

## ESG Performance and Financial Outcomes: The Role of Innovation and External Assurance in Emerging Markets

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### ABSTRACT

**Objectives:** Investor and regulator attention to sustainability practices has made Environmental, Social, and Governance (ESG) performance increasingly crucial for companies. This study examines the effect of ESG performance on financial performance with innovation as a mediator and external assurance as a moderator.

**Methodology:** The study was conducted on 58 publicly listed Indonesian companies during the 2023–2024 period that have ESG Risk Rating scores from Morningstar Sustainalytics and have reported research and development expenses in their operations. SEM-PLS aims to analyze the developed model.

**Finding:** The results show that (1) good ESG performance (indicated by a lower ESG Risk Rating) has a significant positive effect on ROE, indicating that better ESG performance is associated with higher financial performance; (2) innovation acts as a mediator, where sustainability practices encourage innovative activities that positively impact financial performance; and (3) external assurance strengthens the relationship between ESG and financial performance through enhanced reporting credibility and reduced information asymmetry.

**Conclusion:** These findings affirm that ESG is not merely about compliance but a strategy to drive innovation and increase profits. The managerial implications include reducing ESG risk through measurable sustainability initiatives, strengthening investment in green research and development, and obtaining independent external assurance to enhance reporting credibility and increase investment opportunities.

**Keywords:** ESG; ROE; Innovation; External Assurance.

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## INTRODUCTION

As stakeholder awareness of the importance of sustainability continues to grow, companies are increasingly focusing on Environmental, Social, and Governance (ESG) aspects that influence firm value both individually and collectively (Melinda & Wardhani, 2020). ESG not only reflects a company's resilience but also serves as an indicator of long-term sustainability (Buallay, 2019). Many companies are now fostering a sustainable culture and environmental efficiency in their operations (Kotze et al., 2010; Nowak et al., 2011). The Indonesia Stock Exchange's role in encouraging sustainability disclosure is consistent with the country's growing focus on Environmental, Social, and Governance (ESG) principles. Establishing market trust and generating long-term value for businesses depend more and more on the strategic use of ESG standards. According to the framework of stakeholder theory, businesses must not only satisfy the financial expectations of their shareholders but also exhibit social and environmental responsibility in order to win over more people and stay out of trouble with the law and their reputation. Companies that can effectively manage ESG risks are expected to gain stronger legitimacy and reduce investors' risk perception. To maintain and enhance sustainability, innovation becomes a key element. Companies facing external pressures are expected to be capable of integrating both incremental and radical innovations to address ESG challenges and maintain competitive advantage (Barbieri et al., 2010; De Massis et al., 2018). (Xu & Zhu, 2024) show that companies with strong ESG performance tend to be more innovative, and such innovation contributes positively to financial performance. The growing awareness among investors regarding ESG and sustainability has opened the door to the phenomenon of greenwashing, where some companies attempt to project an environmentally friendly image without genuine commitment or meaningful action. In Indonesia, regulations such as POJK No. 51/POJK.03/2017 and SEOJK No. 16/2021 mandate sustainability reporting, and the increasing pressure to maintain a positive image has driven the practice of greenwashing or false sustainability claims in order to attract investors (Choice, 2010). A survey by (PWC, 2024) of 345 global investors revealed that 94% doubted the credibility of sustainability reports, up from 87% the previous year. Another survey by (Stanley, 2024) indicated that a lack of transparency remains a major obstacle in sustainable investing. To address these concerns, external assurance plays an important role. Independent third-party assurance can enhance the credibility and reliability of sustainability information, especially in the absence of universal accounting standards for ESG topics (Gomulya D & Y, 2017; J et al., 2009). In GRI 2: General Disclosures 2021, companies are encouraged to use external assurance to ensure report quality, although it is not mandatory (GRI, 2013). (G & R, 2018) stated that companies with strong ESG performance tend to voluntarily provide external assurance as a form of accountability. (Dewi & Widyawati, 2023) showed that sustainability disclosures only positively affect financial performance when supported by external assurance. With rising concerns over greenwashing, it is essential to examine how ESG influences financial performance by considering innovation as a mediator and external assurance as a moderator. However, prior research on the relationship between ESG and financial success has mostly focused on the developed world and has not yet integrated the roles of innovation and external assurance. Furthermore, there has been a dearth of research on the application of more objective ESG testing and measurements in emerging market environments like Indonesia, which this study aims to fill. This research utilizes publicly available ESG Risk Rating data to avoid the weaknesses of manual data extraction found in earlier studies (Dewi & Widyawati, 2023; Xu & Zhu, 2024).

Unlike (Xu & Zhu, 2024), which highlighted the mediating role of innovation in a developed country context (China), this study examines the mediating effect of innovation in the context of a developing country (Indonesia), which presents different market characteristics, regulatory environments, and ESG challenges. The objective of this study is also supported by (Kalia & Aggarwal, 2023), who found that ESG has a positive impact on financial performance in developed countries, but tends to be negative or insignificant in developing countries. The effectiveness of ESG in enhancing financial performance is contextual and cannot be generalized, depending on the level of economic development and the readiness of the respective sectors. The study by (Dewi & Widyawati, 2023) focused on the effect of external assurance on the relationship between sustainability disclosure and market performance, whereas this research broadens the scope by examining the role of external assurance as a moderator in the relationship between ESG performance and corporate financial performance (ROE). This represents an original contribution, as it not only assesses the direct effects but also how external assurance strengthens the effectiveness of ESG in creating financial value.

## LITERATURE REVIEW

According to stakeholder theory, an organization's capacity to balance the needs of different stakeholder groups is crucial to its existence. The normative branch emphasizes the company's moral obligation to stakeholders, the descriptive branch observes how companies actually meet those demands, and the instrumental branch predicts that integrating stakeholder interests into corporate strategy will lead to higher long-term gains (Donaldson & Preston, 1995; Freeman, 1999).

The concept of sustainability, introduced by Meadows et al. (1972), is strongly linked to stakeholder theory, which emphasizes the importance of social responses in addressing environmental and economic challenges. With the growth and development of the times, the concept of sustainability has been increasingly put forward and applied in various business sectors through a corporate sustainability approach. According to Artiach et al. (2010) and Pemer et al. (2020), corporate sustainability is a business and investment strategy aimed at improving business practices by balancing the needs of current and future stakeholders.

A framework called Environmental, Social, and Governance (ESG) is used to evaluate a business's social effect and sustainability performance. A high ESG score shows that management has fulfilled stakeholder demands on governance, social, and environmental issues, which lowers conflict and raises the value of the business. According to the work of Meadows et al. (1972) and the World Commission on Environment and Development (WCED, 1987), corporate sustainability requires a balance among economic, social, and environmental goals, known as the triple bottom line concept (Elkington, 1997). Therefore, companies are assessed based on their ability to create long-term value without depleting natural or social capital (Artiach et al., 2010; Pemer et al., 2020). Practices aligned with ESG can become unique and hard-to-replicate resources that strengthen a company's innovation capability. Based on the Resource-Based Theory (RBT), sustainable competitive advantage originates from resources that are valuable, rare, inimitable, and non-substitutable (Barney, 1991). Companies need to invest in research and development (R&D), which transforms intangible knowledge into innovation to enhance productivity and profitability (Griliches, 1998; Hall & Mairesse, 1995).

## Research Hypotheses

In general, stakeholders have a more favorable opinion of businesses that can successfully manage environmental, social, and governance risks. A lower ESG Risk Rating reflects lower risk exposure and more mature sustainability issue management. In the long run, effective ESG management can reduce the cost of capital, improve operational efficiency, and strengthen corporate legitimacy in the market. According to stakeholder theory, companies with strong ESG performance are considered more responsible and sustainable, making them more attractive to investors. Several studies, including (Xu & Zhu, 2024) and Taha et al., (2023), show a significant positive relationship between ESG performance and profitability. (Aydoğmuş et al., 2022) analysed the impact of ESG on firm value and profitability using large-scale data, showing that the combined ESG score, as well as the social and governance aspects, have a significant positive relationship with firm value. (Sinha Ray & Goel, 2023) examined the impact of ESG scores on various financial indicators of companies in India, within the context of new ESG reporting policies by SEBI, and found that ESG scores affect ROA, ROE, Tobin's Q, and stock prices particularly in the long term and play a role in shaping market perception and mitigating risks in developing countries.

**H<sub>1</sub>:** The financial success of the company is positively impacted by ESG performance.

Good ESG performance not only reduces risk but also fosters an adaptive, creative, and innovative organizational culture. Companies that adopt sustainable practices are often driven to develop new, more efficient, and environmentally friendly products or processes. Such innovation can serve as a competitive advantage, enhancing financial performance. Resource-Based Theory (RBT) supports the notion that strong ESG performance enables better allocation of resources toward innovation. (Xu & Zhu, 2024) demonstrated that ESG drives innovation, which in turn positively impacts financial performance. Based on this logic, innovation is viewed as a mediating mechanism that bridges the influence of ESG on financial performance.

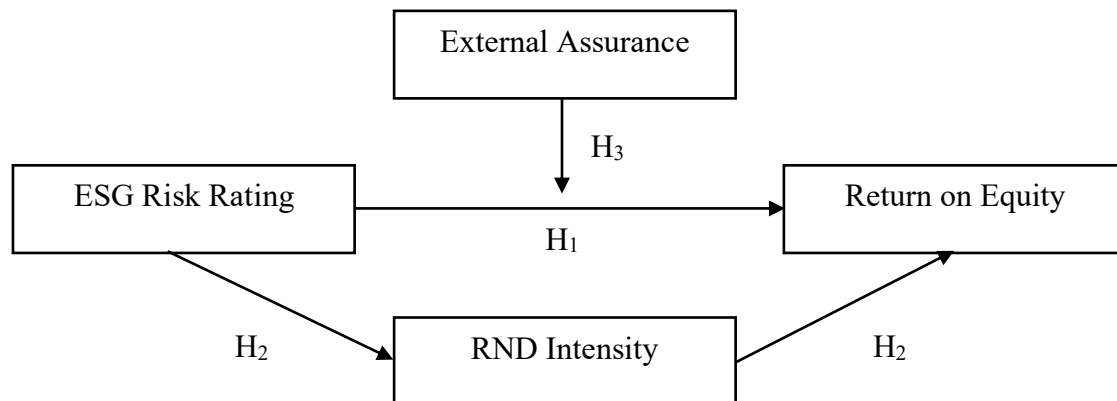
**H<sub>2</sub>:** The relationship between ESG performance and financial success is mediated by business innovation, whereby strong ESG performance fosters corporate innovation, which in turn boosts financial performance. In practice, ESG disclosures without third-party verification are often questioned by investors regarding their credibility. The risk of greenwashing renders sustainability information less trustworthy when it is not supported by external assurance. External assurance serves as a credibility signal that reduces information asymmetry and strengthens stakeholder perceptions of a company's ESG commitment. (Dewi & Widyawati, 2023) found that only companies with independently verified sustainability reports received positive market responses. Thus, external assurance is believed to strengthen the relationship between ESG performance and financial performance by enhancing stakeholder perceptions of ESG quality.

**H<sub>3</sub>:** The relationship between ESG performance and financial performance is moderated by external assurance, and the positive association is strengthened when external assurance is present.

This study aims to examine the effect of environmental, social, and governance performance, as measured by ESG Risk Rating, on financial performance, with corporate innovation as a

mediating variable and external assurance as a moderating variable. Figure 1 presents the research model tested in this study.

**Figure 1** Research Model



## RESEARCH METHODOLOGY

This study was conducted on 58 companies out of 142 companies in Indonesia that are subject to ESG Score assessment by Morningstar Sustainalytics (an ESG performance rating agency partnered with the Indonesia Stock Exchange) and have R&D expenditures in their operational activities. ESG Risk Rating data were obtained from the official website of Morningstar Sustainalytics ([www.sustainalytics.com](http://www.sustainalytics.com)), while financial reports and sustainability reports were sourced from the official website of the Indonesia Stock Exchange ([www.idx.co.id](http://www.idx.co.id)) and the official websites of the companies. The research period covers the years 2023-2024. In this study, ESG performance is positioned as the independent variable and measured using the ESG Risk Rating, which reflects a company's exposure to ESG risks and its ability to manage or mitigate them. The ESG Risk Rating is expressed as a numerical score, where a higher score indicates greater ESG risk, and conversely, a lower score reflects lower ESG risk. Therefore, the ESG Risk Rating has an inverse relationship with a company's ESG performance. The classification of ESG Risk Rating categories is presented in Table 1.

**Tabel 1** Classification of ESG Risk Rating Categories

Risk Score	Categories	Description
0-10	Negligible	Considered to have negligible ESG risk
10-20	Low	Considered to have low ESG risk
20-30	Medium	Considered to have medium ESG risk
30-40	High	Considered to have high ESG risk
>40	Severe	Considered to have severe ESG risk

The dependent variable is Return on Equity (ROE), a proxy chosen because it directly measures how efficiently a company uses equity capital to create shareholder value. Therefore, an increase in ROE associated with ESG can be interpreted as evidence of higher "management quality." The study also includes a dummy variable for External Assurance: companies receive a score of 1 if their sustainability report officially includes external

assurance, regardless of the standard or scale of assurance, and a score of 0 if no such assurance is present. Finally, R&D Intensity serves as the mediating variable, calculated by dividing the company's annual R&D expenditure by its total assets; this ratio reflects the portion of assets allocated to innovation activities, where a higher R&D intensity indicates a stronger corporate commitment to innovation. The definitions and descriptions of the study variables are presented in Table 2, which serves as the primary reference for understanding the variables used in this research in detail.

**Table 2** Definition and Description of Research Variables

Variable Type	Variable Name	Variable Symbol	Variable Metric
Dependent	Financial Performance	ROE	Net Income / Shareholders' Equity
Independent	ESG Performance	ESG	ESG Risk Rating
Mediator	Corporate Innovation	RNDI	$\frac{\text{RND Expenses}}{\text{Total Assets}}$
Moderator	External Assurance	EA	Dummy (1 = assured, 0 = not assured)

This study employs a Structural Equation Modeling approach based on Partial Least Squares (PLS-SEM) and is processed using SmartPLS version 4.

## RESULT AND DISCUSSION

The results of the descriptive analysis of the four variables in this study (Table 3) show that the average ESG Risk Rating of the companies is 28.86, which falls into the medium risk category, with a median value of 30.10, indicating that most companies have entered the high-risk category.

**Table 3** Descriptive Analysis Results Indicators

Name	Mean	Median	Observed min	Observed max
ESG	28.868	30.100	10.700	49.100
RNDI	0.006	0.000	0.000	0.195
EA	0.690	1.000	0.000	1.000
ROE	0.116	0.114	-2.530	1.570

The lowest ESG Risk Rating score of 10.70 is held by PT Jasa Marga Tbk (JSMR), while the highest score of 49.10 belongs to PT Timah Tbk (TINS), indicating a significant variation in ESG risk levels across companies. The ROE (Return on Equity) variable has an average value of 11.6% and a median of 11.4%, suggesting that companies generally exhibit good profitability (>10%), although the range is quite wide, from -253.0% (PT GoTo Gojek Tokopedia Tbk) to 157.0% (PT Unilever Indonesia Tbk), reflecting substantial differences in financial performance. For the RNDI (Research and Development Intensity) variable, the average is recorded at 0.6% with a median of 0.0%, indicating that most companies do not allocate significant funds for R&D, with some not reporting any R&D expenditure at all. The

highest value of 19.5% is observed in PT Unilever Indonesia Tbk. Meanwhile, the EA (External Assurance) variable shows that around 69.0% of the 58 companies use external assurance to validate their sustainability reports, while the remaining 31% do not, considering that the use of external assurance remains voluntary.

**Table 4** Multicollinearity Test Results

	VIF
EA	1.000
ESG	1.000
RNDI	1.000
ROE	1.000
EA x ESG	1.000

Based on the multicollinearity test results (Table 4), all variables in the model, including the interaction term  $EA \times ESG$ , have Variance Inflation Factor (VIF) values of 1.000. These values indicate no signs of multicollinearity, as they fall well below the commonly accepted threshold of 5. This means that all variables are linearly independent and the regression model can be interpreted reliably.

**Table 5** R-square Results

	R-square	R-square adjusted
RNDI	0.048	0.040
ROE	0.504	0.486

Furthermore, based on the results of the determination test in Table 5, the model with the mediating variable Research and Development Intensity (RNDI) shows an adjusted R-square value of 0.040, meaning that only 4.0% of the variability in corporate innovation can be explained by the ESG Risk Rating. This indicates that other factors outside the model play a more dominant role in influencing the level of innovation. Meanwhile, the model with the dependent variable Return on Equity (ROE) has an adjusted R-square value of 0.486, indicating that 48.6% of the variation in financial performance can be explained by the combination of ESG Risk Rating, RNDI, External Assurance (EA), and the  $EA \times ESG$  interaction. This value is considered fairly good, suggesting that the model has moderate to strong predictive power for ROE.

**Table 6** F-square Results

	F-square	Interpretation
$EA \times ESG \rightarrow ROE$	0.090	Small
$ESG \rightarrow RNDI$	0.051	Small
$ESG \rightarrow ROE$	0.174	Medium
$RNDI \rightarrow ROE$	0.484	Large

The effect size analysis using F-square (Table 6) indicates that the strongest contributor to financial performance comes from  $RNDI \rightarrow ROE$ , with an F-square value of 0.484, classified as a large effect. This demonstrates the significant role of innovation in explaining variations in ROE. The direct influence of  $ESG \rightarrow ROE$  has an F-square of 0.174, considered a medium effect, showing that ESG Risk Rating also significantly impacts financial performance. The interaction term  $EA \times ESG \rightarrow ROE$  records an F-square of 0.090,

categorized as a small to medium effect, indicating that the presence of external assurance plays a role in reinforcing the relationship between ESG and ROE. Meanwhile, the effect of ESG → RNDI has 0.051, a small effect, suggesting a limited influence of ESG performance on corporate innovation levels.

**Table 7** Model Fit Results

	<b>Saturated model</b>	<b>Estimated model</b>
SRMR	0.000	0.093
NFI	1.000	0.899

Based on the results of the model fit test (Goodness of Fit) in Table 7, the Standardized Root Mean Square Residual (SRMR) is 0.093, which falls within the generally accepted threshold of below 0.10. This indicates that the model has an adequate level of fit. Meanwhile, the Normed Fit Index (NFI) value is 0.899, which is very close to the ideal cutoff of 0.90. Thus, the model can be considered to have a near-good level of fit. Overall, these indicators suggest that the structural model in this study is acceptable and sufficiently representative for examining the relationships between the variables under investigation.

**Table 8** T Test Results

	<b>Original Sample</b>	<b>Sample Mean</b>	<b>Standard Deviation</b>	<b>T statistics</b>	<b>P-value</b>
EA x ESG → ROE	0.710	0.654	0.374	1.898	0.058*
ESG → RNDI	-0.219	-0.227	0.046	4.760	0.000**
ESG → ROE	-0.901	-0.873	0.328	2.744	0.006**
RNDI → ROE	0.504	0.507	0.199	2.534	0.011**

\*Significance Level 10%, \*\*Significance Level 5%

In the path coefficients significance test in (Table 8), ESG Risk Rating has a negative and significant effect on ROE, with a coefficient of -0.901 and a p-value of 0.006, supporting the first hypothesis (H<sub>1</sub>) that the better the company's ESG practices (the lower the ESG Risk Rating), the better its financial performance tends to be. In addition, ESG also has a negative and significant effect on RNDI, with a coefficient of -0.219 and a p-value < 0.001, indicating that the better the ESG performance, the higher the company's level of innovation. RNDI is also proven to have a positive and significant effect on ROE with a p-value of 0.011, reinforcing the existence of a mediating mechanism between ESG and financial performance as stated in the second hypothesis (H<sub>2</sub>).

Meanwhile, the interaction between ESG and EA on ROE has a p-value of 0.058, which indicates significance at the 10% level. This result supports the third hypothesis (H<sub>3</sub>); the positive coefficient value indicates that when the ESG risk rating increases and external assurance is present, financial performance improves. This result suggests that external assurance plays a role in mitigating the negative impact of ESG risk on financial performance, particularly ROE.



**Table 9** Mediation Test Results

	Original Sample	Sample Mean	Standard Deviation	T statistics	P-value
ESG → RNDI → ROE	-0.110	-0.115	0.053	2.080	0.038

Furthermore, the results of the indirect mediation path analysis in (Table 9) show that ESG → RNDI → ROE has a coefficient of -0.110 with a t-statistic value of 2.080 and a p-value of 0.038. This value is statistically significant at the 95% confidence level, indicating a significant mediating effect of innovation on the relationship between ESG and financial performance. The negative direction of the ESG → RNDI path suggests that companies with better ESG practices (indicated by lower ESG Risk Rating scores) tend to increase innovation intensity, which in turn positively impacts financial performance, particularly ROE. These findings provide empirical support for the second hypothesis (H<sub>2</sub>), which states that innovation serves as an important mediating mechanism in bridging the influence of ESG on a company's financial performance.

**Table 10** Hypothesis Test Result

	Description	Result	Conclusion
H <sub>1</sub>	The financial success of the company is positively impacted by ESG performance.	p-value (0.006)** < 0.05	Accepted
H <sub>2</sub>	The relationship between ESG performance and financial success is mediated by business innovation, whereby strong ESG performance fosters corporate innovation, which in turn boosts financial performance.	p-value (0.038)** < 0.05	Accepted
H <sub>3</sub>	The relationship between ESG performance and financial performance is moderated by external assurance, and the positive association is strengthened when external assurance is present.	p-value (0.058)* < 0.10	Accepted

\*Significance Level 10%, \*\*Significance Level 5%

The result of the test on the first hypothesis in (Table 10) is accepted. This result shows that better ESG performance (indicated by a lower ESG Risk Rating score) has a significantly positive effect on the company's financial performance, particularly in the Return on Equity (ROE) indicator. This finding indicates that companies with lower ESG risk tend to have higher financial performance. Theoretically, this is in line with stakeholder theory (Freeman, 1999), which emphasizes the importance of long-term relationships between companies and their stakeholders (investors, consumers, government, and society). Companies that pay attention to environmental, social, and governance aspects tend to gain greater public trust, which ultimately supports income stability and increases operational efficiency. This relationship can also be explained through legitimacy theory, which states that companies strive to align their operations with social expectations in order to maintain legitimacy or public acceptance and recognition of the decisions or policies taken (Suchman, 1995). When companies demonstrate a commitment to sustainability, they gain social support and a good

reputation, which play an important role in maintaining financial stability. ESG is also closely related to the management of non-financial risks that are not directly reflected in financial statements, such as environmental risks (emissions, waste), social risks (employee relations, human rights), and governance risks (corruption, internal management). Thus, in practice, the implementation of ESG principles can reduce legal, reputational, and operational risks. For example, good waste management and energy efficiency not only reflect environmental responsibility but also reduce long-term costs. This result is consistent with the research by (Friede et al., 2015), which through a meta-analysis of more than 2,000 studies found that the majority of the relationships between ESG and financial performance are positive. In addition, a study by (Eccles et al., 2014) shows that companies that seriously implement sustainability strategies tend to have better long-term financial results, mainly because they focus on operational efficiency, customer loyalty, and employee productivity. Furthermore, the integration of ESG helps companies avoid fines, lawsuits, and reputational damage, which contributes to more stable ROE. Therefore, the positive relationship between ESG performance and financial performance is not only statistically valid but also logical from theoretical and practical perspectives. This reinforces the notion that ESG is not merely a philanthropic initiative, but a risk management instrument and strategic advantage that has a real impact on profitability.

The result of the test on the second hypothesis in (Table 10) is accepted based on the mediation test result, which shows that ESG performance has an indirect relationship with financial performance through innovation. This means that good ESG practices encourage innovative activities within the company, which in turn lead to improved financial performance. This finding aligns with the resource-based view (RBV) framework, which positions internal capabilities such as innovation as a source of sustainable competitive advantage (Barney, 1991). Companies that focus on sustainability tend to be more open to change and encouraged to adapt, including in developing environmentally friendly products, energy-efficient production processes, and new business models based on digitalization and social responsibility. A study by Porter & Kramer (2011) on Creating Shared Value explains that integrating social and environmental values into business strategy can create new innovation opportunities relevant to the needs of society and consumers. Furthermore, ESG can open access to green financing and increase attractiveness to innovative talent. This result is also supported by research by Wang & Li (2016), which found that ESG positively influences corporate innovation output in China. Therefore, the mediating role of innovation shows that ESG not only has a direct impact on financial outcomes but also forms an innovative foundation that supports long-term growth. Theoretically, this aligns with the Dynamic Capabilities framework (Teece et al., 1997), which states that the ability to innovate and adapt is key to maintaining competitiveness. Companies with good ESG often have organizational structures that are open to change, focus on sustainability, and promote values of responsibility, which in turn drive internal innovation. Research by Fernando & Lawrence (2014) found that companies with strong sustainability initiatives tend to have greater innovation activity, as measured by R&D expenditure and patent filings. Therefore, the mediating relationship between ESG and financial performance through innovation reflects ESG's role as a driver of progressive strategy. The result of the test on the third hypothesis in (Table 10) is accepted.

The result shows that the interaction between ESG and External Assurance ( $EA \times ESG$ ) on ROE has a p-value of 0.058. Although conventionally this value is slightly above the 5% significance threshold, it is still considered significant at the 10% level, thus the hypothesis

can be accepted with a more relaxed level of confidence. These results are still noteworthy for their managerial and academic implications, as they demonstrate that the presence of external assurance can strengthen the positive influence of ESG performance on financial performance. The test result shows that when the ESG risk rating increases and external assurance is present, financial performance increases. This result indicates that External Assurance plays a role in reducing the negative impact of ESG risk on financial performance, particularly ROE. External Assurance on ESG reports conducted by independent auditors or third-party verification bodies aims to increase the trust and credibility of ESG reports in the eyes of investors and stakeholders. According to (Simnett et al., 2009), the presence of assurance enhances the quality, credibility, and reliability of sustainability reports, which in turn can reduce information asymmetry and strengthen the market's positive perception of the company. The moderation by External Assurance also supports the concept of Signaling Theory (Spence, 1973), which states that companies can send quality signals to the market through certain actions that are difficult for other companies to imitate. External Assurance on corporate sustainability reports is one such signal that shows the company is willing to be independently audited and open to external evaluation. Empirically, the presence of assurance indicates that the company not only complies with sustainability norms but is truly committed to integrity and transparency. This creates a multiplier effect, where the influence of ESG on financial outcomes becomes stronger because the market's perception of the company's social responsibility also increases. In the long term, this moderation can be key to building reputation and strategic differentiation. In the context of a market that increasingly demands transparency and integrity in ESG data, assurance is not merely a formality, but a strategic tool to build reputation and attract ESG-based investment. This result shows that assurance can strengthen the effect of ESG on financial performance, especially in environments that do not yet have strict ESG reporting regulations. Therefore, companies are advised not only to carry out ESG reporting but also to complement it with independent and transparent assurance as part of their governance strategy and communication with investors.

## CONCLUSION AND MANAGERIAL IMPLICATIONS

This study comes to the conclusion that, both directly and through mediation and moderation routes, ESG performance has a strategic role in improving a company's financial performance. First, properly managed ESG dramatically raises ROE, proving that ESG is a useful tool for risk management as well as a kind of social duty. Second, ESG strengthens its position as a catalyst for long-term competitive advantage by promoting sustainable corporate innovation. Third, by improving information trustworthiness and lowering information asymmetry, external assurance of ESG reporting increases the influence of ESG on financial performance. Only when ESG implementation is genuine, incorporated into business strategy, and backed by reliable control procedures are these advantages maximized. Greenwashing, which can harm a company's brand and undermine market trust, is a danger associated with symbolic or surface-level ESG efforts. Companies must thus steer clear of flimsy ESG strategies and make sure that each ESG project accurately demonstrates a dedication to sustainability and long-term value generation.

These results suggest that managers should incorporate ESG concepts into their main business plans rather than only considering them as administrative compliance or reporting requirements. ESG should be viewed as a component of a long-term strategy that boosts innovation, competitiveness, efficiency, and finance availability, all of which have a tangible

effect on profitability. Businesses could also encourage sustainability-driven innovation by doing research and development (RND) on low-emission technology, energy efficiency, and eco-friendly products. To gauge their impact on performance, RND operations must be documented and reported in financial accounts. However, even though the statistical relevance of assurance was not established in this study, organizations still need to work with independent assurance providers to improve the quality of sustainability reporting in order to boost credibility and investor confidence. Through socialization and training, management should raise ESG literacy at all organizational levels, guaranteeing that every department actively supports thorough and long-term ESG implementation.

Additionally, the findings of this study offer compelling evidence that sustainability commitments are not just "complementary" or "additional," but rather a driver of corporate profitability and the stability of the financial system, which has implications for regulators like the IDX and the Financial Services Authority (OJK). Regulations, policies, and more focused monitoring of businesses with poor ESG performance can all be strengthened by regulators. The study's findings can also help businesses prepare sustainability reports that go beyond greenwashing and instead highlight important ESG factors that affect performance, changing the perspective from one of duty to one of business strategy. There are a number of limitations to this study that provide opportunities for further investigation. In order to strengthen the effect of ESG on financial performance, future research is recommended to investigate additional moderator variables, such as the participation of sustainability committees, the quality of corporate governance, or the transparency levels of ESG reporting. Second, the results will be more broadly applicable if the observation period and sample coverage are extended in terms of industry and geographic area. Third, in order to achieve more thorough and comparable results across methodologies, ESG measuring techniques should be further refined, utilizing different indicators like the ESG Disclosure Index, Sustainalytics ESG Score, or Global Reporting Initiative (GRI) standards. Fourth, in order to provide a more thorough examination of sectoral disparities, future studies are encouraged to investigate the particular effects of ESG within each industry, taking into account that ESG and innovation impacts may differ between manufacturing, service, or resource-based sectors.

## REFERENCES

- Artiach, T., Lee, D., Nelson, D., & Walker, J. (2010). The determinants of corporate sustainability performance. *Accounting and Finance*, 50(1), 31–51.  
<https://doi.org/10.1111/j.1467-629X.2009.00315.x>
- Aydoğmuş, M., Gülay, G., & Ergun, K. (2022). Impact of ESG performance on firm value and profitability. *Borsa Istanbul Review*, 22, S119–S127.  
<https://doi.org/10.1016/j.bir.2022.11.006>
- Barbieri, J. C., Vasconcelos, I.F.G., D., Andreassi, T., & Vasconcelos, F. C. D. (2010). Innovation and sustainability: new models and propositions. *RAE Revista de Administracao de Empresas*, 146–154.
- Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99–120.
- Buallay, A. (2019). Is sustainability reporting (ESG) associated with performance? Evidence from the European banking sector. *Management of Environmental Quality: An International Journal*, 98–115.

- Choice, T. (2010). *The sins of greenwashing: home and family edition*. Ottawa, ON: Terra Choice Group.
- De Massis, A., Audretsch, D., Uhlaner, L., & Kammerlander, N. (2018). Innovation with limited resources: management lessons from the German mittelstand. *Journal of Product Innovation Management*, 125–146.
- Dewi, A., & Widyawati, L. (2023). The Relationship between Sustainability Performance and Financial Performance with External Assurance as the Moderating Variable in Indonesian Listed Companies. *IOP Conference Series: Earth and Environmental Science*, 1–11. <https://doi.org/10.1088/1755-1315/1199/1/012025>
- Donaldson, T., & Preston, L. E. E. E. (1995). *The Stakeholder Theory of the Corporation : Concepts , Evidence , and Implications Author ( s ) : Thomas Donaldson and Lee E . Preston Source : The Academy of Management Review , Jan . , 1995 , Vol . 20 , No . 1 ( Jan . , 1995 ) , pp . Published by : Academy . 1*, 65–91.
- Eccles, R. G., Ioannou, I., & Serafeim, G. (2014). The impact of corporate sustainability on organizational processes and performance. *The Impact of Corporate Sustainability on Organizational Processes and Performance*, 60(11), 2835–2857. <https://doi.org/10.1287/mnsc.2014.1984>
- Elkington, J. (1997). *Cannibals with Forks: The Triple Bottom Line of 21st Century Business*. Oxford: Capstone Publishing.
- Fernando, G. D., & Lawrence, S. R. (2014). Corporate social responsibility disclosures: Responses to investor pressure in the USA. *Accounting and Business Research*, 44(3), 269–285. <https://doi.org/10.1080/00014788.2014.891897>
- Freeman, R. E. (1999). Response: Divergent Stakeholder Theory. *The Academy of Management Review*, 233–236.
- Friede, G., Busch, T., & Bassen, A. (2015). ESG and financial performance: Aggregated evidence from more than 2000 empirical studies. *Journal of Sustainable Finance & Investment*, 210–233.
- G, B., & R, P. (2018). Corporate Sustainability Performance and Assurance on Sustainability Reports: Diffusion of Accounting Practices in the Realm of Sustainable Development: Sustainability Performance and Assurance on Sustainability Reports. *Corp. Soc. Responsib. Environ. Mgmt.*
- Gomulya D, & Y, M. (2017). Signaler Credibility, Signal Susceptibility, and Relative Reliance on Signals: How Stakeholders Change their Evaluative Processes After Violation of Expectations and Rehabilitative Efforts. *AMJ*.
- GRI. (2013). *Global Reporting Initiative: The external assurance of sustainability reporting*.
- Griliches, Z. (1998). R&D and Productivity: The Econometric Evidence. *University of Chicago Press*.
- Hall, B. H., & Mairesse, J. (1995). xploring the Relationship Between R&D and Productivity in French Manufacturing Firms. *Journal of Econometrics*, 65(1), 263–293.
- J, C. P., S, M. G., & R, W. D. (2009). The Value of Assurance on Voluntary Nonfinancial Disclosure: An Experimental Evaluation. *A Journal of Practice & Theory*.
- Kalia, D., & Aggarwal, D. (2023). Examining impact of ESG score on financial performance of healthcare companies. *Journal of Global Responsibility*, 14(1), 155–176. <https://doi.org/10.1108/JGR-05-2022-0045>
- Kotze, D., Malan, H., Ellery, W., Samuels, I., & Saul, L. (2010). *Assessment of the environmental condition, ecosystem service provision and sustainability of use of two*

- wetlands in the Kamiesberg uplands, wetland health and importance research programme.
- Meadows, D. H., Meadows, D. L., Randers, J., & Behrens, W. W. (1972). The Limits to Growth. *Universe Books*.
- Melinda, A., & Wardhani, R. (2020). The effect of environmental, social, governance, and controversies on firms' value: evidence from Asia. *Advanced Issues in the Economics of Emerging Markets*.
- Nowak, A., Leymann, F., & Schumm, D. (2011). The differences and commonalities between green and conventional business process management. *Institute of Architecture of Application Systems*.
- Porter, M. E., & Kramer, M. R. (2011). Creating shared value. *Harvard Business Review*, 62–77.
- PWC. (2024). 94% investor meyakini pelaporan perusahaan tentang kinerja keberlanjutan mengandung klaim tanpa bukti: Survei Investor Global PwC 2023. <https://www.pwc.com/id/en/media-centre/press-release/2024/indonesian/survei-investor--global-pwc-2023.html>
- Simnett, R., Vanstraelen, A., & Chua, W. F. (2009). Assurance on sustainability reports: An international comparison. *The Accounting Review*, 937–967. <https://doi.org/10.2308/accr.2009.84.3.937>
- Sinha Ray, R., & Goel, S. (2023). Impact of ESG score on financial performance of Indian firms: static and dynamic panel regression analyses. *Applied Economics*, 55(15), 1742–1755. <https://doi.org/10.1080/00036846.2022.2101611>
- Spence, M. (1973). Job market signaling. *The Quarterly Journal of Economics*, 355–374. <https://doi.org/10.2307/1882010>
- Stanley, M. (2024). *Sustainable Signals Understanding Individual Investors' Interests and Priorities*. <https://www.morganstanley.com/ideas/sustainable-investing-on-the-rise>
- Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*, 571–610. <https://doi.org/10.5465/amr.1995.9508080331>
- Taha, R., Al-Omush, A., & Al-Nimer, M. (2023). Corporate sustainability performance and profitability: The moderating role of liquidity and stock price volatility - evidence from Jordan. *Cogent Business and Management*, 10(1). <https://doi.org/10.1080/23311975.2022.2162685>
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 509–533. [https://doi.org/10.1002/\(SICI\)1097-0266\(199708\)18:7<509::AID-SMJ882>3.0.CO;2-Z](https://doi.org/10.1002/(SICI)1097-0266(199708)18:7<509::AID-SMJ882>3.0.CO;2-Z)
- Wang, H., & Li, D. (2016). Market reactions to the first-time disclosure of corporate social responsibility reports: Evidence from China. *Pacific-Basin Finance Journal*, 158–177.
- WCED. (1987). *Our Common Future*. Oxford University Press.
- Xu, Y., & Zhu, N. (2024). The Effect of Environmental, Social, and Governance (ESG) Performance on Corporate Financial Performance in China: Based on the Perspective of Innovation and Financial Constraints. *Sustainability (Switzerland)*, 8. <https://doi.org/10.3390/su16083329>