 (0.026)
Financial Literacy	-0.006 (0.006)	-0.008 (0.006)	-0.010** (0.005)	-0.013 (0.008)
Observations	2,502	2,502	2,502	1,678
Demographics	Yes	Yes	Yes	Yes
Population Weight	Yes	Yes	Yes	Yes
Sample	All	All	All	Active

**Stronger for mass-
changes**



Predicting advisory-led funds



	Advisor fund	Advisor fund	Advisor fund	Advisor fund	Advisor fund
Advisor		0.396*** (0.031)			
25 Advisor			0.398*** (0.032)		
50 Advisor				0.445*** (0.039)	0.445*** (0.041)
MF Return	0.061** (0.027)	0.055** (0.026)	0.054** (0.026)	0.040 (0.026)	0.059 (0.038)
MF Fee	-0.030 (0.022)	-0.019 (0.022)	-0.024 (0.021)	-0.020 (0.022)	-0.006 (0.040)
MF Don't know	0.012 (0.020)	0.020 (0.019)	0.015 (0.019)	0.011 (0.019)	0.064* (0.034)
Financial Literacy	-0.012* (0.007)	-0.011* (0.006)	-0.010 (0.006)	-0.009 (0.006)	-0.013 (0.011)
Observations	2,502	2,502	2,502	2,502	1,678
Demographics	Yes	Yes	Yes	Yes	Yes
Population Weights	Yes	Yes	Yes	Yes	Yes
Sample	All	All	All	All	Active

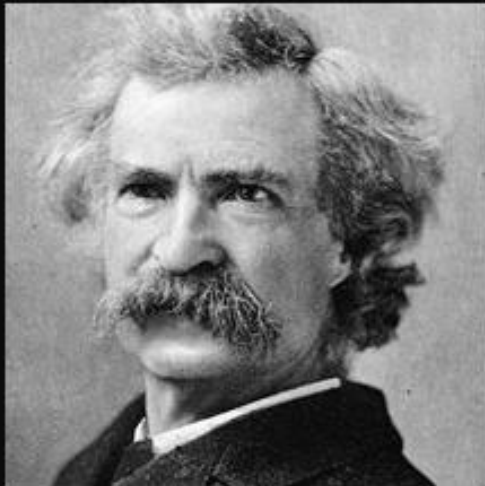
Better predictor for advisor-funds

Fund fees

	Fund fee	Fund fee	Fund fee	Fund fee	Fund fee
50 Advisor	0.064*** (0.013)	0.060*** (0.009)		0.058*** (0.009)	0.082*** (0.011)
MF Return			0.028** (0.011)	0.025** (0.011)	0.023** (0.011)
MF Fee			-0.015 (0.014)	-0.012 (0.014)	-0.013 (0.011)
MF Don't know			-0.004 (0.009)	-0.005 (0.009)	-0.033*** (0.007)
Observations	1,678	1,678	1,678	1,678	2,502
R-squared	0.024	0.866	0.864	0.866	0.779
Characteristics	Yes	Yes	Yes	Yes	Yes
Fund category	No	Yes	Yes	Yes	Yes
Population Weights	Yes	Yes	Yes	Yes	Yes

	Market Model			FF+Momentum		
	(7)	(8)	(9)	(10)	(11)	(12)
50 Advisor		-0.673 (0.473)	-0.872*** (0.172)		-0.319 (0.574)	-0.544*** (0.179)
MF Return	-0.356** (0.146)	-0.316** (0.151)	-0.342* (0.192)	-0.279* (0.150)	-0.260* (0.148)	-0.245 (0.183)
MF Fee	0.029 (0.151)	0.008 (0.150)	0.197 (0.217)	-0.085 (0.144)	-0.095 (0.146)	0.173 (0.214)
MF D/K	0.358** (0.146)	0.360** (0.147)	0.375*** (0.135)	0.520*** (0.123)	0.521*** (0.125)	0.543*** (0.153)
Observations	2,483	2,483	2,483	2,483	2,483	2,483
R-squared	0.602	0.604	0.658	0.774	0.774	0.810
Characteristics	Yes	Yes	Yes	Yes	Yes	Yes
Cohort	Yes	Yes	Yes	Yes	Yes	Yes
Pop. weights	No	No	Yes	No	No	Yes

Concluding remarks



It ain't what you don't know that gets you into trouble. It's what you know for sure that just ain't so.

~ Mark Twain

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Thank you!

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