

ESG REPORTING DIMENSION UNDER ECONOMIC UNCERTAINTY: IMPLICATION FOR COMPETITIVE ADVANTAGE AND FIRM VALUE

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Abstract

Environmental, Social, and Governance (ESG) reporting has become increasingly important in supporting corporate resilience and long-term value creation under conditions of economic uncertainty. However, prior studies predominantly treat ESG reporting as a single composite construct, providing limited understanding of how individual Environmental, Social, and Governance dimensions contribute to firms' strategic outcomes. This study aims to examine ESG reporting dimensions under economic uncertainty and explore their implications for competitive advantage and firm value among companies included in the IDX ESG Leaders Index. The study employs a quantitative approach using panel data from 16 companies listed in the IDX ESG Leaders Index during the 2020–2023 period. ESG reporting is assessed based on Environmental, Social, and Governance disclosure dimensions aligned with the Indonesia Stock Exchange (IDX) ESG criteria. Firm value is measured using Tobin's Q, while competitive advantage is proxied by relative market concentration. Data analysis consists of descriptive analysis to identify reporting patterns across ESG dimensions, followed by panel data regression and robustness analysis to examine their implications for competitive advantage and firm value. The findings are expected to provide a more comprehensive understanding of the heterogeneous roles of ESG reporting dimensions under economic uncertainty and offer empirical evidence that extends beyond the use of aggregate ESG measures. This study contributes to the ESG literature by emphasizing a multidimensional perspective on ESG reporting and providing practical insights for managers, investors, and policymakers in strengthening corporate sustainability strategies during periods of economic uncertainty.

Keywords: ESG Reporting Dimensions, Economic Uncertainty, Competitive Advantage, Firm Value, IDX ESG Leaders.

Introduction

An economic uncertainty has fundamentally reshaped corporate strategic priorities, compelling firms to balance short-term financial resilience with long-term sustainability commitments. The volatility of macroeconomic conditions, supply chain disruptions, and tightening regulatory expectations trigger Environmental, Social, and Governance (ESG) reporting has evolved beyond a voluntary disclosure practice into a strategic mechanism for communicating corporate resilience, accountability, and sustainable value creation. Investors, regulators, and other stakeholders increasingly rely on ESG information to evaluate firms' capability for managing the sustainability-related risks while maintaining competitive performance in uncertain business environments. This value is an important indicator for investors in assessing the company's performance and growth prospects (Widarwati et al., 2023). Consequently, high-quality ESG reporting is no longer viewed merely as a compliance instrument but as an important strategic resource that may strengthen stakeholder confidence and support firms' long-term competitiveness. Companies with sustainable practices will have a good reputation, making them more attractive to investors. Investors invest because they can help maintain environmental health (Widarwati et al, 2024). The ESG reporting enhances corporate transparency, reduces information asymmetry, and improves stakeholder trust; however, empirical evidence regarding its strategic implications remains inconclusive, particularly during periods of heightened economic uncertainty (Gillan et al., 2021; Zhang et al., 2024; Velte, 2023).

Most empirical studies continue to operationalize ESG reporting as a single aggregate construct, implicitly assuming that Environmental, Social, and Governance disclosures contribute uniformly to corporate outcomes. Such an approach may obscure the heterogeneous characteristics of individual ESG dimensions, each of which reflects distinct strategic objectives, stakeholder expectations, implementation costs, and governance mechanisms. For instance, environmental reporting often requires substantial long-term investments, social reporting emphasizes stakeholder relationships and human capital, while governance reporting primarily strengthens transparency, accountability, and organizational oversight. Under conditions of economic

uncertainty, firms may therefore prioritize one reporting dimension over another according to strategic considerations and resource constraints. Nevertheless, limited empirical evidence has explored ESG reporting from a multidimensional perspective capable of revealing these heterogeneous reporting patterns and their implications for corporate strategic outcomes. This gap suggests that treating ESG as a homogeneous construct may overlook important insights into how firms adapt their sustainability reporting strategies under uncertain economic conditions.

The strategic importance of ESG reporting has been reinforced by growing stakeholder pressure about corporate transparency and accountability. Institutional investors increasingly integrate ESG information into investment decisions, regulators continue to strengthen sustainability disclosure requirements, and customers expect firms to demonstrate responsible business practices through credible sustainability reporting (Alessaa et al., 2024; Solberg et al., 2024). These evolving expectations have transformed ESG reporting from a voluntary disclosure practice into a strategic communication mechanism through which firms signal their ability to manage environmental risks, social responsibilities, and governance quality while maintaining organizational resilience (Oliver Yébenes, 2024). Otherside, the quality and credibility of ESG reporting have become increasingly important because investors rely not only on the existence of sustainability disclosures but also on their transparency, consistency, and decision usefulness in evaluating long-term corporate performance. However responding to these diverse stakeholder expectations becomes considerably more challenging during periods of economic uncertainty, when firms face tighter financial constraints, shifting stakeholder priorities, and increasing pressure to balance sustainability commitments with short-term performance (Chen et al., 2024). Companies may not allocate equal strategic attention to Environmental, Social, and Governance reporting, and should view ESG Reporting as a multidimensional construct rather than a homogeneous disclosure practice. The empirical evidence explaining how firms prioritize different ESG reporting dimensions under economic uncertainty remains limited, leaving important questions regarding their implications for competitive advantage and firm value largely unanswered.

While the strategic value of ESG reporting has been widely examined in developed economies, empirical evidence from emerging markets remains comparatively limited despite their increasing significance in the global economy. Emerging markets are characterized by evolving institutional and regulatory environments, heterogeneous governance quality, relatively weaker investor protection, and greater exposure to macroeconomic volatility, all of which may shape firms' ESG reporting priorities under conditions of economic uncertainty (Boubaker et al., 2023). Under these conditions, firms frequently face the challenge of balancing stakeholder expectations with financial constraints, potentially leading to different strategic priorities across Environmental, Social, and Governance reporting dimensions.

Indonesia has made substantial progress in strengthening its sustainability reporting ecosystem through evolving regulatory initiatives and capital market mechanisms designed to promote sustainable finance and ESG transparency. These developments include the implementation of sustainable finance regulations issued by the Financial Services Authority (OJK), which progressively strengthen sustainability disclosure requirements for issuers and public companies, together with the establishment of the IDX ESG Leaders Index by the Indonesia Stock Exchange to encourage ESG best practices among listed firms. Against this backdrop, Indonesia provides a particularly relevant empirical setting because sustainability reporting practices have expanded alongside evolving regulatory frameworks and increasing market recognition of ESG performance. As one of Southeast Asia's largest emerging economies, Indonesia provides a valuable empirical context for examining whether firms prioritize Environmental, Social, and Governance reporting dimensions differently under conditions of economic uncertainty. Despite these regulatory and market developments, empirical evidence remains limited regarding how firms included in the IDX ESG Leaders Index prioritize Environmental, Social, and Governance reporting dimensions under economic uncertainty and how these heterogeneous reporting priorities translate into competitive advantage and firm value.

High interest of ESG research has substantially improved the understanding of corporate sustainability reporting and its relationship with competitive advantage and firm value. It has revealed several conceptual and empirical questions concerning whether Environmental, Social, and Governance (ESG) reporting dimensions contribute equally to corporate outcomes, particularly when firms operate under conditions of economic uncertainty in emerging markets. Although ESG reporting has become an increasingly important topic in corporate sustainability research, several important questions remain unresolved. Previous studies have consistently reported that ESG disclosure contributes to enhancing corporate reputation, competitive advantage, and firm value (Gillan et al., 2021; Berg et al., 2022; Velte, 2023). Nevertheless, much of this evidence is derived from studies that evaluate ESG reporting as a single composite indicator. While this approach has advanced the understanding of ESG-performance relationships, it provides only limited insights into whether Environmental, Social, and Governance reporting dimensions play different strategic roles under varying business conditions. In practice, firms rarely allocate equal attention to all ESG dimensions. Reporting priorities may shift according to stakeholder expectations, regulatory developments, industry characteristics, and economic conditions.

Those issue appears particularly relevant in emerging markets, where sustainability reporting continues to evolve alongside institutional and regulatory development (Alessa et al., 2024; Oliver Yébenes, 2024). Recent systematic evidence further suggests that ESG disclosure cannot be adequately explained by a single theoretical perspective, as different disclosure dimensions are associated with distinct organizational motivations and institutional mechanisms (Del Gesso & Lodhi, 2025). Compared with firms operating in developed economies, companies in emerging markets frequently encounter greater regulatory adjustments, changing investor expectations, and higher exposure to macroeconomic uncertainty (Broadstock et al., 2021; Del Gesso & Lodhi, 2025). It may influence how firms communicate sustainability initiatives and determine which ESG dimensions receive greater strategic emphasis. Despite the growing number of ESG studies, empirical evidence explaining reporting priorities among firms recognized as sustainability leaders remains relatively limited, particularly within the context of the IDX ESG Leaders Index.

Then, an important research opportunity still exists for examining whether aggregate ESG reporting influences competitive advantage and firm value, this study argues that greater attention should be given to the individual Environmental, Social, and Governance reporting dimensions Berg et al., 2022; Velte, 2023; Maria et al., 2024). Such an approach is expected to provide a more nuanced understanding of corporate sustainability strategies under conditions of economic uncertainty and to generate richer evidence regarding how ESG reporting creates competitive advantage and enhances firm value in emerging market settings.

According the stakeholder theory (Freeman, 1984; Donaldson & Preston, 1995), legitimacy theory (Suchman, 1995; Deegan, 2002), and signaling theory (Spence, 1973; Connelly et al., 2011), this study integrates multiple theoretical perspectives to understand how ESG practices are translated into market value creation under uncertain economic conditions. Stakeholder theory suggests that firms engage in ESG activities to respond to broader stakeholder expectations, including investors, regulators, communities, and environmental concerns. Meanwhile, legitimacy theory emphasizes that ESG disclosure serves as a mechanism through which firms maintain social acceptance and organizational legitimacy, particularly when facing heightened scrutiny from stakeholders.

From a signaling perspective, ESG performance can function as a credible signal regarding firms' long-term sustainability orientation, risk management capability, and strategic resilience. Previous studies suggest that ESG disclosure can function as a strategic mechanism to address stakeholder expectations and enhance organizational legitimacy (Suchman, 1995; Deegan, 2002). Furthermore, from a signaling perspective, ESG performance provides information regarding firms' long-term orientation, risk management capability, and sustainability commitment (Connelly et al., 2011). However, the effectiveness of ESG as a market signal may vary depending on the quality, consistency, and dimension-specific characteristics of ESG disclosure. In emerging markets, where institutional environments and sustainability practices are still developing, investors may interpret environmental, social, and governance dimensions differently. Although ESG has increasingly become an important consideration in investment decisions, previous studies indicate that ESG measurement remains complex due to differences across rating methodologies and individual dimensions (Gillan et al., 2021; Berg et al., 2022).

Therefore, integrating these theoretical perspectives allows this study to move beyond the assumption that ESG performance uniformly enhances firm value. Instead, this research examines whether different ESG dimensions provide differentiated signals to the market and how such signals are reflected in firm valuation and stock market responses. The relationship between ESG performance and financial outcomes may vary across institutional contexts, particularly in emerging markets where sustainability practices and regulatory environments are still evolving (Friede et al., 2015; Broadstock et al., 2021). Unlike previous studies that often examine ESG as an aggregated construct, this study investigates the distinct roles of environmental, social, and governance dimensions in explaining firm value and stock market responses. This approach responds to recent concerns regarding ESG measurement heterogeneity and the need to understand whether specific ESG dimensions generate different economic implications (Gillan et al., 2021; Berg et al., 2022). Recent systematic evidence confirms that ESG disclosure research is primarily grounded in stakeholder, legitimacy, institutional, agency, and signaling theories, indicating the importance of multi-theoretical approaches in explaining ESG outcomes (Del Gesso & Lodhi, 2025).

Based on the identified research gaps and theoretical arguments, this study aims to examine the role of ESG practices in influencing firm value with competitive advantage as mediation variable among ESG Leaders companies listed on the Indonesia Stock Exchange. Specifically, this research seeks to investigate whether environmental, social, and governance dimensions generate different implications for market valuation, rather than assuming ESG performance as a homogeneous construct. Furthermore, this study aims to explore how ESG performance functions as a strategic signal that shapes investor perceptions and reflects firms' sustainability-oriented capabilities within an emerging market context characterized by evolving ESG practices and increasing sustainability expectations. Accordingly, this study seeks to move beyond the conventional assumption that ESG performance generates uniform market benefits by examining how individual ESG dimensions contribute differently to competitive level and firm valuation.

This study contributes to the ESG literature in several ways. First, unlike previous studies that commonly examine ESG as an aggregated construct, this research explores the distinct roles of environmental, social, and governance dimensions in explaining competitive advantage and firm value. This approach provides a more nuanced understanding of whether specific ESG components generate stronger market recognition.

Second, this study extends existing ESG research by focusing on the context of emerging markets, where ESG adoption is influenced by evolving regulatory frameworks, investor awareness, and institutional characteristics. The Indonesian ESG Leaders sector provides a relevant setting due to its significant economic contribution while simultaneously facing substantial environmental and social challenges.

Third, this study incorporates the perspective of economic uncertainty, highlighting that ESG effectiveness should not only be evaluated from a sustainability compliance perspective but also from its ability to strengthen investor confidence and market resilience. By doing so, this research bridges the gap between sustainability performance and financial decision-making.

This study provides both theoretical and practical contributions. Theoretically, it enriches ESG research by offering a dimension-specific perspective that challenges the conventional assumption that ESG operates as a homogeneous construct. The findings demonstrate that Environmental, Social, and Governance reporting dimensions generate distinct strategic implications, reinforcing the importance of examining ESG reporting as a multidimensional rather than an aggregated construct (Berg et al., 2022; Velte, 2023). The findings may provide deeper insights into how different sustainability dimensions contribute to value creation mechanisms.

Practically, the findings offer implications for corporate managers, investors, and policymakers. For corporate managers, the study highlights which ESG dimensions require strategic attention to enhance stakeholder confidence and long-term competitiveness. For investors, the results provide additional considerations in evaluating sustainability-related information beyond aggregated ESG scores. For policymakers, the study may support the development of more effective ESG disclosure frameworks that reflect the priorities and challenges of emerging economies.

Methods

This study analyzes how the ESG dimensions contribute differently implementation for competitive advantage and firm value with the analysis unit of ESG Leaders companies on the IDX in 2020-2023. The research analysis unit focuses on ESG Leadersl companies, with a sample of up to 16 companies representing the infrastructure, primary & non primary consumers, financial, and health sectors. Purposive sampling was used to get the sample data that match certainty criteria such as several pieces of information relevant to this study from financial and annual reports examples amount of ESG Disclosure, Tobins Q, and Relative Market Concentration. Furthermore, this study also conducted a different effect test by grouping crisis period data, namely 2020-2021 data and 2022-2023 data post crisis based on the argument uncertainty of economic influences the investment decision of ESG dimensions and its implementation (Quddus et al, 2022).

To examine the heterogeneous effects of Environmental, Social, and Governance (ESG) reporting dimensions, six separate panel regression models were estimated. Three models assessed the influence of Environmental, Social, and Governance reporting on Competitive Advantage, while the remaining three models examined their effects on Firm Value. Firm Size was included as a control variable in all estimations to account for differences in organizational scale. The appropriate panel estimation technique for each model was determined based on the Chow, Hausman, and Lagrange Multiplier tests.

Results and Discussion

Descriptive Statistics

The empirical analysis begins with descriptive statistics to summarize the characteristics of the research variables. This preliminary assessment provides an overview of the data distribution and serves as the foundation for the subsequent analyses of ESG reporting priorities, competitive advantage, and firm value under conditions of economic uncertainty.

Table 1. Descriptive Statistics of the Research Variables

Variable	Mean	St.Dev	Min	Max
Environmental Reporting	0.888	0.057	0.813	0.95
Social Reporting	0.947	0.024	0.913	0.963
Governance Reporting	0.891	0.913	0.863	0.021
Competitive Advantage	0.907	0.099	0.667	1
Firm Value	0.375	0.304	0.028	1
Firm Size	3.03365E+14	5.43268E+14	6.7669E+12	2.17422E+15

Source: Authors' calculations based on ESG data of IDX ESG Leaders (2020–2023).

ESG Reporting Priorities under Economic Uncertainty

Before examining the statistical relationships among variables, it is important to understand how firms prioritize Environmental, Social, and Governance reporting under conditions of economic uncertainty. Such an exploration provides the contextual foundation for interpreting the subsequent regression results.

Table 2. ESG Reporting Dimensions among IDX ESG Leaders during Economic Uncertainty (2020–2023)

Year	Environmental	Social	Governance
2020	0.813	0.950	0.863
2021	0.888	0.913	0.900
2022	0.900	0.963	0.888
2023	0.950	0.963	0.913
Overall Mean	0.888	0.947	0.891

Source: Authors' calculations based on ESG data of IDX ESG Leaders (2020–2023).

Table 2 presents the average Environmental (E), Social (S), and Governance (G) reporting scores of firms included in the IDX ESG Leaders Index during 2020–2023, a period characterized by heightened economic uncertainty following the COVID-19 pandemic and subsequent global economic disruptions. Overall, ESG reporting remained relatively high across all three dimensions, suggesting that firms continued to maintain sustainability reporting despite operating under uncertain economic conditions. However, noticeable differences emerged across reporting dimensions, indicating that companies did not allocate equal emphasis to Environmental, Social, and Governance disclosures.

Among the three dimensions, Social reporting consistently recorded the highest average score throughout the observation period. This finding suggests that firms prioritized maintaining relationships with employees, customers, suppliers, local communities, and other stakeholders during periods of heightened uncertainty. Such a pattern is consistent with the stakeholder perspective, which argues that organizations strengthen stakeholder engagement to preserve legitimacy, trust, and organizational resilience when external conditions become more uncertain.

Environmental reporting exhibited the most consistent improvement over the four-year period, increasing from 2020 to 2023. Although environmental initiatives often require substantial long-term investment, the upward trend indicates that firms continued to strengthen environmental disclosure despite economic challenges. This pattern may reflect increasing regulatory expectations, investor demand for climate-related transparency, and the growing integration of sustainability into long-term corporate strategy.

Governance reporting remained relatively stable throughout the observation period. Compared with Environmental reporting, governance practices generally require fewer capital-intensive investments because they are closely associated with internal control systems, board oversight, transparency, and accountability. The relatively stable governance scores therefore suggest that firms included in the IDX ESG Leaders Index have institutionalized good governance practices as part of their corporate sustainability strategy.

These findings indicate that firms included in the IDX ESG Leaders Index do not treat ESG reporting as a homogeneous construct. Instead, reporting priorities differ across Environmental, Social, and Governance dimensions, suggesting that companies strategically adjust sustainability reporting according to stakeholder expectations, institutional pressures, and prevailing economic conditions. This observation supports the argument that examining ESG reporting at the dimensional level provides richer insights than relying solely on an aggregate ESG measure.

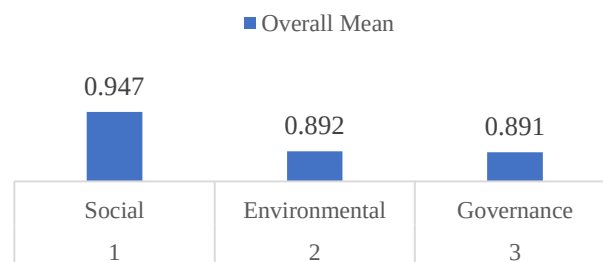


Figure 1. Relative Priority of ESG Reporting Dimensions among IDX ESG Leaders (2020–2023)

Source: Authors' calculations based on ESG data of IDX ESG Leaders (2020–2023).

Figure 1 summarizes the overall reporting priorities observed among firms included in the IDX ESG Leaders Index during 2020–2023. Social reporting emerged as the highest priority during research period. This finding indicates that firms placed greater emphasis on maintaining relationships with employees, customers, suppliers, and local communities during periods of economic uncertainty. This pattern is consistent with Stakeholder Theory, which argues that organizations respond to the expectations of salient stakeholder groups to secure legitimacy, trust, and continued organizational support (Freeman, 1984; Donaldson & Preston, 1995). The finding also aligns with previous studies reporting that firms tend to strengthen stakeholder-oriented disclosures during periods of heightened uncertainty because social engagement contributes to organizational resilience and reputation.

Then, second priority is Environmental reporting that had been increasing consistency and company have long term investment. According to Signaling Theory (Spence, 1973), consistent environmental reporting may serve as a credible signal that firms remain committed to sustainability despite uncertain economic conditions. Meanwhile, governance dimension remains stable because reflects to company's commitment to accountability.

This pattern suggests that firms do not allocate equal strategic attention to all ESG dimensions. Instead, reporting priorities appear to reflect different stakeholder expectations and organizational responses to economic uncertainty. While social disclosure may serve to strengthen relationships with key stakeholders during uncertain periods, the continuous improvement in environmental reporting also indicates a growing commitment to long-term sustainability. These findings reinforce the importance of examining ESG reporting at the dimensional level rather than relying solely on an aggregate ESG measure, as different dimensions may convey distinct strategic signals and managerial priorities.

ESG Reporting Dimension across Different Phases of Economic Uncertainty

The annual ESG reporting scores also indicate differences between the pandemic period (2020–2021) and the post-pandemic recovery period (2022–2023). During the pandemic, firms primarily focused on maintaining stakeholder relationships and organizational resilience amid unprecedented uncertainty. As economic conditions gradually improved after 2021, environmental reporting exhibited a more consistent increase, suggesting a shift toward longer-term sustainability commitments. Governance reporting remained relatively stable across both periods, indicating that governance mechanisms had become institutionalized regardless of changing economic conditions.

Table 3. ESG Reporting Dimensions across Different Phases of Economic Uncertainty among IDX ESG Leaders

Economic Phase	Environmental	Social	Governance	Overall ESG
During Pandemic (2020–2021)	0.851	0.932	0.882	0.888
Post-Pandemic Recovery (2022–2023)	0.925	0.963	0.901	0.929

Source: Authors' calculations based on ESG data of IDX ESG Leaders (2020–2023).

Table 3 compares the average ESG reporting dimensions between the pandemic period (2020–2021) and the post-pandemic recovery period (2022–2023). Overall ESG reporting increased from 0.888 during the pandemic to 0.929 during the post-pandemic recovery period, indicating that firms included in the IDX ESG Leaders Index strengthened their sustainability reporting as economic conditions gradually stabilized. This finding is consistent with previous studies suggesting that firms tend to reinforce sustainability disclosure as institutional expectations, investor confidence, and regulatory pressures increase following periods of heightened uncertainty (Maria et al., 2024).

Environmental reporting recorded the largest improvement, increasing from 0.851 to 0.925 between the two phases. This finding suggests that firms gradually shifted greater strategic attention toward long-term environmental commitments as immediate operational pressures associated with the pandemic subsided. Consistent with Signaling Theory (Spence, 1973), enhanced environmental disclosure may represent a credible signal of firms' long-term sustainability orientation and their commitment to responsible business practices. Previous studies have similarly reported that environmental disclosure becomes increasingly important in strengthening corporate reputation and responding to growing investor demand for climate-related transparency (Maria et al., 2024).

Social reporting remained the highest-rated dimension throughout both phases, increasing from 0.932 to 0.963. The consistently high level of social disclosure indicates that firms continued to prioritize relationships with employees, customers, suppliers, and local communities despite changing economic conditions. This pattern supports Stakeholder Theory (Freeman, 1984), which argues that organizations create long-term value by responding to stakeholder expectations. The finding is also consistent with prior ESG studies showing that firms strengthen stakeholder-oriented disclosure to preserve legitimacy, trust, and organizational resilience during periods of uncertainty (Velte, 2022).

Governance reporting increased only modestly from 0.882 to 0.901, indicating relatively stable governance practices across both economic phases. Compared with environmental reporting, governance disclosure exhibited less variation, suggesting that governance mechanisms had become institutionalized among firms included in the IDX ESG Leaders Index. Previous studies similarly argue that governance practices are generally more stable over time because they are embedded within firms' organizational structures and internal control systems (Velte, 2022).

The findings indicate that ESG reporting dimensions evolved differently across phases of economic uncertainty. While social reporting consistently remained the highest priority, environmental reporting experienced the greatest improvement during the post-pandemic recovery period, whereas governance reporting remained comparatively stable. These heterogeneous patterns suggest that firms do not respond uniformly across ESG dimensions, reinforcing the importance of examining Environmental, Social, and Governance reporting separately rather than relying solely on an aggregate ESG measure.

Overall, the descriptive findings demonstrate that ESG reporting dimensions exhibit heterogeneous patterns rather than evolving uniformly under conditions of economic uncertainty. While Social reporting consistently received the greatest managerial emphasis, Environmental reporting showed the most substantial improvement during the post-pandemic recovery period, whereas Governance reporting remained comparatively stable across both phases. These findings suggest that firms strategically allocate their sustainability reporting efforts according to changing stakeholder expectations and institutional conditions. However, descriptive evidence alone cannot determine whether these reporting patterns translate into competitive advantage and enhanced firm value. Accordingly, the subsequent panel regression analysis examines the extent to which each ESG reporting dimension contributes to firms' competitive advantage and firm value.

Regression Results and Discussion

Implications of ESG Reporting Dimensions for Competitive Advantage

Environmental Reporting and Competitive Advantage

The panel regression results indicate that Environmental reporting has a significant negative effect on Competitive Advantage ($\beta = -0.0446$, $p < 0.05$). This finding suggests that greater emphasis on environmental reporting during the observation period did not immediately strengthen firms' competitive advantage. Instead, the results imply that environmental initiatives may require substantial financial resources, organizational adaptation, and compliance costs before generating tangible competitive benefits. Under conditions of economic uncertainty, firms may prioritize maintaining environmental commitments despite the possibility of short-term pressure on operational efficiency and strategic flexibility.

Interestingly, this finding should be interpreted together with the descriptive evidence presented in the previous section. Although Environmental reporting exhibited the largest improvement during the post-pandemic recovery period, the regression results demonstrate that increased environmental disclosure was not associated with stronger competitive advantage in the short term. This indicates that higher environmental reporting reflects firms' long-term sustainability commitment rather than an immediate source of competitive differentiation.

From the perspective of Signaling Theory, environmental disclosure serves as a credible signal of corporate commitment to sustainability. However, signaling benefits may not be realized immediately because investors and other stakeholders often require time to evaluate whether environmental initiatives are supported by substantive operational improvements rather than symbolic disclosure. Consequently, the strategic value of environmental reporting may emerge gradually rather than producing instant competitive advantages.

The finding contrasts with Li and Liu (2025) that studies suggesting that environmental disclosure enhances firms' competitive positioning by strengthening corporate reputation, stakeholder trust, and market differentiation. Recent studies argue that ESG initiatives can improve firms' strategic competitiveness when sustainability practices are effectively integrated into business operations. However, the present finding is consistent with emerging evidence indicating that ESG-related investments may impose substantial implementation and compliance costs before generating measurable economic benefits. International evidence shows that ESG performance, including its environmental pillar, may exhibit a negative association with firm value because investors do not always perceive sustainability initiatives as immediate sources of financial returns (Gaweda, 2025)

the findings indicate that environmental reporting during periods of economic uncertainty primarily reflects firms' long-term sustainability orientation rather than an immediate mechanism for strengthening competitive advantage. Consequently, environmental reporting should be viewed as a strategic investment whose competitive benefits may materialize only after firms successfully transform sustainability commitments into operational capabilities and market differentiation.

Social Reporting and Competitive Advantage

The Fixed Effect Model indicates that Social reporting has a negative but statistically insignificant effect on Competitive Advantage ($\beta = -0.0794$, $p = 0.1478$). This finding suggests that variations in social reporting did

not significantly explain differences in firms' competitive advantage during the observation period. In contrast, Firm Size positively affected Competitive Advantage ($\beta = 0.0319$, $p = 0.0162$), indicating that larger firms tended to possess stronger competitive advantages. Furthermore, the regression model is statistically significant (Prob. F < 0.001) and explains a substantial proportion of the variation in Competitive Advantage (Adjusted $R^2 = 0.9912$).

Although Social reporting consistently received the highest disclosure priority throughout the observation period, the regression results indicate that such reporting did not significantly enhance firms' competitive advantage. This finding suggests that maintaining extensive social disclosure alone may not be sufficient to create strategic differentiation among firms included in the IDX ESG Leaders Index. Since most firms in the sample consistently reported relatively high levels of social information, the limited variation in disclosure may reduce its ability to distinguish firms' competitive positions.

From the perspective of Stakeholder Theory, firms disclose social information to maintain legitimacy and strengthen relationships with employees, customers, suppliers, and local communities. However, the present findings indicate that fulfilling stakeholder expectations through social reporting does not necessarily translate into immediate competitive advantage. Stakeholder-oriented initiatives may primarily serve to preserve organizational legitimacy and reputation rather than directly improving firms' strategic competitiveness during periods of economic uncertainty.

This finding complements the descriptive analysis presented earlier, which showed that Social reporting remained the highest-rated ESG dimension across both the pandemic and post-pandemic recovery periods. While firms consistently prioritized stakeholder-related disclosure, the absence of a significant relationship with Competitive Advantage indicates that maintaining high levels of social reporting may represent an institutional expectation rather than a strategic capability capable of differentiating firms from their competitors.

Previous studies generally argue that social disclosure enhances organizational reputation, stakeholder trust, and long-term competitiveness by strengthening relationships with key stakeholders (Velte, 2022; Maria et al., 2024). However, the present findings suggest that such benefits may not be realized uniformly under conditions of economic uncertainty. Instead, firms may prioritize social reporting primarily to satisfy institutional and stakeholder expectations, while its contribution to competitive advantage remains limited in the short term. The findings suggest that Social reporting functions primarily as a mechanism for maintaining stakeholder legitimacy rather than generating immediate competitive advantage. Although firms consistently prioritize social disclosure, its strategic benefits may require complementary organizational capabilities before being translated into sustainable competitive performance.

Governance Reporting and Competitive Advantage

The Fixed Effect Model indicates that Governance reporting has a negative but statistically insignificant effect on Competitive Advantage ($\beta = -0.0570$, $p = 0.1723$). Thus, variations in governance reporting did not significantly explain differences in firms' competitive advantage during the observation period. In contrast, Firm Size remained positively associated with Competitive Advantage ($\beta = 0.0513$, $p < 0.001$). The overall regression model is statistically significant (Prob. F < 0.001), with an Adjusted R^2 of 0.9993, indicating a high explanatory power.

The insignificant relationship suggests that governance reporting alone was insufficient to generate measurable competitive advantages among firms included in the IDX ESG Leaders Index. Since governance practices have become increasingly standardized through regulatory requirements and corporate governance codes, governance disclosure may represent a baseline expectation rather than a unique strategic capability that differentiates one firm from another.

From an institutional perspective, governance reporting reflects firms' compliance with formal regulations and accepted corporate governance norms. Consequently, governance disclosure primarily serves to maintain organizational legitimacy and regulatory conformity rather than creating distinctive competitive advantages. When governance practices become widely adopted across listed firms, their ability to differentiate firms strategically naturally declines.

The regression findings are also consistent with the descriptive analysis, which revealed relatively stable governance reporting throughout both the pandemic and post-pandemic recovery periods. The limited variation observed in governance disclosure may explain why governance reporting did not exhibit a statistically significant relationship with Competitive Advantage. This finding reinforces the argument that governance practices among IDX ESG Leaders firms have become institutionalized, thereby reducing their role as a source of strategic differentiation.

Previous studies generally suggest that sound corporate governance enhances organizational performance by improving transparency, accountability, and investor confidence (Velte, 2022; Maria et al., 2024). However, the present findings indicate that governance reporting alone did not significantly strengthen Competitive Advantage during the observation period. This discrepancy may reflect the institutional characteristics of emerging markets, where governance disclosure has increasingly become a compliance-oriented practice rather than a distinctive strategic resource. The findings indicate that governance reporting primarily fulfills institutional

and regulatory expectations instead of serving as a direct driver of competitive advantage. Therefore, firms may need to complement governance disclosure with substantive organizational capabilities before governance practices can be translated into sustainable strategic benefits.

Implications for Firm Value

Environmental Reporting and Firm Value

The Fixed Effect Model demonstrates that Environmental reporting has a significant negative effect on Firm Value ($\beta = -0.5637$, $p < 0.001$). This indicates that higher levels of environmental reporting were associated with lower firm value during the observation period. The regression model is statistically significant (Prob. $F < 0.001$) and explains a substantial proportion of the variation in Firm Value (Adjusted $R^2 = 0.8738$). Firm Size shows a positive but statistically insignificant relationship with Firm Value ($p = 0.0871$).

The significant negative association between Environmental reporting and Firm Value suggests that capital markets did not immediately reward firms for increasing environmental disclosure during the period of economic uncertainty. Although environmental initiatives strengthen long-term sustainability commitments, they often require substantial financial investment, technological adaptation, and compliance expenditures. Consequently, investors may perceive these initiatives as increasing short-term costs rather than generating immediate economic returns.

This finding should be interpreted together with the descriptive analysis presented earlier. Although Environmental reporting exhibited the largest improvement during the post-pandemic recovery period, the regression results reveal that greater environmental disclosure was associated with lower Firm Value. The combined evidence indicates that firms intensified their environmental commitment despite the absence of immediate market appreciation, highlighting the long-term nature of sustainability investments under economic uncertainty.

According to Signaling Theory, environmental disclosure represents a positive signal regarding firms' commitment to sustainability and responsible business practices. However, the effectiveness of such signals depends on investors' perceptions and the surrounding economic environment. During periods of heightened uncertainty, investors may prioritize short-term financial performance and cash flow stability over long-term environmental commitments, thereby weakening the expected positive valuation effect of environmental reporting.

Previous studies frequently report a positive relationship between ESG performance and Firm Value because sustainability initiatives strengthen corporate reputation, reduce information asymmetry, and improve investor confidence (Velte, 2022; Maria et al., 2024). However, recent evidence also suggests that the financial benefits of environmental investments are not always realized immediately, particularly in emerging markets characterized by economic uncertainty and evolving sustainability regulations. Under such circumstances, investors may interpret environmental initiatives as long-term strategic investments that temporarily reduce profitability and market valuation. The findings indicate that Environmental reporting should be viewed as a long-term strategic investment rather than an immediate determinant of Firm Value. The negative relationship observed in this study reflects the existence of short-term trade-offs between sustainability investments and market valuation during periods of economic uncertainty, while the long-term economic benefits may emerge only after environmental initiatives are successfully integrated into firms' strategic capabilities.

Social Reporting and Firm Value

The Fixed Effect Model indicates that Social reporting has a negative but statistically insignificant effect on Firm Value ($\beta = -0.3573$, $p = 0.0698$). Therefore, variations in social reporting were not associated with significant changes in Firm Value during the observation period. The overall model is statistically significant (Prob. $F < 0.001$) and explains a substantial proportion of the variation in Firm Value (Adjusted $R^2 = 0.8983$). Firm Size exhibits a negative and statistically significant relationship with Firm Value ($\beta = -0.3120$, $p = 0.0043$).

Despite being the highest-priority ESG reporting dimension throughout the observation period, Social reporting did not exhibit a statistically significant relationship with Firm Value. This finding suggests that extensive social disclosure alone may not be sufficient to influence investors' valuation of firms during periods of economic uncertainty. Instead, social reporting appears to function primarily as a mechanism for maintaining stakeholder relationships and organizational legitimacy rather than as a direct determinant of market value.

The regression results complement the descriptive analysis, which demonstrated that Social reporting consistently achieved the highest disclosure level across both the pandemic and post-pandemic recovery periods. Although firms maintained a strong commitment to stakeholder-related disclosure, the absence of a significant relationship with Firm Value suggests that investors may perceive social initiatives as expected corporate responsibilities rather than value-enhancing strategic investments.

Stakeholder Theory argues that firms engage in social disclosure to strengthen relationships with employees, customers, communities, and other stakeholders. However, the present findings indicate that fulfilling stakeholder expectations through social reporting does not necessarily translate into higher market valuation. During

periods of economic uncertainty, investors may place greater emphasis on firms' financial resilience and future earnings potential than on extensive social disclosure.

Previous studies generally report that social disclosure contributes positively to corporate reputation, stakeholder trust, and firm value (Velte, 2022; Maria et al., 2024). However, the present findings suggest that these expected benefits are not automatically reflected in market valuation within the context of emerging markets experiencing economic uncertainty. This indicates that the financial benefits of social reporting may depend on broader organizational capabilities and external market conditions rather than disclosure intensity alone. The findings imply that Social reporting primarily fulfills stakeholder and legitimacy objectives without generating immediate improvements in Firm Value. Consequently, firms may need to complement social disclosure with tangible operational performance and strategic capabilities before such initiatives are recognized by capital markets as value-enhancing activities.

Governance Reporting and Firm Value

The Fixed Effect Model reveals that Governance reporting has a negative but statistically insignificant effect on Firm Value ($\beta = -0.0055$, $p = 0.9832$). Thus, governance reporting was not associated with variations in Firm Value among firms included in the IDX ESG Leaders Index during the observation period. The regression model is statistically significant overall (Prob. $F < 0.001$) and explains a substantial proportion of the variation in Firm Value (Adjusted $R^2 = 0.8595$). Furthermore, Firm Size does not exhibit a statistically significant relationship with Firm Value.

The insignificant relationship between Governance reporting and Firm Value suggests that governance disclosure alone was insufficient to influence investors' valuation during the observation period. One possible explanation is that governance practices have become increasingly standardized among firms included in the IDX ESG Leaders Index, reducing their ability to differentiate firms in capital markets. Consequently, governance reporting may function primarily as a mechanism for maintaining regulatory compliance and organizational legitimacy rather than as a direct driver of market valuation

This finding is consistent with the descriptive analysis, which demonstrated relatively stable governance reporting throughout both the pandemic and post-pandemic recovery periods. The limited variation in governance disclosure suggests that governance practices have become institutionalized among ESG-leading firms. As a result, investors may regard governance reporting as a standard corporate practice rather than as a distinctive strategic signal capable of enhancing Firm Value.

Previous studies often report that strong corporate governance enhances Firm Value by improving transparency, reducing agency conflicts, and strengthening investor confidence (Velte, 2022; Maria et al., 2024). However, the present findings indicate that governance reporting alone did not significantly influence Firm Value within the context of Indonesian ESG-leading firms. This discrepancy suggests that governance disclosure may have reached a level of institutional maturity where compliance is expected, thereby limiting its incremental contribution to market valuation during periods of economic uncertainty.

The findings indicate that governance reporting primarily serves as an institutional mechanism supporting corporate accountability and regulatory compliance rather than as an immediate determinant of Firm Value. Consequently, firms may need to integrate governance practices with broader strategic initiatives before governance reporting can generate measurable economic value for shareholders.

Integrated Discussion of ESG Reporting Dimensions

To provide a comprehensive interpretation of the empirical findings, Table 4 summarizes the descriptive evidence together with the regression results for each ESG reporting dimension. The integrated analysis demonstrates that Environmental, Social, and Governance reporting exhibit heterogeneous implications for Competitive Advantage and Firm Value under conditions of economic uncertainty.

Table 4. Integrated Summary of ESG Reporting Dimensions and Strategic Implications

ESG Reporting Dimension	Descriptive Evidence	Competitive Advantage	Firm Value	Strategic Insight
Environmental	Largest improvement	Negative, Significant	Negative, Significant	Environmental initiatives should be viewed as long-term strategic investments rather than short-term performance drivers.
Social	Highest priority	Negative, Not Significant	Negative, Not Significant	Firms should complement social reporting with operational capabilities to transform stakeholder engagement into competitive outcomes.
Governance	Stable	Negative, Not Significant	Negative, Not Significant	Governance practices should move beyond compliance toward strategic value creation.

Source: Compiled by the authors based on ESG data of IDX ESG Leaders (2020–2023).

Overall, the empirical findings demonstrate that ESG reporting dimensions should not be interpreted as a homogeneous construct under conditions of economic uncertainty. The descriptive analysis reveals distinct reporting patterns across the three ESG dimensions, with Environmental reporting exhibiting the largest improvement over time, Social reporting consistently receiving the highest disclosure priority, and Governance reporting remaining relatively stable throughout the observation period. However, the regression results indicate heterogeneous strategic implications. Environmental reporting shows the strongest statistical relationship with both Competitive Advantage and Firm Value, although the negative coefficients suggest the existence of short-term sustainability trade-offs. In contrast, Social and Governance reporting do not exhibit significant relationships with either outcome variable, implying that these dimensions primarily fulfill stakeholder and institutional expectations rather than generating immediate improvements in firms' strategic competitiveness or market valuation. Taken together, these findings reinforce the argument that each ESG reporting dimension reflects different strategic objectives, stakeholder pressures, and organizational resource allocations. Therefore, analyzing ESG as a multidimensional construct provides richer theoretical and managerial insights than relying solely on an aggregate ESG measure. ESG implementation should be viewed as a long-term strategic investment rather than a short-term profitability driver (Widarwati et al, 2026).

From a theoretical perspective, the findings extend the growing ESG literature by demonstrating that no single theoretical perspective is sufficient to explain the strategic implications of ESG reporting under conditions of economic uncertainty. Instead, each ESG reporting dimension appears to operate through different underlying mechanisms. Environmental reporting is best explained by Signaling Theory, whereby firms communicate long-term sustainability commitments despite the existence of short-term financial trade-offs (Spence, 1973; Connelly et al., 2011). Social reporting aligns with Stakeholder Theory, reflecting firms' efforts to maintain stakeholder relationships and organizational legitimacy rather than generating immediate economic benefits (Freeman, 1984; Donaldson & Preston, 1995; Suchman, 1995). Meanwhile, Governance reporting is more consistent with Institutional Theory, suggesting that governance disclosure has become an institutionalized practice driven by regulatory expectations and accepted corporate norms instead of serving as a source of competitive differentiation (Suchman, 1995; Del Gesso & Lodhi, 2025). Therefore, conceptualizing ESG reporting as a multidimensional construct provides richer theoretical insights than relying solely on an aggregate ESG measure (Berg et al., 2022; Velte, 2023).

From a managerial perspective, the findings suggest that firms should avoid adopting a uniform approach to ESG reporting because each ESG dimension serves a distinct strategic purpose and therefore requires different managerial priorities. Environmental initiatives should be viewed as long-term strategic investments that may not generate immediate improvements in Competitive Advantage or Firm Value but remain essential for strengthening long-term organizational resilience and sustainable growth. Social reporting should be complemented by tangible organizational capabilities and meaningful stakeholder engagement to transform disclosure into measurable strategic outcomes. Meanwhile, Governance practices should evolve beyond regulatory compliance by enhancing strategic decision-making, organizational transparency, and long-term value creation. Accordingly, firms should allocate sustainability resources according to the distinct strategic roles of each ESG reporting dimension rather than assuming that all ESG activities produce similar organizational benefits.

Although ESG reporting is commonly evaluated using an aggregate score, the present findings demonstrate that such an approach may conceal important differences across individual reporting dimensions. The descriptive and regression analyses consistently reveal that Environmental, Social, and Governance reporting follow distinct disclosure patterns and exhibit different strategic implications for Competitive Advantage and Firm Value. Therefore, relying solely on an overall ESG score may oversimplify the complex mechanisms through which sustainability reporting contributes to corporate performance under conditions of economic uncertainty (Berg et al., 2022; Velte, 2023).

This study therefore provides empirical support for treating ESG reporting as a multidimensional construct rather than a single composite indicator. By integrating descriptive evidence with panel regression analysis, the findings offer a more nuanced understanding of how each ESG reporting dimension contributes differently to firms' strategic outcomes. Such an approach enriches the current ESG literature while providing practical guidance for managers in prioritizing sustainability initiatives according to their distinct strategic roles.

Conclusion

This study examined the strategic implications of Environmental, Social, and Governance (ESG) reporting dimensions for Competitive Advantage and Firm Value among firms included in the IDX ESG Leaders Index during the period of economic uncertainty from 2020 to 2023. Unlike previous studies that commonly treat ESG as a single aggregated construct, this study analyzed each reporting dimension separately to provide a more nuanced understanding of sustainability reporting.

The findings reveal that the three ESG reporting dimensions exhibit heterogeneous disclosure patterns and strategic implications. Descriptive analysis indicates that Social reporting consistently received the highest

disclosure priority, Environmental reporting demonstrated the greatest improvement throughout the observation period, and Governance reporting remained relatively stable. However, panel regression analysis shows that Environmental reporting was the only dimension significantly associated with both Competitive Advantage and Firm Value, although the relationships were negative, suggesting the existence of short-term sustainability trade-offs during periods of economic uncertainty. In contrast, Social and Governance reporting did not exhibit significant relationships with either outcome variable, indicating that these dimensions primarily fulfilled stakeholder and institutional expectations rather than generating immediate strategic or market benefits.

Taken together, these findings demonstrate that ESG reporting should not be interpreted as a homogeneous construct. Each ESG reporting dimension reflects distinct strategic objectives, stakeholder pressures, and organizational resource allocations, thereby producing different implications for firms' strategic outcomes. Consequently, this study contributes to the growing ESG literature by supporting a multidimensional perspective of ESG reporting and by showing that separate analyses of Environmental, Social, and Governance reporting provide richer theoretical and managerial insights than relying solely on an aggregate ESG measure.

Theoretically, this study extends existing ESG literature by demonstrating that the strategic implications of ESG reporting cannot be adequately explained by a single theoretical perspective. Instead, Environmental reporting is primarily interpreted through Signaling Theory, Social reporting through Stakeholder Theory, and Governance reporting through Institutional Theory. This integrated theoretical perspective enriches current understanding of ESG reporting under conditions of economic uncertainty while reinforcing the importance of examining ESG as a multidimensional construct.

From a managerial perspective, the findings suggest that firms should avoid adopting a uniform approach to ESG reporting. Instead, managers should recognize that each ESG dimension serves a distinct strategic purpose. Environmental initiatives should be viewed as long-term strategic investments despite their short-term trade-offs, Social reporting should be strengthened through meaningful stakeholder engagement and organizational capabilities, and Governance practices should evolve beyond regulatory compliance toward strategic value creation. Such differentiated sustainability strategies are expected to improve long-term organizational resilience and sustainable competitiveness.

Despite providing important insights into the heterogeneous implications of ESG reporting dimensions under conditions of economic uncertainty, this study has several limitations that should be acknowledged. First, the analysis focuses exclusively on firms included in the IDX ESG Leaders Index, which represent companies with relatively advanced sustainability reporting practices. Consequently, the findings may not be directly generalize to firms outside the ESG Leaders Index or to companies operating in other institutional and regulatory environments. Second, the observation period (2020–2023) primarily captures the pandemic and post-pandemic recovery phases. Although this period offers valuable evidence regarding ESG reporting under economic uncertainty, the strategic implications of ESG reporting may differ during periods of normal economic conditions or future economic disruptions. Finally, this study measures ESG reporting through its Environmental, Social, and Governance disclosure dimensions without incorporating other potentially relevant organizational characteristics or governance mechanisms that may influence firms' strategic outcomes.

Future research is encouraged to extend this study in several directions. Comparative analyses across industries, countries, or emerging and developed markets would provide broader evidence regarding the contextual role of ESG reporting dimensions. Future studies may also investigate whether institutional quality, ownership structure, corporate governance characteristics, or sustainability assurance moderate the relationships between ESG reporting dimensions, Competitive Advantage, and Firm Value. In addition, longitudinal studies covering longer observation periods could examine whether the negative short-term relationships identified in this study eventually evolve into positive long-term strategic and financial outcomes. Such investigations would enrich current ESG literature by explaining whether the heterogeneous effects of Environmental, Social, and Governance reporting persist across different institutional settings and economic cycles, thereby providing a deeper understanding of how ESG reporting contributes to sustainable competitive advantage and long-term firm value.

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References

- Alessa, N., Akparep, J. Y., Sulemana, I., & Agyemang, A. O. (2024). Does stakeholder pressure influence firms' environmental, social and governance (ESG) disclosure? Evidence from Ghana. *Cogent Business & Management*, 11(1). <https://doi.org/10.1080/23311975.2024.2303790>

- Broadstock, D. C., Chan, K., Cheng, L. T. W., & Wang, X. (2021). The role of ESG performance during times of financial crisis: Evidence from COVID-19 in China. *Finance Research Letters*, 38, 101716. <https://doi.org/10.1016/j.frl.2020.101716>
- Berg, F., Kölbel, J.F., Rigobon, R (2022). Aggregate Confusion: The Divergence of ESG Ratings, *Review of Finance*, 26 (6), 1315–1344, <https://doi.org/10.1093/rof/rfac033>
- Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. (2011). Signaling theory: A review and assessment. *Journal of Management*, 37(1), 39–67. <https://doi.org/10.1177/0149206310388419>
- Deegan, C. (2002). The legitimising effect of social and environmental disclosures—A theoretical foundation. *Accounting, Auditing & Accountability Journal*, 15(3), 282–311.
- Del Gesso C, Lodhi RN (2025). Theories underlying environmental, social and governance (ESG) disclosure: a systematic review of accounting studies. *Journal of Accounting Literature*, Vol. 47 No. 2 pp. 433–461, <https://doi.org/10.1108/JAL-08-2023-0143>
- Donaldson, T., & Preston, L. E. (1995). The Stakeholder Theory of the Corporation: Concepts, Evidence, and Implications. *The Academy of Management Review*, 20(1), 65–91. <https://doi.org/10.2307/258887>
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Pitman.
- Gawęda, Adrian, (2025). Does environmental, social, and governance performance elevate firm value? International evidence, *Finance Research Letters*, Elsevier, 73(C). <https://doi.org/10.1016/j.frl.2024.106639>
- Gillan, S. L., Koch, A., & Starks, L. T. (2021). Firms and social responsibility: A review of ESG and CSR research in corporate finance. *Journal of Corporate Finance*, 66, 101889. <https://doi.org/10.1016/j.jcorpfin.2021.101889>
- Li, Q., C. Liu, and Y.-E. Lin. (2026). ESG and Firm Value: The Moderating Effects of Corporate Transparency and Institutional Environment. *International Journal of Finance & Economics*, 31(2), 1582–1605. <https://doi.org/10.1002/ijfe.70005>.
- Marie, M., Qi, B., Maria, A. M., & Nobanee, H. (2024). Exploring Environmental, Social and Governance research in the wake of COVID-19: A bibliometric analysis of current trends and recommendations for future research. *Corporate Social Responsibility and Environmental Management*, 31(6), 6131–6149. <https://doi.org/10.1002/csr.2909>
- Oliver Yébenes, M. (2024). Climate change, ESG criteria and recent regulation: challenges and opportunities. *Eurasian Econ Rev* 14, 87–120. <https://doi.org/10.1007/s40822-023-00251-x>
- Solberg, H. M., Evans, Y. V., Alorzuke, B. C., & Abraham, A. (2024). Stakeholder Pressure, Climate Finance, and ESG Reposting: Empirical Research. *American Interdisciplinary Journal of Business and Economics (AIJBE)*, 11(2), 41–57. <https://doi.org/10.5281/zenodo.11092609>
- Spence, M. (1973). Job market signaling. *Quarterly Journal of Economics*, 87(3), 355–374.
- Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*, 20(3), 571–610. <https://doi.org/10.5465/AMR.1995.9508080331>
- Velte, P. (2023). Determinants and consequences of corporate social responsibility decoupling—Status quo and limitations of recent empirical quantitative research. *Corporate Social Responsibility and Environmental Management*, 30(6), 2695–2717. <https://doi.org/10.1002/csr.2538>
- Widarwati, E., Fauziah, H. A., Nurmalasari, N., & Lugiani, T. 2023. Corporate Sosial Responsibility and Firm Value : The Mediating Role of Profitability and Governance. *Proceeding of National Conference on Accounting & Finance*, 5, 465-474. <https://journal.uui.ac.id/NCAF/article/view/27834>
- Widarwati, E., Rohmah, N. N., Wityasminingsih, E., Nurmalasari, N., Apriandi, D. W., & Sopiawadi, M. (2024). Green investment and firm value: Does corporate governance matter? *Journal of Accounting and Investment*, 25(3), 1156-1174. <https://doi.org/10.18196/jai.v25i3.22159>
- Widarwati, E., Rahma, G., Gardenas, R.K., E. Wityasminingsih., & Davina, A.I. (2026). The Impact of ESG Scores on Sustainable Banking Performance: Evidence from Islamic and Conventional Banks in Indonesia. *Islamic Economic, Accounting, and Management Journal (Tsarwatica)*, 8(10), 26-51. <https://doi.org/10.35310/tsarwatica.v8i01>
- Zhang, N., Yang, C., & Wang, S. (2024). Research progress and prospect of environmental, social and governance: A systematic literature review and bibliometric analysis. *Journal of Cleaner Production*, 447, 141489. <https://doi.org/10.1016/j.jclepro.2024.141489>

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