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OIAD Research Brief

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The entire research paper can be found at the following link: <https://www.journals.uchicago.edu/doi/10.1086/726428>.

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A Picture Is Worth A Thousand Dollars: Using Visual Aids to Help Investors Make Decisions

Key Takeaways

- Findings from the three studies show that fee visuals consistently reduce fees incurred in mutual fund investment decisions, with savings between 19% and 25%.
- All design variations of the visual aid provided to participants outperformed the traditional, prospectus-only option.
- Fee visuals did NOT decrease investment participation (i.e., participants did not select a cash option more often).
- More research is needed to test fee visuals and identify the optimal design for investors.

Decisions about mutual funds can be among the most financially consequential that consumers face. Yet when making investment decisions, consumers often overprioritize fund performance (i.e., select funds with seemingly higher past returns) and overlook the expenses or fees associated with a mutual fund.¹ Given that choosing a low-cost option from within an asset class can save investors hundreds of thousands of dollars over the long run: **What can help consumers understand the relative costs of mutual funds?** Fortunately for policy design, behavioral research demonstrates that disclosures supplemented with visual aids can convey complex quantitative information and reduce decision biases. Thus, decision aids introduced into disclosures can help investors become more aware of the importance of fees and make it easier for investors to make good decisions about their investments.

OIR developed and tested prototype visual aids to help consumers better incorporate the fees associated with mutual funds into their selection process. This brief presents the findings from three recent research studies conducted by OIR on the effect of visual aids on investor decision-making in mutual fund selection. [<https://www.journals.uchicago.edu/doi/10.1086/726428>]

Encouraging Consumers to Consider Mutual Fund Costs in Decisions

There is concern that investors do not sufficiently consider fees when making decisions about mutual funds.² Investors too frequently prioritize past performance in their selection of mutual funds, despite decades of academic research demonstrating that very few funds consistently outperform the market.^{3,4} In other words, a top performing fund in one year may be mediocre or low-performing in the next. By contrast, fees are easy to predict and have an enormous impact on investors' long run investment performance.⁵

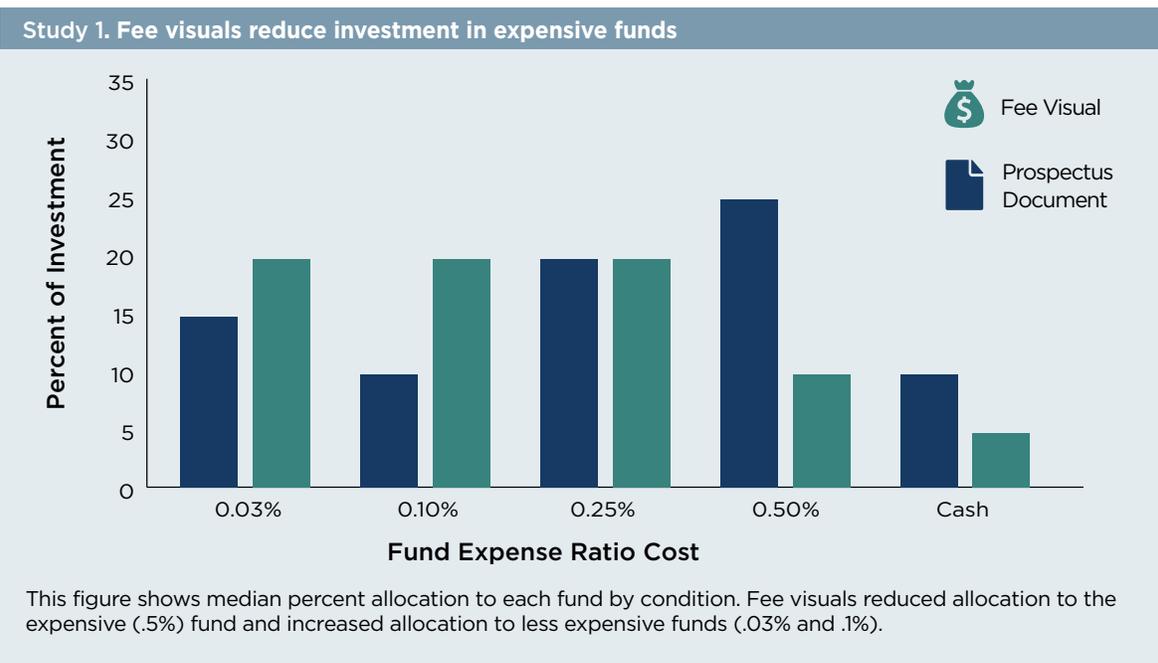
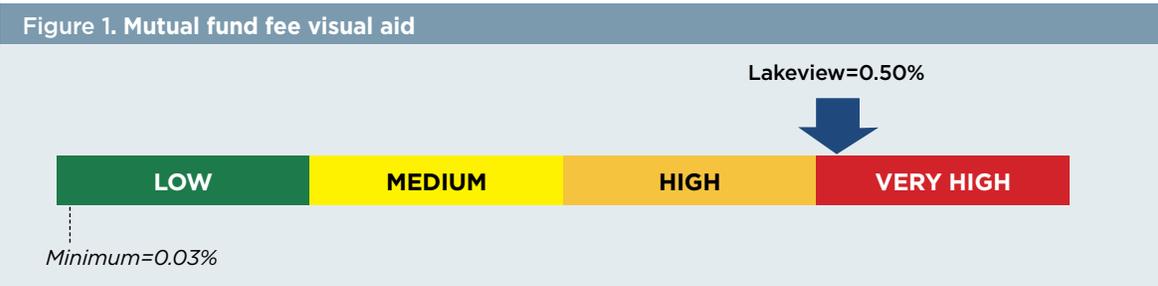
Because of the investor emphasis on returns,⁶ policymakers have introduced specific disclosure statements, such as a warning that “Past performance is no guarantee of future results.” Yet, buried in a long financial document and extensive fine print, these textual statements may go unnoticed by investors. Even if disclosure statements are noticed, they may not be understood. Additional efforts to encourage consumers to use mutual fund costs in their decisions by providing simplified prospectus documents have also shown less than hoped-for results across a range of tests from the academic community.⁷ Because performance remains a central focus with fees infrequently considered, OIR developed a prototype visual aid that could lead consumers to consider fees in their decisions, and then tested whether the aid was more effective than legally compliant short form disclosure documents.

What We Did

Motivated by other agencies' successful use of cost comparisons (e.g., the Federal Trade Commission's “Energy Guide” cost rating scale) and academic research on “nudges” that can assist consumer decision making, OIR developed a mutual fund fee visual aid that depicts the distribution of fees within a fund type (Figure 1). To test the effects of the fee visual aid, OIR conducted three interrelated studies on nationally representative samples.* For each study, participants were asked to invest a hypothetical \$10,000 among S&P 500 index funds that were essentially identical in strategy, risk, and gross returns (i.e., performance before fees). The only widely differing factor between the options was cost, so the funds' overall value was mainly driven by the fees that participants would pay. All respondents received mutual fund performance and fee information with summary prospectus documents that meet current disclosure requirements (control condition). However, an experimental group received a visual aid showing the distribution of fees charged for index funds.

Study 1: Effects of visual aids on the importance of returns and fees in fund selection.	Study 2: Effects of variations in the visual aid provided with different investor groups.	Study 3: Comparison of effects of visual and nonvisual aids on importance of returns and fees.
Randomly assigned a nationally representative sample of N=380 English-speaking adults to either receive a fee visual in addition to the standard Prospectus documents or a control group that only received the Prospectus documents (Prospectus-only group). See Figure 1.	Using a large representative sample (N=3,907), examined effects of variations in the visual aid provided (i.e., different reference points, evaluative fee labels, and a continuous fee scale) and with different consumer groups based on level of investment experience. Also, tested the effects of showing long-term fees (compounded over 20 years).	Tested an additional control condition where fees were provided in a nonvisual, but more accessible expense ratio format (i.e., fees in percent). Compared findings of three study groups of N=301 participants: two control groups received a Prospectus-only or an expense ratio document and one treatment group received an additional visual aid.

* Study 1 and Study 2 use nationally representative samples.



Key Findings

Study 1	Study 2	Study 3
<p>The study findings showed statistically significant differences in total fees between study groups (Prospectus-only and Fee Visual), resulting in a 27% (approximately nine basis points) total fee reduction for the visual condition compared to the prospectus document condition.</p>	<p>Building on the fee reduction effects in Study 1, findings in a larger sample verified that visual aids showing the distribution of fees charged help consumers with different backgrounds, including relatively sophisticated investors and those with no investment experience. Benefits also were found across different types of visual aids (i.e., different reference points, evaluative fee labels, and a continuous fee scale).</p>	<p>This third study demonstrated that visual aids reduce fees paid in fund selection compared to both a Prospectus-only and a more accessible (nonvisual) expense ratio format. However, visual aids only increased fee importance for investors more than the Prospectus-only condition, but not compared to the nonvisual expense ratio format.</p>

Policy Implications

The findings from these three studies have several policy implications, including:

- While valuable information is currently provided to investors, these results imply that current disclosures are inadequate as decision tools.
- Improving policy around investment products often requires disclosure changes.
- Fee visuals may need to be incorporated into written materials to help investors make better decisions.

If applied to the \$27 trillion mutual fund industry, fee visuals could possibly save investors in the range of \$24 billion annually.

Study limitations: While these findings are promising and should be considered in future discussions on the use of decision aids for investors, further work is needed to understand the mechanisms underlying the true effect of visual aids compared to nonvisual expense materials on fee importance in investor decision-making. These studies are limited in their ability to provide a true understanding of the underlying mechanisms that lead to and possibly influence investor decisions. Finally, while fee visuals appear to be primarily beneficial to investors, a singular focus on fee minimization could harm some investors in specific situations.

About the Office of Investor Research, Office of the Investor Advocate (OIAD)

The Office of Investor Research promotes investor well-being through original research and data. OIR aims to inform SEC rulemaking with evidence-based insights. Our mission serves the public interest through investor protection, facilitating capital formation, and maintaining fair and efficient markets. For more information, see <https://www.sec.gov/advocate/positier>.

Endnotes

- 1 John Beshears, James J. Choi, David Laibson, and Brigitte C. Madrian (2009), “The Importance of Default Options for Retirement Saving Outcomes: Evidence from the United States,” National Bureau of Economic Research Working Paper No. 12009, NBER, Cambridge, MA.
- 2 IAC, Recommendation of the Investor as Purchaser Subcommittee: Mutual Fund Cost Disclosure (Apr. 14, 2016), <https://www.sec.gov/spotlight/investoradvisory-committee-2012/recommendation-mf-feedisclosure-041916.pdf>.
- 3 Eugene F. Fama and Kenneth R. French, Luck Versus Skill in the Cross-Section of Mutual Fund Returns, *The Journal of Finance* 65, No. 5 (2010): 1915-1947.
- 4 Warren Bailey, Alok Kumar, and David Ng, Behavioral Biases of Mutual Fund Investors, *Journal of Financial Economics* 102, No. 1 (2011): 1-27.
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- 6 Juhani T. Linnainmaa, Brian T. Melzer & Alessandro Previtero, The Misguided Beliefs of Financial Advisors, *The Journal of Finance* 76, No. 2 (2021): 587-621.
- 7 John Beshears, James J Choi, David Laibson & Brigitte C Madrian (2009), “How Does Simplified Disclosure Affect Individuals’ Mutual Fund Choices?,” M-RCBG Faculty Working Paper No. 2009-02, Harvard University, Cambridge, MA.