2023 MOSKOWITZ PRIZE HONORABLE MENTION

RESEARCH BRIEF

Four Facts About ESG Beliefs and Investor Portfolios

By Stefano Giglio, Matteo Maggiori, Johannes Stroebel, Zhenhao Tan, Stephen Utkus, and Xiao Xu

Individual investors expect ESG investments to underperform the market, on average. But expectations and motives related to investing in ESG vary widely and influence actual portfolio allocations.

ABOUT THE PRIZE

The Moskowitz Prize recognizes research that exhibits empirical excellence and the potential to inform responsible business and investing practices in the real world.

SUMMARY OF FINDINGS

Why do retail investors buy ESG assets and what returns do they expect those assets to have? What roles do financial and non-financial considerations play?

The authors seek to answer those and related questions using a large-scale survey and anonymized study of Vanguard investors and their portfolio holdings. These are important queries as global sustainability funds have grown into the trillions of dollars and debate continues about the financial implications of incorporating ethics into investment decisions, with limited understanding of investor motivations.

The research revealed four key facts about retail investor expectations for their ESG investments:

- Between mid-2021 and mid-2023, investors expected the 10-year return on ESG investments to *underperform* the market by 2% per year, on average.
- Expectations and motives related to ESG investments vary significantly, with a standard deviation of expected excess ESG returns of 5% across individuals, and motives for ESG investments including ethical reasons (primary motive for 24% of investors), hedging of climate risk (22%), and financial performance (6%); 48% of investors see no reason to invest in ESG.
- ESG holdings are largest among investors motivated by ethics and holding strong concerns about climate change; ESG portfolio investments also increase with greater beliefs about excess ESG returns.
- Financial (return-related expectations) and non-financial (ethical) considerations jointly influence ESG-related portfolio allocation. Financial considerations are an important driver for all groups of investors, including those who mention hedging or ethical motivations as key reasons for investing in ESG. Non-pecuniary considerations also play a role alongside financial performance, with some investors holding ESG investments even when they expect negative excess returns.

The authors provide further context and explanation for each of the facts observed.

3 Questions About ESG Investing

The authors worked with major asset-management firm Vanguard to survey a random sample of US investor clients holding retail brokerage (80% of sample) or retirement (20%) accounts. Investors held an average of nearly $700K total in their Vanguard portfolios, representing a wealthier population segment. The survey asked questions about three elements of ESG investing:

- Investors' expectations of 10-year annualized returns from ESG investments (which were then compared to expectations for the overall stock market)
- What possible investment motives they held for ESG investment, including none, excess financial returns, ethics, or hedging
- To what degree investors were concerned about climate change

The ESG questions—including explanation that ESG investing is often used interchangeably with "socially responsible" or "sustainable" investing—were added to an ongoing Vanguard survey in mid-2021, with thousands of responses collected for analysis over the following 26 months. The study also looked at the link between investor beliefs about ESG stock performance and their actual holding of ESG-focused mutual funds and exchange-traded funds by using anonymized investment-holding data.

Facts in Context

The researchers provide context and potential explanations for the facts uncovered by the investor survey. Of note, only 3.5% of investors in the sample held any ESG-related investments, and these represented a small share of their portfolios, likely linked to the relative newness of these investment options.

Investors expect lower returns for ESG investments. This finding might be explained by investors believing that ESG stocks are overpriced and hence will deliver lower-than-average returns. Or investors may see lower returns as driven by these investments' valuable hedging properties against climate risk or the result of benefits perceived by investors with ethical considerations.

Expectations and motives vary across investors. This variance isn't well-explained by traditional variables such as demographics (e.g., age) or level of conservatism, thus representing a separate dimension of investor beliefs. Investors motivated primarily by return expectations expect ESG investments to outperform the market by 1.1% annually, whereas those holding other motives expect ESG underperformance.

ESG beliefs are linked to ESG investments. Investors who report seeing no reason for ESG investment have nearly zero ESG investments, whereas those motivated by returns, ethical considerations, and climate risks hold at least some ESG assets on average (though holdings are still relatively low in each group). About half of all investors holding ESG investments are motivated by ethics.

Investing patterns suggest trade-offs between financial and non-financial considerations. Even within investor groups with the same primary ESG-related motivation, allocations vary. Among those with ethical motivation, for example, those who expect higher returns are more likely to hold ESG assets than those who expect underperformance.

From Belief to Business Decisions

Collectively, the results show that expectations and motives related to ESG investments vary meaningfully among investors—some have no interest in ESG-related assets while others allocate portions of their portfolios to ESG even if they expect underperformance relative to the market. These beliefs and expectations, moreover, translate into observable portfolio allocations, which in turn influence asset prices and, consequently, ESG-related decisions by businesses.

KEY DATA

- GMSU-Vanguard Survey from June 2021 to August 2023
- Vanguard portfolio holdings (anonymized) of survey participants, with focus on share of investments in ESG funds (based on Morningstar "Sustainable Investment Overall" indicator)

PRACTICAL IMPLICATIONS

- *Policymakers can use these findings on the nature and evolution of investors' ESG-related beliefs and investments to shape legislative and regulatory approaches to climate change, with focus on aligning regulations with observed pressures from investors and others.*
- *Fund managers and other investment professionals can incorporate heterogeneity in ESG investment motives and expected returns into marketing strategies and messaging, such as whether to offer ESG investment products as opt-out options in large pension funds or target these to individual investors.*
- *Researchers can use the heterogeneity in motives and expectations found here to inform and further calibrate theoretical models and corresponding predictions related to ESG investing.*

QUESTIONS FOR FUTURE RESEARCH

On future patterns of ESG investing:
As ESG-investment options become better-established and longer-term returns better-documented, how will investor expectations and motivations related to these investments evolve, including the interplay of financial and non-financial considerations?

On the influence of climate risk:
Will larger-scale impacts of climate change stimulate more interest in ESG investments? How will financial and non-financial motives figure into such an increase?