

Do Investors Rationally Evaluate Investment Fees?

A Behavioral Finance Investigation

Edward Hutton, Kevin Ryan, and John Osberg

The BRC Academy Journal of Business 4, no. 1 (2014): 39-53.

<http://dx.doi.org/10.15239/j.brcacadjb.2014.04.01.ja03>

Web Appendix

DOI: <http://dx.doi.org/10.15239/j.brcacadjb.2014.04.01.wa03>

Appendix A

Please answer the below participant information survey for administrative and statistical analysis related purposes. All answers will be kept confidential.

- 1) Your Gender: Female Male
- 2) Your Age: _____
- 3) Your Education Level:
High School Diploma
Some College- specify what year: _____
Bachelor's Degree
Master's Degree
Doctorate
- 4) Trading Name (Player # at station): _____
- 5) GPA (approximate) _____
- 6) Major: (circle choice) Accounting Finance Marketing Management
Economics Other
- 7) Did you play a varsity sport in high school? (Yes/no) _____
- 8) Are you currently employed? (Yes/No) _____ If yes, on average how many
hours per week do you work? _____
- 9) Have you ever invested in the stock market? (Yes/No) _____
- 10) What is the highest education level of either of your parents? (Circle)
Some high school High school graduate Some college
2 yr. College graduate 4 year College graduate Masters/MBA Doctorate
/Professional Degree (Ph.D., MD, JD)
- 11) Have you ever taken a class about the Stock Market? (Yes/No) _____
- 12) Consistency following the stock market:
Daily Every few days Weekly Rarely Never
- 13) How much experience do you have in making investment decisions?
1-----2-----3-----4-----5-----6-----7
None at all Some A great deal
- 14) "Protecting the principal of my investment is more important than achieving significant
growth." Do you...
 - a) Strongly Agree
 - b) Agree
 - c) Disagree
 - d) Strongly Disagree
- 15) Which of the following three investment strategies best suits you?
 - a. One that seeks to avoid loss
 - b. One that has the potential for both moderate gain and moderate loss

- c. One that maximizes potential gain regardless of potential loss
- 16) Let's assume you own a stock fund that has lost 15% of its value the past year, despite previous year's solid performance. The loss is consistent with the performance of similar funds during the past year. At this time would you...
- a. Sell all of your fund shares
 - b. Sell some but not all of your fund shares
 - c. Continue to hold all of your fund shares
 - d. Buy more shares to increase your investment in the fund
- 17) Inflation can greatly reduce the real rate of return on your investments over time. Which of the following best describes how you feel about investment risk with respect to inflation?
- a. Minimal potential for loss, although my investment may only keep pace with inflation
 - b. Moderate potential for loss and lower volatility in trying to exceed the rate of inflation
 - c. Significant potential for loss and high volatility in trying to greatly exceed the rate of inflation
- 18) Which of the following three descriptions of hypothetical investment portfolio returns over a one-year period are you most comfortable with?
- a. Portfolio A: a likely return of 6% and slight chance of losing value
 - b. Portfolio B: a likely return of 10% and moderate chance of losing value
 - c. Portfolio C: a likely return of 14% and a significant chance of losing value
- 19) Which of the following hypothetical portfolio average annual returns over a three-year period are you most comfortable with? A portfolio with average annual returns that are likely to fall between:
- a. 0% and 10%
 - b. -5% and 18%
 - c. -10% and 26%

Appendix B

Example of participant display during simulation (post-allocation display).

Round	History			
Name	Player 1			
Starting Wealth	100,000			
	Historical Return	Volatility	Fees	Actual Return
Fund A	10.0%	7.0%	1.0%	11.0%
Fund B	20.0%	3.0%	1.0%	12.0%
Fund C	30.0%	2.0%	1.0%	13.0%
Fund D	40.0%	6.0%	1.0%	14.0%
Cash	5.0%	8.0%	1.0%	15.0%
	Your Choices	Value of Investment	Fees Paid	Net Gain/Loss
Proportion in Fund A (%)	20	22,200	-222	1,978
Proportion in Fund B (%)	20	22,400	-224	2,176
Proportion in Fund C (%)	20	22,600	-226	2,374
Proportion in Fund D (%)	20	22,800	-228	2,572
Proportion in Cash (%)	20	23,000	-230	2,770
			Ending Wealth	111,870
			Return this trial	11.9%
			Overall return	11.9%

Table 1. Base Return versus Average Fee Regression Model
Dependent variable: avgfees

	<i>Coefficient</i>	<i>t-ratio</i>	<i>p-value</i>
const	0.00155689	1.9990	0.05365
r2p	-0.0141515	-2.2291	0.03252
r3p	-0.0064073	-1.8157	0.07825
r4p	0.00558141	1.6660	0.10491
r5p	0.00795256	2.4675	0.01880
r6p	-0.0135819	-2.2468	0.03126
r7p	-0.0295824	-4.2443	0.00016
r9p	-0.00897373	-1.5359	0.13381
r10t	-0.00303173	-2.6881	0.01105

R-squared	0.817755
Adjusted R-squared	0.774874
F(8, 34)	32.23483
P-value(F)	1.08e-13

Table 2. Summary Statistics

Variable	Mean
Gender	1.41860
Age	20.6279
Education_Level	2.09302
GPA	3.50000
Major	2.39535
varsityhs	1.09302
curremploy	1.32558
hrswkwork	12.3721
everinvest	1.81395
parentshighedu	4.97674
stockmktclass	1.79070
followmkt	4.02326
invstexperience	2.25581
protectprincipal	2.37209
investstratsuits	1.93023
assumeloss15	2.39535
invstrisk	1.83721
hypo_portfolios	1.93023
avgretranges	1.79070
avgfees	0.0048977

Table 3. Demographic Variables versus Average Fees Regression

Dependent variable: avgfees

	<i>Coefficient</i>	<i>t-ratio</i>	<i>p-value</i>
const	-0.0176831	-3.2099	0.00274
Age	0.000697197	2.9324	0.00574
GPA	0.00170824	1.9240	0.06207
invstexperience	0.00051003	2.1805	0.03566
assumeloss15	-0.00165377	-3.0640	0.00406
invstrisk	0.00273844	3.0874	0.00382

R-squared	0.413583	Adjusted R-squared	0.334337
F(5, 37)	5.219002	P-value(F)	0.001006