

Sustainable Finance and Impact Investing: Standards, Measurement, and Outcomes

Olivia Bennett
University of Sydney, Australia

ABSTRACT

Sustainable finance—the integration of environmental, social, and governance (ESG) considerations into financial decision-making—has grown from a niche ethical investment practice to a mainstream financial discipline, with global sustainable fund assets under management estimated at \$2.8 trillion in 2022 and growing. Impact investing—investments explicitly designed to generate measurable social or environmental benefits alongside financial returns—represents the most intentional end of the sustainable finance spectrum. The sustainable finance field faces fundamental measurement challenges: ESG scores from major rating agencies show low and inconsistent correlations (Berg et al., 2022), impact claims are difficult to verify counterfactually, and the causal link between ESG investment and real-world social or environmental outcomes is contested. This paper reviews the evolution of sustainable investment approaches from negative screening through ESG integration and impact investing, the measurement standards landscape, the empirical evidence on financial performance, and the regulatory frameworks shaping mandatory ESG disclosure.

Keywords: Sustainable Finance; Impact Investing; ESG; Responsible Investment; PRI; SFDR; Impact Measurement; Greenwashing

1. INTRODUCTION

The history of sustainable investing begins with religious communities' avoidance of 'sin stocks' (tobacco, alcohol, gambling) in the 1960s–1970s, which established the precedent of ethical screens on investment portfolios. The anti-apartheid movement's 1980s divestment campaign from South Africa-related investments demonstrated that institutional investors could use portfolio decisions to apply political pressure on corporate behavior. The modern ESG investment framework emerged in the early 2000s, with the United Nations' 2006 Principles for Responsible Investment (PRI) providing the institutional framework through which signatories committed to incorporating ESG considerations into investment analysis and ownership decisions. PRI signatories now represent over \$120 trillion in AUM, reflecting the mainstreaming of ESG commitment among institutional investors.

The sustainable finance spectrum spans several distinct approaches with different objectives. Negative screening (exclusions) removes industries or companies based on ESG concerns (fossil fuels, weapons, tobacco). ESG integration incorporates ESG data as additional inputs to financial analysis without necessarily excluding any investments. Best-in-class selection tilts portfolios toward ESG leaders within each industry. Thematic investing targets specific sustainability themes (clean energy, water infrastructure, affordable housing). Impact investing seeks measurable, positive social or environmental outcomes alongside financial returns. These approaches differ in their objectives, implementation rigor, and the strength of their claimed connection to real-world sustainability outcomes.

2. ESG MEASUREMENT CHALLENGES

The most fundamental challenge facing sustainable finance is measurement: what does ESG performance mean, how is it quantified, and do ESG scores from different providers measure the same thing? Berg, Kolbel, and Rigobon (2022) in the Review of Finance document that ESG ratings from six major providers (MSCI, Sustainalytics, Refinitiv, S&P, Moody's, Bloomberg) show pairwise correlations averaging only 0.54—dramatically lower than credit ratings' typical 0.99 agreement rate. This 'ESG ratings divergence' reflects different scope (what dimensions of ESG are covered), measurement (how each dimension is quantified), and weight (how dimensions are combined into an overall score). The divergence makes portfolio construction based on ESG scores highly sensitive to the rating provider chosen and limits the ability to benchmark sustainable fund performance consistently.

3. IMPACT INVESTING

Table 1. Impact investing mechanisms and measurement challenges.

Impact Mechanism	Description	Measurement Challenge
Direct investment impact	Capital provided enables activities with social/environmental benefit	Counterfactual: would activity have occurred without the capital?
Engagement impact	Investor engagement changes corporate ESG behavior	Attribution: is change due to engagement or other factors?
Divestment impact	Reducing demand for sin stocks raises their cost of capital	Price impact: is capital cost materially affected by divestment?
Policy influence	Investor coalitions (Climate Action 100+) influence corporate and public policy	Coalition attribution vs. other advocacy pressure

4. REGULATORY FRAMEWORK

The EU's Sustainable Finance Disclosure Regulation (SFDR, 2021) established the most comprehensive regulatory framework for sustainable fund disclosure, requiring fund managers to classify funds into three categories: Article 6 (no sustainability claims), Article 8 ('light green': promoting ESG characteristics), and Article 9 ('dark green': sustainable investment objective). The classification system has been controversial: many funds initially classified as Article 9 were subsequently reclassified to Article 8 as regulators tightened scrutiny, a pattern described as 'ESG washing' correction. The EU Taxonomy for Sustainable Activities provides a classification system for economic activities that qualify as environmentally sustainable, providing the technical foundation for distinguishing genuine green finance from greenwashing.

5. CONCLUSION

Sustainable finance has grown from a niche ethical investment practice to mainstream financial consideration, driven by investor demand, regulatory pressure, and growing evidence that ESG factors are material to long-run financial performance. The field's primary challenge is measurement: ESG scores are inconsistent across providers, impact claims are difficult to verify counterfactually, and the causal link between ESG investment and real-world outcomes is contested. Regulatory initiatives (EU SFDR, SEC climate disclosure rules) are improving disclosure quality and reducing greenwashing, but the fragmented measurement landscape remains a significant impediment to sustainable finance's scientific development. Future research should develop causal identification strategies for measuring the real-world impact of sustainable investment and distinguish between ESG as financial risk management and ESG as genuine impact—which have different investment and measurement implications.

REFERENCES

- [1] Berg, F., Kölbel, J. F., & Rigobon, R. (2022). Aggregate confusion: The divergence of ESG ratings. *Review of Finance*, 26(6), 1315–1344.
- [2] Friede, G., Busch, T., & Bassen, A. (2015). ESG and financial performance: Aggregated evidence from more than 2000 empirical studies. *Journal of Sustainable Finance & Investment*, 5(4), 210–233.
- [3] UN Principles for Responsible Investment. (2021). Annual report 2021. UNPRI.