

The Cost of ESG Investing

Laura LINDSEY (Arizona State University), Seth PRUITT (Arizona State University) and Christoph SCHILLER (Arizona State University)

Over the past two decades, the amount of investment linked to ESG goals has grown tremendously. According to the 2020 Global Sustainable Investment Review, sustainable-investing assets reached \$35.3 trillion globally at the start of 2020, a 15% increase over 2018.

With rapidly growing demand from clients, fund managers are increasingly looking for ways to integrate ESG goals into their investment strategies. However, the implications of doing so on portfolio efficiency and performance are unclear.

Against this backdrop, Laura Lindsey, Seth Pruitt, and Christoph Schiller of Arizona State University presented their paper titled *The Cost of ESG Investing*. The research aims to study the costs of implementing an ESG-investing mandate and additionally investigate whether or not ESG ratings identify systematic risk exposures or exploitable mispricing.

To explore how costly it is to adjust a profitable investment strategy to adhere to an ESG-investing mandate, the authors use ESG scores from any of four major ESG data providers to tilt optimal portfolios toward satisfying a range of ESG mandates. They constructed the tilts in two steps: First, they used the other valuable firm information to define a profitable portfolio based on a five-factor IPCA model restricted to large firms. Second, they tilted the portfolio to downweigh bad ESG firms (and possibly up-weigh good ESG firms).

Their results showed that there are numerous ways to tilt a profitable systematic portfolio with an ESG mandate and sacrifice nothing: Sharpe ratios can remain unchanged, and average returns stay high and statistically significant.

The authors then investigated how ESG-tilts can have zero cost. To address this question, they explored the role of ESG characteristics in determining either alpha or beta. By including ESG measures along with other firm characteristics, they estimate instrumented betas on aggregate factors via IPCA and find no evidence that ESG scores drive factor exposures.

Next, they allowed the ESG characteristics to drive alpha, defined as predictable returns that are orthogonal to aggregate risk exposures, either on their own or alongside other characteristics: regardless, they find no evidence of significant profits.

These results cast doubt on the idea that ESG scores are useful for creating profitable portfolio strategies. The authors find no significant role for ESG measures in driving beta or alpha – which helps explain why ESG tilts can have no cost.

The authors next examine the equilibrium effect when every investor downweighs bad ESG stocks to achieve a free ESG investing mandate. In other word, the authors investigated why when investors care about the ESG performance of firms by tilting their portfolios to reflect better ESG scores, there were no consistent higher risk-adjusted returns or excess returns.

To explain this observation, they consider the equilibrium model of Pastor et al. (2021b) and propose a simple rationale: investors use varying ESG measures to tilt their portfolios. If investors do not agree on a single definition of ESG measurement, equilibrium pricing need not reflect their ESG concerns even if all investors act on them. In other words, there is a large variety of different and non-coherent ways in the reported ESG scores, resulting in the observation that equilibrium expected returns are unaffected by investors' heterogenous ESG preferences. Therefore, a lack of uniform consensus (or regulation) on definitive ESG measurement is a direct channel explaining the authors' results.