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Authors:
Michael Guillemette, Ph.D., CFP®
Visiting Scholar
FINRA Foundation
Gary R. Mottola, Ph.D.
Research Director
FINRA Foundation
Corresponding author: gary.mottola@finra.org
Olivia Valdes, Ph.D.
Senior Researcher
FINRA Foundation

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Summary
This study investigates how investing knowledge (objectively measured and self-assessed) is associated with the amount of fees investors report paying in their non-retirement investment accounts. Using pooled data from the FINRA Foundation’s 2018 and 2021 National Financial Capability Study, our findings reveal that investors with higher levels of objectively measured investing knowledge report paying lower fees relative to those with lower levels of objectively measured investing knowledge. However, investors with higher self-assessed investing knowledge tend to pay higher fees than those with lower self-assessed investing knowledge. These results underscore the importance of bolstering investing knowledge and addressing potential overestimations in investors’ perceived knowledge.

Any opinions provided herein are those of the authors and do not reflect the views of the FINRA Investor Education Foundation, FINRA, or any of its affiliates.
Introduction

Investing can be a challenging endeavor that requires a fair amount of knowledge. Further, the financial services industry has become increasingly complex with a proliferation of product offerings and investment choices, and even experienced investors can have trouble understanding product structures and investment fees. This is problematic because high fees can have a negative impact on investment returns (Carhart, 1997). And, importantly, it is possible that different levels of investing knowledge could lead to differences in the ability of investors to make informed investment decisions that take fees into consideration. In addition, an investor’s perception of their own investing knowledge may also impact investing decisions.

We use data from the FINRA Foundation's National Financial Capability Study (NFCS) to better understand the relationship between objectively measured and self-assessed investing knowledge and the investment fees that investors report paying. Understanding whether (and how) investing knowledge impacts the amount of investment fees paid is important because, as noted above, unnecessarily high investment fees can contribute to lower returns. For example, when actively managed funds involve high costs, investors typically experience lower returns, and simulations suggest that few actively managed funds produce benchmark-adjusted returns sufficient to cover their costs (Fama & French, 2010).

About the Data

The data used for this study were obtained and pooled from the 2018 and 2021 NFCS Investor Survey resulting in a sample size of 4,827. To be included in the study, respondents had to report owning non-retirement investments. The vast majority of respondents also own retirement accounts. Over half of investors in the sample are men (59 percent), 63 percent are 55 years or older, 59 percent hold a post-college graduate degree, and 37 percent earn an annual household income of $100,000 or higher. The sample is not representative of the general population. It trends towards older, higher-educated adults with higher-than-average household incomes, which are characteristics of the investing population.

Objectively Measured Investing Knowledge. We assessed objectively measured investing knowledge (herein referred to as “objective investing knowledge”) using 10 multiple choice questions about specific investment scenarios, such as the advantages of index funds compared to actively managed funds, and the definition of “selling short.” We summed correct answers, and scores ranged from 0 to 10. The objective investing knowledge questions can be found in the Appendix.

Self-assessed Investing Knowledge. We measured self-assessed investing knowledge with the following question: “On a scale from 1 (very low) to 7 (very high), how would you assess your overall knowledge about investing?”

Investment Fees. To measure the amount of fees that investors pay for their investments, we asked respondents the following: “Considering all the various types of fees, approximately what percentage of your invested assets do you pay annually in fees for your non-retirement accounts?” The response choices ranged from not paying any fees to paying 4 percent or more. Respondents were also able to select “do not know” as a response. To ensure that all respondents were aware of the different types of fees, they were primed with a prior question that stated, “Do you pay any of the following types of fees for investing in your non-retirement accounts? Fees for investment advice, Fees or commissions for trades, Mutual fund/ETF fees or expenses, Account service fees.”

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1 Information on the NFCS Investor Survey, including the survey, data, and methodological documents can be found at www.FinraFoundation.org/NFCS.
2 We defined investors as those who reported “yes” to the following question: “Not including retirement accounts, do you have any investments in stocks, bonds, mutual funds, or other securities?”
3 Objective and self-assessed knowledge were mildly correlated (r = .30).

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Results

Investors who correctly answered more investing knowledge questions reported paying lower fees. Specifically, Figure 1 shows the mean investing knowledge score is 5.7 (out of 10) for investors who reported paying less than half a percent compared to 3.65 for those who reported paying 4 percent or more in fees. The association between objective knowledge and investment fees paid persists even after controlling for a host of demographic characteristics, including gender, ethnicity, marital status, age, educational attainment, income, employment status, non-retirement account portfolio value and the survey year.4

Figure 1. Objective Investing Knowledge and Total Fees Paid

![Figure 1. Objective Investing Knowledge and Total Fees Paid](image)

Note: Responses for “do not pay” and “do not know” are not displayed.

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4 All results in this brief are unweighted. Weighted and unweighted results yielded similar results. Objective investing knowledge is statistically significant at an alpha level of less than .01. Regression output is available from the authors upon request.
As shown in Figure 2, investors who rated their investing knowledge as higher reported paying more in fees. Specifically, on average, those who stated they pay less than 0.5 percent in investing fees rated their knowledge of investing as a 4.96 (out of 7). In comparison, investors who stated they pay 2-3.9 percent in fees, on average, rated their investing knowledge as a 5.47 of 7. Despite being comparatively weaker than the association between objective investing knowledge and investment fees paid, the association between self-assessed knowledge and investment fees paid persists after controlling for a host of demographic characteristics. 5

Figure 2. Self-assessed Investing Knowledge and Total Fees Paid

<table>
<thead>
<tr>
<th>Self-reported investing fees paid</th>
<th>Self-assessed Investing Knowledge Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 0.5%</td>
<td>4.96</td>
</tr>
<tr>
<td>0.5 – 0.99%</td>
<td>4.95</td>
</tr>
<tr>
<td>1 – 1.9%</td>
<td>5.09</td>
</tr>
<tr>
<td>2 – 3.9%</td>
<td>5.47</td>
</tr>
<tr>
<td>4% or more</td>
<td>5.43</td>
</tr>
</tbody>
</table>

Note: Responses for “do not pay” and “do not know” are not displayed.

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5 Self-assessed investing knowledge is statistically significant at an alpha level of less than .01. Regression output is available from the authors upon request.
Conclusions

This study provides evidence that both objective and self-assessed investing knowledge are related to fees paid in non-retirement accounts. Our analyses indicate that investors with higher levels of objectively measured investing knowledge reported paying lower fees, while those who have higher levels of self-assessed investing knowledge reported paying higher fees. Since the fees are self-reported, it is possible that investors with lower objective investing knowledge are not actually paying higher fees but are simply miscalculating/mis-estimating the fees paid. Survey respondents were permitted to choose “Don’t Know” when asked about the investing fees they are paying, which should have reduced the likelihood of this happening. The findings underscore the importance of increasing investing knowledge. And, they also underscore the importance of better understanding the relationship between investors' perceptions of their investing knowledge and how it might affect their investment decisions.

While the relationship between objective investing knowledge and fees paid is somewhat intuitive—that is, arguably those with higher levels of investing knowledge better understand fee structures of financial products and services and how fees can impact performance relative to those with lower levels of investing knowledge (Lusardi & Tufano, 2015)—the relationship between self-assessed investing knowledge and fees is less intuitive. Evidence suggests that consumers tend to infer the quality of a product based on its price (Rao & Monroe, 1989) and subjective knowledge (i.e., perceived or self-assessed knowledge) can affect the quality of consumer choice (Moorman et al., 2004). So, it is possible that investors who perceive their investing knowledge as high may be excessively self-assured in their abilities to discern value and, consequently, may be more likely to succumb to the price-quality relation, assuming funds with higher expenses or investment firms or professionals with higher fees as higher quality. Following this heuristic may make investors with high self-assessed investing knowledge more inclined to pay higher fees, even though investment performance has been linked to lower loads and expense ratios. That said, some investors may knowingly pay higher fees for reasons of their own (like the desire to work with a specific financial professional, the risk-return tradeoff, portfolio diversification, or interest in specific products or sectors), and this needs to be taken into consideration, as well. Taken together, the role of financial education becomes increasingly evident, both in improving investor's knowledge as well as fostering accurate self-awareness of investing knowledge among investors.

Helping investors understand the limits of their investing knowledge may be challenging, but it may also be an important aspect of financial education given these findings. Potential avenues for fostering self-awareness may include providing quizzes where participants are instructed to answer questions about investing and rate their degree of certainty in their answers. This way, investors can be shown disparities between their actual and self-assessed investing knowledge, which can foster awareness of content areas they may need to learn more about. Though, care would need to be taken not to undermine an investor's confidence to the point where he or she decides not to invest.

Fee transparency is one of many factors that support investors' ability to make well-informed decisions about their investments. However, research indicates that when presented with a summary prospectus, investors tend to focus primarily on returns (Beshears et al., 2009), often overlooking the impact of fees on their overall portfolio performance. Accordingly, investors and financial professionals could be encouraged to use tools that easily compare and analyze the costs and potential returns of various mutual funds, ETFs, and other investment options, while taking into account the impact of fees on overall portfolio performance. Further, encouraging conversations about fees and costs between a financial professional and their clients is also important. For example, broker-dealers and investment advisers that offer services to retail investors are required to include in their relationship summary disclosures (Form CRS) a “conversation starter” designed to prompt a discussion about the effect of fees and costs on investments, that states: “Help me understand how these fees and costs might affect my investments. If I give you $10,000 to invest, how much will go to fees and costs, and how much will be invested for me?” This offers a great opportunity to discuss the relationship between fees and returns.
Importantly, objective and independent educational resources are widely available from sources like SEC.gov, FINRA.org, and non-profit organizations. And many financial services firms also offer excellent educational resources. The promotion of these resources can contribute to a system that emphasizes the importance of fees in the investment decision-making process.

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References


Appendix – Investing Knowledge Questions

1. If you buy a company’s stock...
   - You own a part of the company
   - You have lent money to the company
   - You are liable for the company’s debts
   - The company will return your original investment to you
   - Don’t know
   - Prefer not to say

2. If you buy a company’s bond...
   - You have lent money to the company
   - You are liable for the company’s debts
   - You can vote on shareholder resolutions
   - Don’t know
   - Prefer not to say

3. If a company files for bankruptcy, which of the following securities is most at risk of becoming virtually worthless?
   - The company’s common stock
   - The company’s bonds
   - Don’t know
   - Prefer not to say

4. In general, investments that are riskier tend to provide higher returns over time than investments with less risk.
   - True
   - False
   - Don’t know
   - Prefer not to say

5. The past performance of an investment is a good indicator of future results.
   - True
   - False
   - Don’t know
   - Prefer not to say

6. Over the last 20 years in the US, the best average returns have been generated by:
   - Stocks
   - Bonds
   - CDs
   - Money market accounts
   - Precious metals
   - Don’t know
   - Prefer not to say

7. What is the main advantage that index funds have when compared to actively managed funds?
   - Index funds are generally less risky in the short term
   - Index funds generally have lower fees and expenses
   - Index funds are generally less likely to decline in value
   - Don’t know
   - Prefer not to say

8. Which of the following best explains why many municipal bonds pay lower yields than other government bonds?
   - Municipal bonds are lower risk
   - There is a greater demand for municipal bonds
   - Municipal bonds can be tax-free
   - Don’t know
   - Prefer not to say

9. You invest $500 to buy $1,000 worth of stock on margin. The value of the stock drops by 50%. You sell it. Approximately how much of your original $500 investment are you left with in the end?
   - $500
   - $250
   - $0
   - Don’t know
   - Prefer not to say

10. Which is the best definition of ‘selling short’?
    - Selling shares of a stock shortly after buying it
    - Selling shares of a stock before it has reached its peak
    - Selling shares of a stock at a loss
    - Selling borrowed shares of a stock
    - Don’t know
    - Prefer not to say

*The correct answers are denoted in bold font.*