

ESG Investment, ESG Risk Management, And The Development Of Sustainrisk Performance: A Literature Review

Devi Hardianti Rukmana

Faculty of Islamic Economics and Business
Universitas Islam Negeri Kiai Haji Achmad Siddiq Jember
Email: devihardianti@uinkhas.ac.id

Firda Rachma Amalia

Tourism Department, Politeknik Negeri Banyuwangi
Email: firdarachma@poliwangi.ac.id

Mega Amalia

Faculty of Economics and Business, ITB Swadharma Jakarta
Email: megaamalia@gmail.com

Penta Satria

Faculty of Economics and Business, Universitas Jember
Email: pentasatria@gmail.com

Abstract

This study develops the concept of SustainRisk Performance by synthesizing evidence on ESG Investment and ESG Risk Management. A structured qualitative literature review was conducted on ten peer-reviewed international journal articles published between 2022 and 2026. The review corpus was restricted to studies directly addressing ESG in relation to investment return, volatility, portfolio diversification, financial risk, climate risk, stock crash risk, or financial stability. Articles that were non-peer-reviewed, duplicated, outside the ESG-risk-return focus, or did not provide evidence relevant to the conceptual synthesis were excluded. The selected studies were coded by research focus, theoretical basis, method, risk-return findings, and sustainability implications. The synthesis shows that ESG is more consistently associated with risk mitigation and resilience than with uniformly higher returns; the strength and direction of outcomes vary by market, investment horizon, and risk measure. Based on these converging and contrasting findings, SustainRisk Performance is proposed as a conceptual construct integrating ESG quality, risk management, return stability, sustainability performance, and market resilience. The study contributes a clearer conceptual foundation and preliminary indicators for future empirical validation of the construct.

Keywords: Sustainrisk Performance; Sustainable Finance; Risk-Return; Portfolio Resilience; Literature Review

Abstrak

Studi ini mengembangkan konsep SustainRisk Performance dengan menyintesis bukti mengenai investasi ESG dan manajemen risiko ESG. Tinjauan literatur kualitatif yang terstruktur dilakukan terhadap sepuluh artikel jurnal internasional yang telah melalui telaah sejawat dan diterbitkan antara tahun 2022 hingga 2026. Cakupan tinjauan dibatasi pada studi yang secara langsung membahas ESG dalam kaitannya dengan imbal hasil investasi, volatilitas, diversifikasi

portofolio, risiko keuangan, risiko iklim, risiko kejatuhan harga saham, atau stabilitas keuangan. Artikel yang tidak melalui telaah sejawat, merupakan duplikasi, berada di luar fokus ESG-risiko-imbal hasil, atau tidak menyajikan bukti yang relevan dengan sintesis konseptual tersebut, tidak disertakan dalam analisis. Studi-studi terpilih dikodekan berdasarkan fokus penelitian, landasan teoretis, metode, temuan terkait risiko-imbal hasil, serta implikasi keberlanjutan. Hasil sintesis menunjukkan bahwa ESG lebih konsisten dikaitkan dengan mitigasi risiko dan ketahanan dibandingkan dengan imbal hasil yang secara seragam lebih tinggi; kekuatan dan arah hasil penelitian bervariasi tergantung pada pasar, cakrawala investasi, dan ukuran risiko yang digunakan. Berdasarkan temuan yang konvergen maupun kontras tersebut, SustainRisk Performance diusulkan sebagai konstruk konseptual yang mengintegrasikan kualitas ESG, manajemen risiko, stabilitas imbal hasil, kinerja keberlanjutan, dan ketahanan pasar. Studi ini memberikan kontribusi berupa landasan konseptual yang lebih jelas serta indikator awal untuk validasi empiris konstruk tersebut di masa mendatang.

Kata kunci: *Sustainrisk Performance; Keuangan Berkelanjutan; Risiko-Imbal Hasil; Ketahanan Portofolio; Tinjauan Literatur*

INTRODUCTION

The growth of sustainable investing in recent years has shown a significant increase in global financial markets. Investors no longer consider only financial returns but also take into account environmental, social, and corporate governance factors commonly known as environmental, social, and governance (ESG). ESG has emerged as a key indicator in investment decision-making because it is seen as a measure of a company's quality, business stability, and ability to manage long-term risks.

This shift in investment focus is driven by growing awareness of climate change, global economic instability, and the need for sustainable development. ESG is viewed as an approach that bridges economic interests with social and environmental sustainability. In practice, companies with strong ESG practices tend to have a stronger reputation, lower risk, and greater resilience in the face of market uncertainty.

Kyei Mensah (2026) explains that companies with high ESG ratings tend to have better stock returns and lower financial risk compared to companies with low ESG ratings. These findings demonstrate that ESG is not only related to business ethics but also to the stability of a company's financial performance. Additionally, Tao et al. (2025) found that ESG has a negative relationship with idiosyncratic volatility, suggesting that ESG can serve as a risk mitigation mechanism for companies.

Research on ESG and risk-return has also expanded to include portfolio diversification. Lopez Prol and Kim (2022) explain that ESG-based portfolios exhibit lower volatility compared to non-ESG portfolios. These findings suggest that ESG can

help investors create more stable portfolios that are resilient to market volatility. On the other hand, Dinh (2023) states that ESG has a greater impact on risk reduction than on return enhancement.

In the context of sustainable finance, ESG is viewed not only as a tool for corporate assessment but also as a mechanism for long-term risk management. Nguyen (2025) explains that green finance and ESG contribute to the stability of the financial system and can mitigate the impact of climate risk on the banking and investment sectors.

Although previous studies have examined ESG-return, ESG-risk, portfolio volatility, stock crash risk, and financial stability, the evidence remains fragmented and, in several cases, mixed. For example, high-ESG portfolios may exhibit lower volatility without necessarily producing higher risk-adjusted returns, while diversification benefits can differ between developed and emerging markets. This fragmentation creates a conceptual problem: existing measures often isolate return, risk, or sustainability rather than explaining how these outcomes jointly reflect the durability of investment performance. Accordingly, this study introduces SustainRisk Performance as a proposed integrative construct, not as an already established measure. Its theoretical urgency lies in connecting Modern Portfolio Theory's risk-return optimization with sustainability-related information, risk governance, and resilience perspectives. The study therefore asks: (1) How does the literature explain the relationship between ESG Investment and investment risk-return outcomes? (2) How does ESG Risk Management contribute to risk stability and resilience? and (3) What dimensions can be synthesized into a preliminary conceptualization of SustainRisk Performance? The objective is to critically synthesize the selected literature and develop a conceptually grounded framework that can subsequently be operationalized and empirically validated.

RESEARCH METHODS

This study uses a qualitative structured literature review to synthesize theoretical and empirical evidence on ESG Investment, ESG Risk Management, and risk-return outcomes. The review procedure follows the principles of transparent literature synthesis described by Snyder (2019) and is reported in a manner consistent with the transparency

logic of PRISMA 2020 (Page et al., 2021), while recognizing that the present study is a focused conceptual review rather than a meta-analysis.

The search and verification process focused on peer-reviewed international journal articles indexed in Scopus, with publisher databases, principally ScienceDirect, used to retrieve and verify bibliographic records. Search combinations included “ESG investment” AND “risk return”, “ESG” AND “portfolio volatility”, “ESG risk management” AND “idiosyncratic risk”, “sustainability reporting” AND “stock crash risk”, “green finance” AND “financial stability”, and “ESG” AND “market resilience”. The publication window was 2022-2026 to capture recent evidence while retaining the earliest study in the final review corpus. Inclusion criteria were: (1) peer-reviewed journal article; (2) English language; (3) direct relevance to ESG, sustainable/green finance, investment performance, or financial risk; (4) explicit evidence concerning return, volatility, diversification, crash risk, climate/financial risk, or resilience; and (5) sufficient theoretical or empirical content for conceptual synthesis. Exclusion criteria were duplicate records, non-peer-reviewed publications, studies outside the financial/investment context, and papers without findings relevant to the risk-return-sustainability nexus. Ten articles met these eligibility criteria and formed the final analytical corpus.

Each article was coded using a review matrix covering author and year, research setting, theoretical perspective, methodology, ESG-related variable, risk/return outcome, principal finding, and implication for the proposed construct. Analysis proceeded through four stages: data reduction, thematic categorization, comparison of convergent and divergent findings, and concept synthesis. Rather than counting findings, the review examined where the studies agreed, where they differed, and which contextual factors could explain those differences. The final synthesis was then mapped onto preliminary dimensions of SustainRisk Performance. Because these dimensions are conceptually derived, they are presented as candidate indicators that require measurement development and empirical construct validation in future research.

RESULTS AND DISCUSSION

ESG Investment from the Perspective of Modern Portfolio Theory

Modern Portfolio Theory, developed by Harry Markowitz (1952), explains that investors will choose the optimal asset mix to achieve the highest return for a given level of risk or the lowest risk for a given level of return. In modern investment practice, ESG has come to be viewed as part of a portfolio diversification strategy.

Lopez Prol and Kim (2022) explain that ESG-based portfolios exhibit lower volatility compared to non-ESG portfolios. ESG factors enhance portfolio stability because companies with strong ESG performance generally have stronger governance, better risk management, and a higher corporate reputation. These findings suggest that ESG investing can enhance the stability of long-term investments. Additionally, Kilic et al. (2022) explain that ESG investing provides better diversification benefits in developed countries compared to emerging markets. ESG assets exhibit lower spillover effects from market shocks, thereby enhancing a portfolio's resilience against global market volatility.

In the context of modern investing, ESG investing serves not only as an indicator of sustainability but also as an investment risk management strategy. Investors are beginning to view ESG as a key factor in building stable and sustainable portfolios.

ESG Risk Management and Investment Risk Stability

ESG Risk Management can be understood as the integration of environmental, social, and governance information into the identification, assessment, mitigation, and monitoring of financial and non-financial risks. Evidence in the reviewed studies is strongest for risk-related outcomes rather than for a uniform return premium. Tao et al. (2025), for example, report that stronger ESG ratings are associated with lower idiosyncratic risk, supporting the view that ESG information can reduce firm-specific uncertainty. This mechanism is consistent with stronger governance, greater transparency, and improved anticipation of sustainability-related exposures.

The evidence on extreme downside risk is more nuanced. Kiran et al. (2025) report a significant positive association between ESG factors and stock price crash risk in their banking sample, including differences between Islamic and conventional banks, while their robustness analysis also suggests that sustainability disclosure can improve market

dynamics, investor confidence, and agency-related information conditions. This apparent tension is important: ESG disclosure should not be assumed to reduce every risk measure in every context. From a Signaling Theory perspective, disclosure can reduce information asymmetry, but the market effect depends on disclosure quality, governance, institutional setting, and how investors interpret sustainability information. SustainRisk Performance therefore needs to capture risk resilience without presuming that ESG mechanically produces superior outcomes.

Critical Synthesis of Convergent and Divergent Findings

Across the reviewed studies, three patterns emerge. First, risk reduction is more consistent than return enhancement: Dinh (2023) and Tao et al. (2025) emphasize reductions in risk or volatility, whereas Lopez Prol and Kim (2022) show that lower volatility can coexist with lower returns and weaker Sharpe ratios. Second, market context matters: Kilic et al. (2022) find stronger diversification benefits in developed markets than in developing markets. Third, disclosure-related effects are not uniformly protective: Kiran et al. (2025) identify a positive relationship between ESG factors and stock crash risk in their main estimates, even though disclosure may simultaneously improve information conditions and investor confidence. These findings reject a simple assumption that “more ESG” always means “higher return and lower risk.” Instead, they justify a construct centered on the durability and balance of risk-adjusted performance under sustainability constraints.

SustainRisk Performance as a New Conceptual Construct

SustainRisk Performance is proposed in this study as an integrative conceptual construct emerging from the intersection of ESG Investment, ESG Risk Management, sustainable finance, and risk-return stability. It is not presented as an established scale. Instead, the construct synthesizes recurring outcomes in the reviewed literature while explicitly accommodating mixed evidence concerning returns, volatility, diversification benefits, and downside risk.

SustainRisk Performance is defined as the capacity of an investment, portfolio, or company to maintain comparatively stable and sustainable financial performance while

managing material ESG-related risks and preserving resilience under changing market conditions. The definition emphasizes balance: sustainable performance is not equivalent to maximum return, but to the durability of risk-adjusted outcomes supported by ESG quality and risk-management capability.

The SustainRisk Performance concept is built on several key dimensions, namely:

1. ESG Quality
2. Risk Management
3. Return Stability
4. Sustainability Performance
5. Market Resilience



Figure 1. Proposed conceptual framework of SustainRisk Performance

Preliminary operational dimensions and candidate indicators are summarized below. These indicators are propositions for future scale development and should not be treated as validated measures.

Dimension	Conceptual meaning	Candidate indicators
ESG Quality	Quality of environmental, social, and governance practices/information supporting sustainable investment decisions.	ESG rating/score; ESG disclosure quality; governance quality; material ESG issue management.
Risk Management	Capacity to identify, mitigate, and monitor	Volatility; idiosyncratic risk; downside/crash risk;

	financial and ESG-related risks.	climate-risk exposure; risk-control processes.
Return Stability	Ability to maintain comparatively consistent financial outcomes over time.	Return variability; risk-adjusted return; Sharpe ratio; persistence of returns; drawdown stability.
Sustainability Performance	Extent to which financial performance is supported by durable environmental, social, and governance practices.	Environmental performance; social performance; governance effectiveness; sustainable-finance alignment.
Market Resilience	Ability to withstand shocks, spillovers, and changing market conditions.	Shock recovery; spillover sensitivity; diversification benefit; drawdown recovery; stability during market stress.

The construct differs from conventional ESG performance or stand-alone financial return measures because it integrates sustainability quality, risk-control capacity, return stability, and resilience within one conceptual domain. The reviewed evidence also shows why this integration must remain conditional rather than deterministic. Lopez Prol and Kim (2022) find that high-ESG optimized portfolios have lower volatility but also lower returns and lower Sharpe ratios, indicating that lower risk does not automatically translate into superior risk-adjusted performance. Kilic et al. (2022) further show that ESG diversification benefits are stronger in developed markets and more limited in developing markets. Dinh (2023) similarly concludes that ESG plays a stronger role in risk than in return and that the effect varies by investment horizon. These differences support a multidimensional construct that separates risk control, return stability, and resilience instead of treating ESG as a single-direction performance enhancer.

Behavioral Finance adds a complementary explanation because investor responses to ESG information can reflect preferences, perceptions, and time horizons in addition to conventional financial expectations. This helps explain why ESG-related assets may attract demand even when the return premium is inconsistent. In the proposed framework, behavioral responses are therefore relevant to market resilience and the persistence of sustainable investment preferences, but they do not replace objective risk-return assessment.

Financial Contagion and resilience perspectives further clarify the market-resilience dimension. Kilic et al. (2022) document heterogeneous spillover and diversification patterns across developed and developing markets, suggesting that resilience is context-dependent. Together, the reviewed studies indicate that SustainRisk Performance should be evaluated through multiple dimensions and tested across market settings rather than inferred from an ESG score alone.

CONCLUSION

This literature review finds that ESG Investment and ESG Risk Management are relevant to sustainable investment performance, but their effects are not uniform across all financial outcomes. The most consistent pattern is that ESG is associated with risk-related benefits such as lower volatility or idiosyncratic risk and, in some settings, stronger resilience. Evidence for higher returns is less consistent, and several studies show trade-offs or context-dependent outcomes. This distinction is central to the proposed SustainRisk Performance construct.

The theoretical contribution of the study is the integration of sustainability quality, risk-management capability, return stability, and market resilience into one preliminary conceptual domain. Practically, the framework encourages investors, financial institutions, and corporate decision makers to assess ESG performance together with risk and return characteristics rather than treating ESG scores as automatic evidence of superior financial performance. The proposed dimensions and indicators can also provide an initial basis for instrument development, portfolio assessment, and future comparative studies.

This study has several limitations. The review is based on a focused corpus of ten articles, covers the 2022-2026 publication period, and does not conduct meta-analysis; consequently, the findings should be interpreted as conceptual synthesis rather than a definitive estimate of ESG effects. The proposed SustainRisk Performance dimensions have not yet been statistically validated. Future research should expand the database coverage and sample of studies, test the construct through expert validation and scale-development procedures, examine reliability and convergent/discriminant validity, and evaluate the model using cross-country or multi-market data. Further studies should also

test whether market development, investment horizon, industry, regulatory quality, and ESG measurement source moderate the relationship between ESG practices and SustainRisk Performance.

REFERENCES

- Carvalho, P. V., Falcao, P. F., Pinheiro, C. M., & Carrao, D. (2025). *Revisiting ESG performance: Do high scores translate to higher returns? A risk-adjusted analysis of S&P 500 portfolios*. Finance Research Letters.
- Dinh, M. T. H. (2023). *ESG, time horizons, risks and stock returns*. Research in International Business and Finance, 65, 101981. <https://doi.org/10.1016/j.ribaf.2023.101981>
- Fahmi, I. (2018). *Manajemen Risiko: Teori, kasus, dan solusi*. Alfabeta.
- Garbuio, M., Leeson, C., & Gheno, G. (2026). *ESG improvement as a critical driver of improved shareholder returns: A study of comparative portfolios*. Finance Research Letters.
- Halim, A. (2015). *Analisis Investasi dan Aplikasinya*. Salemba Empat.
- Hartono, J. (2017). *Teori Portofolio dan Analisis Investasi*. BPFE.
- Kilic, Y., Destek, M. A., Cevik, E. I., Bagan, M. F., Korkmaz, O., & Dibooglu, S. (2022). *Return and risk spillovers between the ESG global index and stock markets: Evidence from time and frequency analysis*. Borsa Istanbul Review, 22(S2), S141-S156. <https://doi.org/10.1016/j.bir.2022.11.015>
- Kiran, M., Rabbani, M. R., Khan, K. H., Atif, M., Talha, M., & Chughtai, S. (2025). *Sustainability reporting as a shield: Exploring ESG disclosures, governance, and stock crash risks in Islamic and conventional banks*. Sustainable Futures, 10, 101469. <https://doi.org/10.1016/j.sftr.2025.101469>
- Kyei-Mensah, J. (2026). *Investing with ESG ratings and the performance of stock returns*. International Review of Economics & Finance.
- Lopez Prol, J., & Kim, K. (2022). *Risk-return performance of optimized ESG equity portfolios in the NYSE*. Finance Research Letters, 50, 103312. <https://doi.org/10.1016/j.frl.2022.103312>
- Nguyen, Q. K. (2025). *Green finance, climate risk, and financial stability: Evidence from ASEAN+4 countries*. Environmental and Sustainability Indicators.

- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hrobjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., ... Moher, D. (2021). *The PRISMA 2020 Statement: An Updated Guideline For Reporting Systematic Reviews*. *BMJ*, 372, n71. <https://doi.org/10.1136/bmj.n71>
- Snyder, H. (2019). *Literature review as a research methodology: An overview and guidelines*. *Journal of Business Research*, 104, 333-339. <https://doi.org/10.1016/j.jbusres.2019.07.039>
- Sugiyono. (2020). *Metode penelitian kualitatif*. Alfabeta.
- Tandelilin, E. (2017). *Portofolio dan investasi: Teori dan aplikasi*. Kanisius.
- Tao, M., Lin, B., Poletti, S., & Roubaud, D. (2025). *Greener pastures, steadier returns: ESG ratings and idiosyncratic risk management*. *International Review of Economics & Finance*.
- Zhang, Q., Du, K., Fang, W., & Tu, Q. (2025). *Environmental regulation, banking risk, and green finance policy: A DSGE approach*. *Sustainable Futures*.

