Jurnal Akuntansi dan Bisnis
Vol 25, No. 2, Agustus 2025: 334-351
https://jab.fe.uns.ac.id/

DO ESG RATINGS DRIVE STOCK PERFORMANCE? AN EMPIRICAL STUDY OF INDONESIAN LISTED FIRMS

Nur Imamah[1] (nurima_fia@ub.ac.id)
Layyin Nafisa Arifin[1]
Ari Darmawan[1]
Irwan Trinugroho[2]
Aurence Dea Krissanti[1]

[1]Department of Business Administration, Faculty of Administrative Science, Universitas Brawijaya, Indonesia
[2] Center for Fintech and Banking, Universitas Sebelas Maret, Indonesia

A B S T R A C T

Green Economy and Sustainable Development and Sustainable Finance projects are making Indonesia more concerned about Environmental, Social and Governance (ESG) factors in the business evaluation process. The Indonesian Stock Exchange (IDX) provides online ESG rating data to the public to influence investor decisions and the Financial Services Authority (OJK) supports sustainable finance practices. This research explores the link between ESG ratings and financial success in Indonesian public companies to determine if profitability affects the effect of ESG ratings on stock price behavior This study adopts a quantitative research approach and analyzes 207 firm-year observations obtained from 69 companies listed on the Indonesia Stock Exchange (IDX) that reported ESG scores over the period 2021–2023. The study applies multiple regression to study the relationship between ESG ratings and stock price performance and profitability indicators such as return on assets (ROA). The statistical models are guaranteed to be valid by Classical assumption tests. The results assist different stakeholders in getting important information. This research demonstrates to investors how ESG factors influence financial performance in the Indonesian market. The managers are able to determine whether sustainability investments will benefit the company or not. The impact of the current ESG programs can be determined by policymakers, and better legislation can be developed. This research contributes another example of the way ESG affects finances in emerging markets.
Keywords: ESG ratings, stock performance, profitability, Indonesian Stock Exchange

Proyek Ekonomi Hijau, Pembangunan Berkelanjutan, dan Keuangan Berkelanjutan membuat Indonesia semakin memperhatikan faktor Lingkungan, Sosial, dan Tata Kelola (ESG) dalam proses evaluasi bisnis. Bursa Efek Indonesia (IDX) menyediakan data peringkat ESG secara daring kepada publik untuk memengaruhi keputusan investor, dan Otoritas Jasa Keuangan (OJK) mendukung praktik keuangan berkelanjutan. Penelitian ini mengeksplorasi hubungan antara peringkat ESG dan keberhasilan keuangan di perusahaan publik Indonesia untuk menentukan apakah profitabilitas memengaruhi pengaruh peringkat ESG terhadap perilaku harga saham. Studi ini mengadopsi pendekatan penelitian kuantitatif dan menganalisis 207 observasi perusahaan-tahun yang diperoleh dari 69 perusahaan yang terdaftar di Bursa Efek Indonesia (IDX) yang melaporkan skor ESG selama periode 2021–2023 Penelitian ini menerapkan regresi berganda untuk mempelajari hubungan antara peringkat ESG dan kinerja harga saham serta indikator profitabilitas seperti return on assets (ROA). Model statistik dijamin valid melalui uji asumsi Klasik. Hasil penelitian membantu berbagai pemangku kepentingan dalam memperoleh informasi penting. Penelitian ini menunjukkan kepada investor bagaimana faktor ESG memengaruhi kinerja keuangan di pasar Indonesia. Para manajer dapat menentukan apakah investasi berkelanjutan akan menguntungkan perusahaan atau tidak. Dampak program ESG saat ini dapat ditentukan oleh para pembuat kebijakan, dan peraturan yang lebih baik dapat dikembangkan. Penelitian ini memberikan contoh lain tentang bagaimana ESG memengaruhi keuangan di pasar negara berkembang.
Kata kunci: *Peringkat ESG, kinerja saham, profitabilitas, Bursa Efek Indonesia*

Received:
13 October 2025
Revised:
19 November 2025
30 January 2026
Accepted:
5 February 2026

INTRODUCTION

Environmental, Social, and Governance (ESG) integration has emerged as a crucial criterion to evaluate corporate performance and sustainability. Investors and other interested parties and regulatory

authorities evaluate the ESG practices of companies because they affect long-term value development and risk reduction. The green securities have a total value of $700 billion (Mitra et al., 2021). ESG ratings have been developed based on the growing focus on ESG to evaluate the performance of companies in the three areas. The impact of CSR activities on the stock prices is determined by the investor perceptions of such initiatives (Fatemi et al., 2018).

ESG ratings can be used as a benchmark measure to assess how a company practices sustainable practices and ethical practices, and its commitment to social responsibility (Morningstar Sustainalytics, 2023). The whole world is having market sentiment influenced by the environment and social and management aspect. It was a huge stock fall after United Airlines was involved in a passenger removal incident back in 2017 (Lins et al., 2017). The way the management neglected the social practice affects the way the investors will view the investment, and the price of the stock will concurrently either rise or fall (Fatemi, et al., 2018). CNBC news did a review of 80 cases of ESG-related controversies in all industries since 2005, and in most of the cases, investors tend to dispose of the stock immediately when it pertains to an issue of environment or social (CNBC, 2020). High ESG ratings generate both positive and negative stock market performance depending on the market performance as established by Broadstock, Collins and Hunt (2021) in their research on socially responsible investment. These ratings affect the investment choices of investors, and investors typically prefer firms that have high ESG scores. The firms also have other reasons to engage in green finance activities.

The interest of researchers in the relationship between ESG ratings and stock prices continues to grow. Gillan et al. (2021) examined existing research on ESG and CSR in the context of corporate finance to show that social responsibility initiatives have a complex impact on stock market performance. Within emerging markets, this relationship becomes even more nuanced due to institutional and market characteristics. In this regard, the Indonesian Stock Exchange (IDX) serves as one of the important stock exchanges in Southeast Asia because Indonesia operates one of the largest economies in the region (Indonesian Stock Exchange, 2023). The exchange strives to achieve green finance objectives by providing ESG rating scores through its partnerships with external rating organizations. The nation experiences both economic growth and environmental plus social issues that demonstrate the necessity of operating businesses in a sustainable manner. As Indonesian firms are increasingly seeking to meet the global ESG standards, it is important to know how the ESG ratings will affect the stock price performance. Naughton, Wang and Yeung (2019) studied whether the investor attention to ESG issues affects the stock price performance and found that although certain investors value the ESG performance, its impact on the stock prices is not uniform.

Research indicates that ESG ratings have a positive impact on stock prices but researchers have not studied how profitability affects this relationship. The research by Lins, Servaes, and Tamayo (2017) shows that the firms that were more active in CSR activities had better stock performance during the financial crisis because their stakeholders trusted them more and they had stronger social capital. Even studies conducted in China during COVID 19, resulted in high- ESG portfolios outperform low- ESG portfolio (Broadstock et al, 2021). The profitability level of a company affects how investors see ESG-related investments because it shows the financial strength of the company. The effective execution of ESG initiatives depends critically on a firm's profitability, as financially strong firms possess greater capacity to allocate resources, implement sustainability strategies, and transform ESG commitments into operational outcomes. Higher profitability enhances investor confidence that ESG initiatives are value-creating rather than symbolic, leading to stronger stock price performance (Xie et al., 2019; Buallay et al.,

2020). Moreover, the growing interest in ESG-related investments indicates that firms need to pay close attention to their ESG ratings, as ESG disclosure influences investors' information environment and market reactions. Prior empirical evidence supports this mechanism, showing that stronger ESG performance influences the incorporation of firm-specific information into stock prices, thereby shaping stock price synchronization and overall market valuation (See Lins et al., 2017; Chen & Hu, 2020). Findings from ESG research conducted in developed countries cannot be directly generalized to the Indonesian context due to substantial differences in institutional frameworks, regulatory environments, and business practices (Suchman, 1995; La Porta et al., 1998; Christensen et al., 2021). In developed economies, ESG implementation is supported by strong legal systems, well-established reporting standards, high transparency, and effective law enforcement (Suchman, 1995; La Porta et al., 1998; Eccles et al., 2014). These conditions enable ESG practices to be relatively uniform, comparable, and strategically embedded into corporate business models (Khan et al., 2016; Christensen et al., 2021; IFRS Foundation, 2023). In contrast, ESG practices in Indonesia remain at a developmental stage, characterized by considerable variation in adoption and disclosure quality across firms and industries, reflecting the evolving nature of sustainability regulations and heterogeneous enforcement mechanisms (OJK, 2017; Lokuwaduge & Heenetigala, 2017).

Although regulatory frameworks related to sustainability reporting have been gradually introduced, ESG implementation is still largely compliance-oriented rather than strategically embedded in corporate decision-making (OJK, 2021; Bose et al., 2017). Prior studies on emerging markets suggest that firms often perceive ESG initiatives primarily as regulatory obligations or legitimacy tools, rather than as value-adding principles that enhance long-term firm performance (Aouadi & Marsat, 2016). The evolving nature of ESG regulations, combined with limited enforcement and heterogeneous disclosure standards, contributes to inconsistent ESG practices across sectors (Lokuwaduge & Heenetigala, 2017; Khan et al., 2016). As a result, many Indonesian firms have yet to fully integrate ESG considerations into their core business strategies, reinforcing the perception of ESG as a cost or reporting burden rather than a strategic investment (Utama & Mirhard, 2016; Bose et al., 2017; OJK, 2021). This may result in the firms not having sound ESG practices that reflect their real sustainability performance and treat them as paperwork.

The study will determine the relationship between the Indonesian Stock Exchange ESG scores and the share price performance. Are good, lucrative ESG companies characterized by high ESG ratings recording better profitability than less lucrative companies? The study aims at helping to provide an answer to that question. This work remains significant since ESG regulations of the world are limited and the financial impacts of ESG in emerging markets are not well explained in the existing literature. Institutions, investors, and ESG practices in such markets, which include Indonesia, are distinct from those in advanced markets. The other unique aspect of this research is that it is among the first studies examining ESG and profitability (ROA and ROE) in Indonesia at once. The research notes how the two aspects of ESG and profitability impact share prices over a variety of sectors. The research departs from the previous research that has been mostly on direct ESG and performance relationships in developed markets to empirically test the intervening effect of profitability to either enhance or reduce the ESG impact on stock prices.

This research is based on the principles of signaling theory and stakeholder theory to clarify the combined effect of ESG ratings and profitability of a firm on the stock price in the Indonesian stock market. Signaling theory suggests that ESG ratings are information signals that minimize information asymmetry by

showing the low-term risk management efforts, sustainability commitment and governance standards of firms to investors. The market response to these signals varies according to the financial situation in the firms. The initial objective of this study is to determine whether ESG ratings have a significant impact on the stock prices that show how much sustainability information is valued in the market.

Profit is one of the main analytical dimensions since investors still consider financial performance to be the most crucial factor, especially in emerging markets like Indonesia (Fatemi et al., 2018). Return on Assets (ROA) and Return on Equity (ROE) are used to measure profitability as they indicate two different but related ways in which a company is doing well. The ROA indicates how well the managers are using the assets of the company to generate profits, which indicates that the company can sustain and sustain ESG initiatives. The ROE indicates how much profit the company generates for the shareholders and how well it turns its strategies, including ESG initiatives, into value for the shareholders. Thus, the study examines whether ROA and ROE influence the stock prices and whether the conventional profitability measures are still the main factors that influence the market value together with the ESG measures.

Not only do ROA and ROE directly affect the ratings of ESG implementation, but also theoretically, these variables are moderating ones and not simple control variables (Xie et al, 2019). Further, according to signaling theory, firms with high levels of profit will have more credible ESG ratings. However, even ESG rating signaling expected as highly rated companies, investor would expect lower return on investment (Cornell, 2020). According to a stakeholder theory, a profitable company can satisfy the needs of its stakeholders, finance the expenses associated with ESG investments, and long-term retain legitimacy. In this regard, this study deliberately investigates cases where ROA intensifies ratings of ESG ratings on share prices. Due to the fact that the company will increase the investor confidence that the company can transfer sustainability commitments into actual operational performance, and cases where ROE intensifies the impact of ESG ratings on the share price due to demonstrating that sustainability initiatives are related to shareholder value creation.

Finally, this research evaluates whether ESG ratings, ROA, and ROE have a concurrent effect on stock prices, such that the combined impact of sustainability performance and financial fundamentals affect the value of the stock. By putting these research questions in a proper theoretical framework, the study gives a better explanation of how the investors in the Indonesian Stock Exchange view and value the information on ESG. The results will contribute to the ongoing debate on ESG and its impact on financial markets, and will provide useful information to investors and policy makers and corporate leaders in Indonesia and around the world.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Employment of two theories in one study can be justified based on the fact that both theories provide an explanation of distinct yet mutually reinforcing processes that occur in the same empirical phenomenon.. In this research, signaling theory explains how information passes to the market and how it is seen, whereas stakeholder theory explains the reason why the information is important in the first place. Signaling theory is a micro-level market logic that defines ESG ratings and profitability measures (ROA and ROE) as signals that close information gaps between firms and investors, hence affecting stock prices. Signaling theory is not sufficient to describe the specific content of ESG information (Barney & Harrison, 2020). This is augmented by stakeholder theory, which considers that ESG performance indicates the firms' responsibility to a number of stakeholders which influence long-term risk, legitimacy and sustainability, which factors are increasingly valued by investors. Through an integration of the two theories, the study possesses enhanced theoretical coherence: ESG is financially

justified by stakeholder theory as a sound business practice, and signaling theory demonstrates the translation of ESG, and profitability into tangible market value. The two theories used in the study allow it to study the normative foundation of ESG relevance and the way in which ESG and profitability affect stock prices, resulting in a more robust explanation of the behavior of investors in the Indonesian capital market.

Stakeholder Theory

ESG ratings inherently reflect how a company addresses the interest of various stakeholders beyond just shareholders, including customers, employees, and communities. High ESG ratings signal that a company considers environmental, social, and governance factors that are important to modern investors and stakeholders, aligning with broader societal expectations. Freeman's (1984) stated that Stakeholder Theory emphasizes the importance of considering the interests of various stakeholders in corporate decision-making. It posits that companies adopting ESG practices are likely to improve their relationship with stakeholders, leading to enhanced reputation and financial performance. Further, ESG ratings reflect a company's commitment to environmental, social, and governance principles, which are increasingly valued by modern investors seeking ethical and sustainable investment options (Freeman, 2017). This theory supported by finding from previous resarch conducted by Freudenreich et al (2019) found that stakeholder value proposition has expanded towards sustainability.

Signaling Theory

ESG ratings serve as a powerful signal to investors about a company's commitment to sustainable practices and long-term value creation. Positive ESG ratings can be a signal of a firm's quality and responsibility, which may attract investors who value these traits, thereby impacting stock prices. Spence (1973) developed the foundation of signalling theory, explaining how certain attributes can serve as indicators of a firm's quality and long-term potential, thus influencing investor behaviour and stock price. Fatemi et al. (2018) findings supported the theory on how the social responsibility act as a positive signal to investors.

ESG Ratings and Stock Price Performance in Indonesian-Listed Companies

The Indonesian Stock Exchange (IDX) offers a unique context for examining the implications of ESG ratings on stock price performance. As an emerging market, Indonesia has witnessed a growing interest in sustainable investing, yet the integration of ESG factors into investment decisions remains relatively nascent compared to more developed markets. Studies focusing on Indonesian companies have produced varied findings. Contrary, Santoso et al (2019) reported no significant relationship between ESG ratings and stock prices, indicating that the market might not yet fully incorporate ESG considerations into pricing mechanisms. This also in line with research conducted by Sihotang and Siregar (2025), where there is no direct relationship between ESG performance and financial outcomes, yet the ESG controversies proven otherwise.

Researchers Mitra and Anas in 2021 analyzed how ESG and CSR performed in business operations before the Covid-19 pandemic, and during the crisis were found to contribute to business sustainability. Indicatively, the ESG ratings could be the key factor to good stock performance in the volatile markets such as the Indonesian one.

According to Al-Issa et al. (2022), the study examined how ESG and CSR factors affect the value of a company and the marketing costs of US companies and the study can be used to analyze the same dynamics in Indonesian firms. According to the study findings, strong ESG performance can enhance the value of the company, and this can enhance the stock price positively. In the study, Li et al. (2023) examined the influence of ESG ratings on the uniformity of stock prices in China and this provides a comparative understanding that can be used to comprehend the situation in

Indonesia.

Hypotheses Development

Signaling theory informs the main framework of the study while stakeholder theory serves as a supportive framework because the study maintains empirical neutrality and theoretical consistency throughout all its hypotheses. The study intentionally defines its hypotheses with ESG ratings (or ESG scores) without specifying either a positive or negative direction because it bases its research on signaling theory as the primary framework. When studies measure ESG scores as ESG risk scores, they don't always lead to positive market responses because previous research shows mixed findings depending on markets and sectors, and measurement methods; thus, defining a positive or negative hypothesis would create a theoretical or contextual assumption that does not hold true in newly emerging markets like Indonesia. Secondly, signalling theory is used as a single dominant theory to inform all the hypotheses in such a way as to maintain theoretical simplicity and consistency, since it can be used to explain that ESG scores, ROA and ROE are observable signals that reduce information asymmetry and affect the stock price, and their interactive effects in the moderation hypotheses. Stakeholder theory is not dismissed but rather used as a contextual basis on why the ESG information is present and of use, as opposed to being used as a testable process in each of the hypotheses. The use of the same non-directional, signalling-based reasoning in all the hypotheses provides uniformity, prevents breaking up of the theory and allows the empirical findings to show whether the market appreciates or depreciates or disregards ESG and profitability signals.

ESG Influence Stock Price

Environmental, Social, and Governance (ESG) ratings have increasingly become pivotal in assessing a company's commitment to sustainable and ethical practices. These ratings evaluate corporate performance in environmental stewardship, social responsibility, and governance quality, all of which are essential for long-term financial stability and investor confidence. Consequently, ESG information has gained prominence as a significant non-financial input in firm valuation.

The relationship between ESG ratings and stock price performance has been widely examined in the literature, yet the findings remain mixed. Such inconsistency may be attributed to differences in how ESG information is interpreted across markets and industries, particularly in emerging market contexts where ESG practices and regulatory frameworks are still evolving (Gillan et al., 2021; Broadstock et al., 2021). From a valuation perspective, Schramade (2016) proposes a value-driver adjustment approach, arguing that ESG performance influences stock prices indirectly through its impact on key financial drivers, such as revenues, costs, risk, and growth. Consistent with this argument, Ahmad et al. (2021) provide empirical evidence that firms with stronger ESG performance tend to exhibit higher stock prices. Furthermore, Al-Issa et al. (2022) examine the effects of ESG and corporate social responsibility (CSR) factors on firm value and marketing costs in U.S. companies, demonstrating that strong ESG performance enhances firm value and, in turn, positively affects stock prices. These findings offer a useful reference for analyzing similar dynamics in Indonesian firms. Similarly, Li et al. (2023) investigate the influence of ESG ratings on stock price synchronicity in China, providing comparative insights that are relevant for understanding ESG valuation in emerging markets, including Indonesia. In addition, Atz et al. (2023), through a comprehensive meta-analysis of more than 1,100 empirical studies, conclude that ESG integration plays a strategic role in enhancing overall firm performance.

Meanwhile, contrary evidence is reported by Santoso et al. (2019), who find no significant relationship between ESG ratings and stock prices, suggesting that the market may not yet fully incorporate

ESG considerations into pricing mechanisms. This finding is consistent with Sihotang and Siregar (2025), who document no direct relationship between ESG performance and financial outcomes, although ESG controversies are shown to have significant financial implications.

From the perspective of signaling theory, ESG ratings function as informational signals that communicate firms' sustainability initiatives, leadership quality, and risk management capabilities. By reducing information asymmetry and uncertainty regarding firms' long-term prospects, these signals shape investor perceptions and influence stock market valuation (Xie et al., 2019). Given the context-dependent nature of ESG valuation, particularly in emerging markets, this study empirically examines the relationship between ESG scores and stock prices without imposing a predetermined directional assumption. Accordingly, the first hypothesis is formulated as follows

H1: ESG score have a significant influence on stock price.

ROA Influence Stock Price

Return on Assets (ROA) is a key indicator of a firm's profitability relative to its total assets, reflecting how efficiently management utilizes company resources to generate earnings. A higher ROA indicates superior operational efficiency and effective asset management, which are commonly perceived by investors as signals of strong financial health (Brigham & Houston, 2019). Consequently, firms with higher ROA tend to experience higher stock prices, as improved profitability reduces perceived investment risk and enhances investor confidence. ROA measures the extent to which management is able to convert assets into net income, thereby capturing the firm's performance in its core business activities (Ross et al., 2020). From an empirical perspective, prior studies consistently document a positive relationship between ROA and stock prices. For instance, Nguyen et al. (2021) find that ROA significantly influences stock prices in emerging markets. Similar evidence is reported in the Indonesian context, where profitability indicators such as ROA are found to be positively associated with firm value and stock price movements (Sartono et al., 2020; Pratama & Wibowo, 2022).

From the perspective of signaling theory, a high ROA serves as a positive signal to investors regarding managerial competence, operational efficiency, and financial strength (Spence, 1973). By conveying credible information about a firm's ability to generate returns from its assets, ROA reduces information asymmetry between managers and investors. This favorable signal enhances investor trust, leading to increased demand for the firm's shares and, ultimately, higher stock prices (Xie et al., 2019). Based on this theoretical and empirical evidence, this study posits that ROA plays a significant role in determining stock prices. Accordingly, the second hypothesis is formulated as follows:

H2: ROA have a significant influences on stock price.

ROE Influence Stock Price

Return on Equity (ROE) reflects a company's ability to generate returns on shareholders' equity, providing insight into how effectively management utilizes shareholders' investments to generate profits. A higher ROE generally signals superior managerial efficiency and strong financial performance, making the firm more attractive to investors seeking sustainable returns on equity investments (Brigham & Ehrhardt, 2017).

From a capital market perspective, ROE is widely regarded as a key profitability indicator that influences investor decision-making and stock valuation. Firms with higher ROE are perceived to have stronger value creation capability, which can lead to increased investor demand and higher stock prices (Penman, 2013). Empirical studies support this relationship, showing that ROE has a positive and significant effect on stock prices in both developed and emerging markets (Kijewska, 2016; Bae et al., 2021).

According to signaling theory, ROE serves as an important financial signal that conveys information about a firm's

profitability, financial strength, and efficiency in deploying equity capital. High ROE reduces information asymmetry by signaling effective management and sound financial fundamentals, thereby enhancing investor confidence and positively influencing stock market valuation (Spence, 1973; Xie et al., 2019).

Several prior studies provide empirical evidence supporting this argument. For instance, Kijewska (2016) finds that ROE significantly explains stock price variation among energy firms in Europe, while Bae et al. (2021) document that profitability indicators, including ROE, play a crucial role in shaping firm valuation in emerging Asian markets. In the Indonesian context, studies by Susanto and Prabowo (2020) also show that ROE is positively associated with stock prices, indicating that investors place substantial weight on equity-based profitability measures. Based on the theoretical arguments and empirical evidence above, this study proposes the following hypothesis:

H3: ROE have a significant influences on stock price.

ROA Moderates ESG Influence on Stock Price

Companies with high return on assets (ROA) possess greater internal resources, enabling them to more effectively implement, monitor, and sustain ESG initiatives. From the perspective of stakeholder theory, firms that are able to balance profitability with stakeholder engagement are better positioned to enhance their corporate reputation, particularly among investors who value both sustainability and financial soundness (Drempetic et al, 2019). Consequently, higher ROA may strengthen the firm's capacity to translate ESG performance into market value.

Empirically, several studies suggest that firm profitability plays a crucial role in shaping the market's response to ESG performance. Highly profitable firms tend to allocate more resources to sustainability -related activities and are more capable of absorbing the associated costs without jeopardizing operational efficiency (Drempetic et al, 2019). As a result, ESG initiatives undertaken by profitable firms are perceived as more credible and value-enhancing by investors.

From the perspective of signaling theory, ESG performance serves as a signal of a firm's long-term commitment to sustainability and sound management practices. This signal becomes more reliable and persuasive when accompanied by strong operational profitability. Investors are more likely to believe that firms with high ROA possess the necessary financial strength and managerial capabilities to consistently implement ESG strategies and sustain them over the long. Accordingly, ESG disclosures by profitable firms reduce information asymmetry and increase investor confidence in the firm's long-term prospects.

Prior empirical evidence supports this moderating role of profitability. Studies such as Broadstock et al. (2021) and Ahmad et al. (2021) document that the positive effect of ESG performance on stock prices is more pronounced among

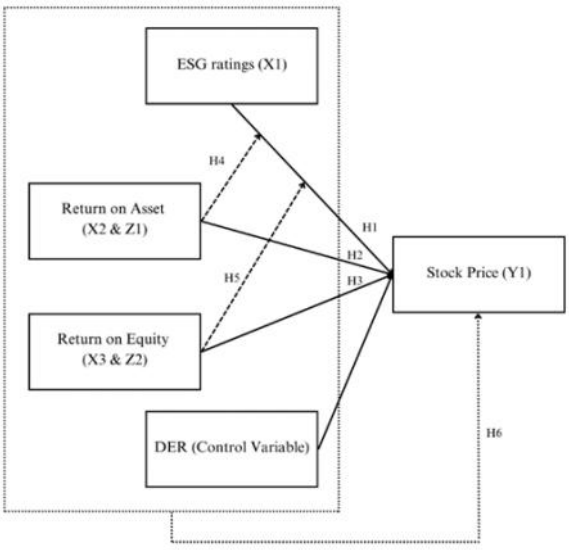


Figure 1. Hypotheses Model

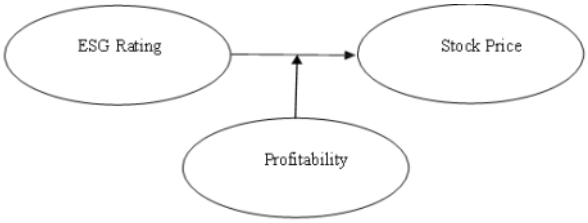


Figure 2. Conceptual Framework

firms with stronger financial performance. In emerging markets, where ESG practices and investor awareness are still developing, profitability is particularly important in validating ESG signals and ensuring that sustainability initiatives are not perceived as symbolic or opportunistic.

Therefore, ROA is expected to moderate the relationship between ESG scores and stock prices, such that the positive impact of ESG performance on stock price is stronger for firms with higher ROA. Based on this argument, the following hypothesis is formulated:

H4: ROA have a significant moderation influence on ESG to stock price.

ROE Moderates ESG Influence on Stock Price

Companies with high ROE demonstrate strong financial performance, which may make them more capable of balancing ESG practices with shareholder profitability. When companies exhibit both high ESG ratings and high ROE, they signal to the market that they are not only ethical and sustainable but also profitable, which can be particularly attractive to investors seeking long-term growth. From a signaling theory perspective, profitability plays a crucial role in strengthening the credibility of ESG-related signals. High ESG scores alone may be perceived as symbolic or costly initiatives; however, when accompanied by high ROE, these signals become more credible, as they demonstrate that sustainability practices do not undermine shareholder returns. Instead, strong profitability indicates that ESG engagement is embedded within an effective business strategy and sound governance structure (Xie et al., 2019; Gillan et al., 2021).

Prior empirical studies support the moderating role of profitability in the ESG–firm value relationship. Ahmad et al. (2021) show that the positive impact of ESG performance on stock prices is more pronounced among financially strong firms. Similarly, Broadstock et al. (2021) argue that investors respond more favorably to ESG information when it is supported by robust financial performance, as profitability reduces uncertainty regarding the economic viability of sustainability initiatives. In emerging markets, where ESG disclosure quality and investor awareness are still evolving, profitability serves as an important validating mechanism that enhances market confidence in ESG signals (Li et al., 2023).

Accordingly, ROE is expected to moderate the relationship between ESG performance and stock prices by reinforcing the market's positive valuation of ESG activities. Firms with high ESG scores and high ROE convey a stronger signal that sustainability and shareholder value creation are complementary rather than competing objectives. Therefore, the hypothesis is formulated as follows:

H5: ROE have a significant moderation influence on ESG to stock price.

RESEARCH METHODS

This study is a quantitative explanatory study. The population of the is listed on the Indonesia Stock Exchange (IDX) and have been rated on ESG by Morningstar Sustainanalytics, a partner of IDX. The study covers the period 2021 to 2023. The sample was selected using a purposive sampling technique. The criteria of the sample are: (1) Listed companies in IDX between 2021 and 2023, (2) Having IDX ESG rating, (3) Companies with positive profits consecutively between 2021 and 2023. The above criteria were used to eliminate the bias that occurs due to the factors of stock price performance. Based on these criteria, 69 companies multiplied by 3 years financial year, 207 data obersvation are used as the final sample.

The variables used in this research are stock price as the dependent variable, ESG score, ROA, and ROE as independent variable, ROA and ROE also serves as moderating variable, and DER as control variable.

This study employs panel data regression to examine the effect of ESG performance on stock prices, with profitability as both an independent and moderating variable, and leverage as a control variable. The regression model is

specified as follows:

$SPit = \alpha + \beta 1 ESG\ score\ it + \beta 2 ROAit + \beta 3 (ESGscoreit \times ROAit) + \beta 3 (ESGscoreit \times ROEit) + \beta 4 DERit + \varepsilon it$

where: SP= Stock price , ESG score = ESG score , ROA= Return on Assets , ROE= Return on Equity, DER= Debt-to-Equity Ratio, ESG×ROA = Interaction between ESG and ROA, ESG×ROE= Interaction between ESG and ROE, it = firm i in year t, a = Intercept, β = Slope, e= Error term

The stock price depicts the market value of the shares of a company and represents a consolidated market opinion of the performance and future potential of the company. The index is calculated by the closing price of the stock at the end of the fiscal year, which is normally December 31, gives an aggregate market response to the financial performance and other disclosure of the company across the year (Brigham & Houston, 2019). The ESG risk score of Morningstar Sustainalytics was used to determine the ESG score, which was found in the IDX ESG database. This score indicates the degree of environmental, social and governance (ESG) risk that a company faces. The score was used in its own form and a lower score indicates a low risk. It is a benchmarked, standardized variable that enables cross-firm and cross-year comparisons of firms (Morningstar Sustainalytics, 2023). This study uses return on assets (ROA) and return on equity (ROE) to measure how profitable a company is (Kasmir, 2019). ROA shows how well managers use assets to create profit by dividing net income by total assets. The amount of profit that is refunded to the shareholders is given by ROE, which divides net income by total equity. The study also utilizes ROA and ROE as moderating variables that either intensify or diminish the effect of ESG score on the stock price (Kasmir, 2019). The concept is that powerful and high-earning firms are in a stronger position to convert sustainable actions into stock value. The Debt-to-Equity Ratio (DER) is a control variable that quantifies financial risk by comparing total liabilities to total equity (Kasmir, 2019). The interaction term ESG × ROA represents the interaction between ESG performance and return on assets, while ESG × ROE denotes the interaction between ESG performance and return on equity. The subscript i,t refers to firm i in year t. The parameter α represents the intercept, β denotes the slope coefficient, and ε is the error term.

This study employs panel data analysis method of EViews as software tools to handle that involves both cross-sectional and time-series data. The application of panel data is able to highly minimize the problems associated with omitted variables and models that are not complete. To select the most suitable regression model, three tests are carried out, namely the Chow test, Hausman test, and Lagrange Multiplier test, to determine between the common effect model, fixed effect model, and random effect model.

To test the theory, the research carried out a partial test (t-test), a simultaneous test (f-test), a coefficient determination test and a moderated regression analysis (MRA). The t-statistic test was employed to verify whether the independent variables have a significant

Table 1.
Table of Descriptive Statistics

	Stock Price	ESC Score	ROA	ROE	DER
Mean	3599.179	28.94072	0.076779	0.157518	1.600436
Median	1690.000	28.18000	0.057070	0.123114	0.906368
Maximum	39025.00	52.37000	0.565790	1.419876	15.30803
Minimum	102.0000	12.67000	-0.180577	-1.239267	0.015221
Std. Dev	5370.512	9.571732	0.087725	0.225204	2.091009
Observations	207	207	207	207	207

effect on the dependent variable in part. The F test is applied to analyze the combined effect of independent variables on the dependent variable. Coefficient of determination (R2) to measure the extent to which the model's ability to explain variations in the dependent variable. Finally, Moderated Regression Analysis (MRA) is applied to analyze whether moderating variables can influence the relationship between independent and dependent variables.

ANALYSIS AND DISCUSSION

Descriptive Statistics

The analysis of 207 firms-year data between 2021 and 2023 indicates that the firms under the study are highly diverse. Stock prices are the highest variation with a mean price of 3,599.18 and a standard deviation of 5,370.51. This indicates that the market value of the firms varies greatly and it is possible to explain it by the size of the firms, their potential growth, and the opinion of investors. The minimum stock price is 102 which proves that the sample includes both low value and high value firms. The ESG scores are less variable, representing ESG investment activited conducted by companies. This results indicates that the sustainability risk profiles of the firms are more comparable. This could be attributed to the fact that ESG disclosure practices in the post-pandemic period have been standardized. The wide range between the minimum stock price of 102 and the maximum value further underscores the presence of both low- and high-valued firms in the sample. In contrast, ESG scores display relatively lower dispersion, indicating more homogeneous sustainability risk profiles across firms, which may reflect increasing convergence in ESG disclosure practices during the post-pandemic period. The profitability indicators of ROA and ROE are on average around average with small variation. This indicates that most of the firms have comparable profits on assets and equity although there are differences in operations and financial structures. At the same time, the Debt to Equity Ratio (DER) shows how the firms vary in their approaches towards money. Certain firms take on more debt, while others maintain lower levels. Generally, stock prices are certainly more responsive to other attributes of the company than ESG scores or profit percent. This is a good reason why analysts need to take both financial and ESG factors into consideration in the following research.

The descriptive statistics indicated that the market value and financial data of the firms in the sample varied greatly. The distribution of stock prices was wide, and the highest value was 39,025, which showed big differences in company size, and future expansion prospects, and varied market conditions affected investor perception. The ESG scores between 12.67 and 52.37, and this shows that firms have different levels of sustainability, and some firms perform well in managing ESG risks, but others have elevated ESG risks, which can affect investor confidence and long-

Table 2.
Multiple Regression Analysis

Variable	Coefficient	Std. Error	t-statistics	p-value
ESG score	182.116	62.71120	2.904036	0.0041
ROA	-13589.30	7341.565	-1.851008	0.0656
ROE	-10819.48	3530.032	-3.064982	0.0025
ESG score*ROA	575.1332	210.1281	2.737061	0.0067
ESG score*ROE	434.5933	121.6931	3.571225	0.0004
DER	1445.407	936.1648	1.543967	0.1242
F-statistics		8.279390		0.000032
		8.106271		0.000040
R-squared		0.109017		
		0.106981		

term value. The profitability data show that the firms have big variations in their performance, and their efficiency, and their financial structure, and their ability to survive in the market. The debt-to-equity ratio seems to lie between 0.015 and 15.31, and this shows highly diverse financial policies, whereas some of the companies are predominantly funded internally and others have high leverage that may increase the returns, but at the same time it will increase the risk. In general, these deviations indicate diversified company profiles in the sample that market value and investor reaction are based on a complicated mix of financial output, leverage decisions, and sustainability.

Based on Chow test, Hausman test, and Lagrange Multiplier test, the most suitable regression model chosen is Random Effect Model (REM). Therefore, due to the Generalized Least Square, a classical assumption test is not required. The table below provide a summary of the results.

Hypothesis Testing

The impact of Environmental, Social, and Governance (ESG) ratings on stock price performance was found through the empirical analysis to provide substantial findings. The regression analysis has a probability value (p-value) which is lower than the widely applied limit of 0.05. There is enough statistical evidence to show that ESG rating scores have an impact on the stock price performance. That means H1 is approved. The effect of ESG ratings on stock price performance is in line with the principles of Stakeholder Theory and Signaling Theory. As per the Stakeholder Theory, companies that put ESG practices first will be able to have better relationships with different stakeholders which will lead to an improvement of their reputation and attraction of more investors (Freeman, 2017). Signaling Theory is also in favor of the fact that high ESG ratings serve as indicators of corporate excellence and long-term value that are able to attract investors who are interested in sustainability (Spence, 1973). The result is supported by the findings of the previous study that ESG investment gives higher returns than conventional investment (Atz et al., 2023). The signalling theory in ESG context adopted in this study has also been supported by previous research in CSR context that the positive signal of CSR activities initiates investors (Zerbini, 2017).

ROA does not have a significant effect on Stock Price

ROA did not have a significant effect on share price because the p-value was 0.0656 (greater than 0.05), which resulted in the rejection of H2. The result of the analysis shows that despite the ROA value being an indication of the efficiency of the assets of a company, the investors do not take it as one of the primary factors in the valuation of the shares. ROA is an accounting measure that is based on historical data and figures and is significantly influenced by the accounting policies, depreciation practices, and asset value, which renders it less comparable and less reliable between firms, especially in capital-intensive industries with diverse asset bases. In terms of signaling theories, ROA is a poor indicator of future performance relative to market-based metrics such as ROE or externally verified metrics such as ESG ratings, which entail evaluating future aspects of risk management, governance, and sustainability. In developing markets such as Indonesia where market instability and information asymmetry prevail, investors focus on reputational credibility measures rather than internal efficiency indicators. The study results match previous research findings which indicate that Indonesian investors value ROE and external ratings more than ROA when evaluating stock price influences (Santoso & Christiani, 2019). The lack of significant ROA impact shows that asset efficiency does not affect stock prices unless it receives support from stronger financial indicators or sustainability-related data that meet investor expectations for long-term value creation.

ROE have significant effect on Stock Price

It is found that the ROE has a significant effect on stock price. Statistically, the p-value 0.0025 < 0.05. It implies that the

result is not significant and H3 is valid. A high ROE indicates that a firm is well run and profitable, and investors who want stable returns on equity like firms that have high ROE. Investors can take ROE as a critical indicator of the returns of a firm, and ROE percentage with the inclusion of ESG can attract the interest of investors who have been interested in both the financial and the ethical metric. This was after the discovery of Busch and Friede (2018) that there is a positive strong relationship between the social and The ROE is a highly reliable and strong financial signal based on the signaling theory that reduces the information asymmetry that exists between the managers and the investors. The return on equity is significant, and it indicates that management is able to use the capital of shareholders efficiently. This shows good management and good financial discipline and lower risk and thus, the price of the stock goes up. Simultaneously, stakeholder theory informs us that it is not merely about short-term profit-taking. High ROE is indicative of firms being able to meet the needs of various individuals such as shareholders, employees, lenders, and the community while maintaining smooth operations and being able to survive in the long run. It enhances the reputation of a business and makes it stronger and therefore, more credible to the investors. Hence, ROE is not merely a figure, it is a powerful indicator on how firms operate, who they are responsible to and how it influences the stock price especially when combined with their ESG performance..

The Moderating Role of ROA in the ESG–Stock Price

The statistically significant moderating effect of ROA (p-value = 0.0067 < 0.05) indicates that profitability strengthens the relationship between ESG performance and stock price, implying that ESG initiatives are more highly valued by the market when firms demonstrate strong asset efficiency.This fact shows that investors do not consider the ESG ratings separately; they view the ESG measures against their ability to generate income from the resources of the firm. High ROA firms can show that their management is good at using the resources, This convinces the investors that the ESG activities are the symbolical and the cost burdens and the activities are the value-creating activities. According to Stakeholder Theory, the findings support the fact that firms that can trade between the interests of stakeholders and the efficiency of the business will transform sustainability into actual monetary value. When a business generates significant profits, it creates sufficient financial slack to regularly invest in environmental protection and social responsibility and high-quality governance, which strengthens the credibility and long-term sustainability of ESG initiatives. According to Dempetic et al (2019), profitability enables businesses to use ESG initiatives as a strategic advantage that goes beyond regulatory compliance to create competitive benefits which ultimately increase investor confidence and decrease risk perception and raise stock value. This finding is consistent with Xie et al. (2019), who document that firms with stronger financial performance are better able to convert ESG practices into economic value, as profitability enhances the effectiveness and credibility of sustainability initiatives. Higher ROA signals efficient asset utilization, leading investors to perceive ESG activities as integrated value-creating strategies rather than symbolic or cost-driven actions. Similarly, Buallay et al. (2020) provide empirical evidence that the positive market valuation of ESG performance is more pronounced in firms with superior profitability. Their results indicate that financially efficient firms are more capable of leveraging ESG investments to improve firm value, supporting the view that ROA strengthens the market response to ESG performance, particularly in contexts where investors emphasize returns.

The Moderating Role of ROE in the ESG–Stock Price Relationship

The H5 was accepted because the ROE value strongly moderates the effect of ESG

on stock prices, with the p-value standing at 0.0004 which is less than the 5% significance level. The stock performance benefit associated with ESG ratings is higher for firms that have higher ROE values. The market impact of ESG performance is reinforced by profitability as measured by ROE since it shows that sustainability initiatives are supported by high shareholder returns. The findings were in line with the previous research conducted by La Rosa et al, 2018. They demonstrated that firms with stronger social responsibility are perceived as more reliable by capital providers and benefit from better access to financing (La Rosa et al., 2018). The evidence indicates that investors will perceive ESG activities to be value-adding strategic investments rather than expenses or an image when ROE has increased. ROE reinforces the ESG indicators hence enhancing the market response to ESG performance and minimizing investor doubt particularly in emerging markets where returns are more significant.

CONCLUSION

This research provides statistical evidence to show the relationship between ESG ratings and the efficiency of stock prices among companies listed in Indonesia using the Random impact Model analysis. Sustainability initiatives have become core business strategies that drive market value according to findings and the ESG ratings have a statistical impact on stock prices thus showing that environmental and social and governance considerations have been adopted by investors in their decision -making processes.

The experimental results back up the theoretical support of both the Stakeholder Theory and the Signaling Theory by showing that firms that have high ESG scores are able to effectively communicate their long-term value proposition to the investors. The ESG-stock price relationship shows that high ESG ratings function as quality indicators and risk-reduction signals and they attract the interest of investors. This signaling process helps out firms to stand out in the highly competitive markets and the investors are increasingly biased towards sustainable business practices as shown by the significant variation in the ESG scores among the sample companies.

The research indicated how financial performance indices, such as stock prices, are related to stock prices. Return on Equity has been shown to significantly influence the stock prices directly but Return on Assets does not influence stock prices significantly. The divergent impact of equity efficiency in the Indonesian market renders asset performance less important to investors.

The findings indicate that ROA and ROE have positive relationships with stock prices and ESG ratings. Firms that provide higher financial performance are inclined to get more value in the stock market based on their ESG initiatives. The finding that ROE is an effective moderator shows that high return on equity will experience greater appreciation benefits of ESG initiatives and questions the traditional notion that sustainability and profitability are mutually exclusive. Firms that have good financial performance can still achieve more value in the stock market out of their ESG initiatives, which will make them appealing to investors who are interested in responsible high performing companies.

Since both ESG and financial data are significant at the same time, it shows that these two variables combined cause the stock price variation. Though ESG and financial performance statistics moderately impact stock prices, the variables can explain only a small part of the stock price variations. These variables are not the sole factors that influence stock valuation in the Indonesian market, since other external variables like industry risk, economic conditions, regulatory changes and market sentiment will affect stock prices.The finding relates to the new markets that have adopted ESG practices and the wide external fluctuations can be more significant than the internal sustainability measures of the company.

These results have crucial effect on business strategy and investment activity

in emerging markets. The results indicate to corporate managers that ESG investments must be regarded as strategic necessities that must be treated with equal attention to profitability measures for maximum market value impact. The powerful effects of moderation indicate that firms must implement holistic approaches that combine sustainability excellence and financial performance optimisation instead of viewing them as separate priorities. The study gives empirical backing to the inclusion of ESG factors in the construction of the portfolio by investors, maintaining the concentration on profitability indicators that enhance sustainability advantages.

The research enhances the existing literature on ESG-performance relationships in emerging markets by exploring unrealized aspects of Indonesian market behavior. The observed differences in company performance within the sample demonstrate that ESG assessment models should be based on market-specific factors. The results demonstrate that companies need to integrate ESG initiatives with their financial position to meet changing investor demands and achieve better stock market performance in emerging sustainability markets.

It ought to be conducted in the future to explore the ESG-price associations across the sectors, learn how these associations evolve across the multiple market cycles, and explain how the separate ESG components contribute to the enhancement of the market value. Comparison of the Southeast Asian markets may also be beneficial in assessing the regional ESG value impacts and in developing more effective emerging market ESG models that represent the complex relationship of sustainability practices, financial performance and market value better.

LIMITATIONS AND SUGGESTIONS.

The study was limited to covering state-owned and publicly traded companies in Indonesia, which had received ESG ratings between 2021 and 2023 from the collaboration of IDX with Morningstar Sustainalytics. The specific time frame and amount of information fail to clearly depict the permanent patterns which exist in various sectors throughout various periods of time. The research used available statistical information which avoided qualitative aspects by not including views of managers and internal ESG programs that would have added value to understanding the situation. A Random Effects Model was fitted into the research even though it was mathematically right but there were hidden company-specific variables that were not considered that would have an impact on both ESG performance and stock price movements. Finally a low R-squared value means that there are other external factors which also contribute to the performance of stock prices but these factors could not be included in the analysis methodically. These contributing external factors include the state of the economy and the mood of investors, and regulatory announcements.

Future research may build on these results by extending the observation time to several economic cycles, which would allow a stronger analysis of ESG and performance relations over time. The combination of other financial and non-financial variables, e.g. firm size or industry type or corporate governance mechanisms, could increase the explanatory power and provide a more complete model. Researchers are also encouraged to carry out comparative studies between state-owned and private companies or in Southeast Asian markets in order to capture the regional differences in ESG integration and market response. Additionally, mixed-method approaches that integrate quantitative analysis with qualitative interviews or case studies may provide more insight into the way ESG strategies are devised and communicated and investor perceptions of them. Practically, policy makers and corporate managers ought to think about enhancing the ESG disclosure standards and include ESG metrics in the financial reports to enhance transparency and comparability and investor trust in sustainable business practices.

ACKNOWLEDGEMENT

The authors would like to express their sincere appreciation to the Department of Business Administration, Faculty of Administrative Science, Universitas Brawijaya, Indonesia, for the academic guidance and institutional support provided throughout this research. The authors also extend their gratitude to the Center for Fintech and Banking, Universitas Sebelas Maret, Indonesia, for the valuable collaboration, insights, and research assistance that greatly contributed to the completion of this study. The combined support from both institutions has been essential in ensuring the quality and success of this work.

REFERENCES

Ahmad, N., Mobarek, A., & Roni, N. N. (2021). Revisiting the impact of ESG on financial performance of FTSE350 UK firms: Static and dynamic panel data analysis. *Cogent Business & Management, 8*(1), 1-18. https://doi.org/10.1080/23311975.2021.1900500

Al-Issa, N. K., Jreisat, A., et al. (2022). Impact of environmental, social, governance, and corporate social responsibility factors on firm's marketing expenses and firm value: A panel study of US companies. *Cogent Business & Management*. https://doi.org/10.1080/23311975.2022.2135214

Aouadi, A., & Marsat, S. (2018). Do ESG controversies matter for firm value? Evidence from international data. *Journal of Business Ethics*, *151*(4), 1027–1047. https://doi.org/10.1007/s10551-016-3213-8

Atz, U., Van Holt, T., Liu, Z. Z., & Bruno, C. C. (2023). Does sustainability generate better financial performance? Review, meta-analysis, and propositions. *Journal of Sustainable Finance & Investment, 13* (1), 1-22. https://doi.org/10.1080/20430795.2022.2106934

Barney, J. B., & Harrison, J. S. (2020). Stakeholder theory at the crossroads. *Business & Society*, *59*(2), 203-212. https://doi.org/10.1177/0007650318796792

Bae, K. H., El Ghoul, S., Gong, Z., & Guedhami, O. (2021). Does CSR matter in times of crisis? Evidence from the COVID-19 pandemic. *Journal of Corporate Finance*, 67, 101876. https://doi.org/10.1016/j.jcorpfin.2020.101876

Bose, S., Saha, A., Khan, H. Z., & Islam, S. (2017). Non-financial disclosure and market-based firm performance: The initiation of financial inclusion. *Accounting & Finance*, 57(2), 445–479. https://doi.org/10.1111/acfi.12168

Brigham, E. F., & Ehrhardt, M. C. (2017). *Financial management: Theory and practice* (15th ed.). Cengage Learning.

Brigham, E. F., & Houston, J. F. (2019). *Fundamentals of financial management* (15th ed.). Boston, MA: Cengage Learning.

Broadstock, D. C., Chan, K., Cheng, L. T., & 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

Broadstock, D. C., Collins, A., & Hunt, L. B. (2021). Socially responsible investment and market performance: The role of ESG ratings. *Journal of Business Ethics, 169*(3), 371-385. https://doi.org/10.1007/s10551-020-04408-3

Brigham, E. F., & Houston, J. F. (2019). *Fundamentals of financial management* (15th ed.). Cengage Learning.

Buallay, A., Fadel, S. M., Al-Ajmi, J., & Saudagaran, S. (2020). Sustainability reporting and firm performance: Evidence from European financial institutions. *Journal of Applied Accounting Research*, 21(4), 635–655. https://doi.org/10.1108/JAAR-10-2018-0175

Busch, T., & Friede, G. (2018). The robustness of the corporate social and financial performance relation: A second-order meta-analysis. *Corporate Social Responsibility and Environmental Management, 25*(4), 583-608. https://doi.org/10.1002/csr.1480

Chen, H., & Hu, N. W. (2020). Does ESG performance affect firm value? Evidence from China. *Pacific-Basin Finance Journal, 63*, 101398. https://doi.org/10.1016/j.pacfin.2020.101398

Cornell, B. (2021). ESG preferences, risk

and return. *European Financial Management*, *27*(1), 12-19. https://doi.org/10.1111/eufm.12295

CNBC. (2020). ESG investing: When companies get it wrong, investors sell fast. CNBC. https://www.cnbc.com/2020/02/21/esg-investing-when-companies-get-it-wrong-investors-sell-fast.html

Christensen, H. B., Hail, L., & Leuz, C. (2021). Mandatory CSR and sustainability reporting: Economic analysis and literature review. *Review of Accounting Studies*, 26(3), 1176–1248. https://doi.org/10.1007/s11142-021-09609-5

Drempetic, S., Klein, C., & Zwergel, B. (2020). The influence of firm size on the ESG score: Corporate sustainability ratings under review. *Journal of Business Ethics*, *167*(2), 333–360. https://doi.org/10.1007/s10551-019-04164-1

Eccles, R. G., Ioannou, I., & Serafeim, G. (2014). The impact of corporate sustainability on organizational processes and performance. *Management Science*, 60(11), 2835–2857. https://doi.org/10.1287/mnsc.2014.1984

Fatemi, A., Fooladi, I., & Zhang, H. (2018). Valuation effects of corporate social responsibility. *Journal of Banking & Finance, 100*, 104-122. https://doi.org/10.1016/j.jbankfin.2018.03.016

Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Cambridge: Cambridge University Press.

Freeman, R. E., & Dmytriyev, S. (2017). Corporate social responsibility and stakeholder theory: Learning from each other. Symphonya. *Emerging Issues in Management*, (1), 7-15. https://doi.org/10.4468/2017.1.02freeman.dmytriyev

Freudenreich, B., Lüdeke-Freund, F., & Schaltegger, S. (2019). A stakeholder theory perspective on business models: Value creation for sustainability. *Journal of Business Ethics, 166*(1), 3-18. https://doi.org/10.1007/s10551-019-04112-z

Gillan, S. L., Hartzell, J. C., 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

IFRS Foundation. (2023). *IFRS sustainability disclosure standards—A global baseline of sustainability-related financial disclosures*. IFRS Foundation. https://www.ifrs.org

Indonesia Stock Exchange. (2023). *IDX fact book*. Indonesia Stock Exchange. https://www.idx.co.id

Kasmir. (2019). *Analisis laporan keuangan* (Edisi revisi). Depok: Rajawali Pers.

Khan, M., Serafeim, G., & Yoon, A. (2016). Corporate sustainability: First evidence on materiality. *The Accounting Review*, 91(6), 1697–1724. https://doi.org/10.2308/accr-51383

Kijewska, A. (2016). Determinants of the return on equity ratio (ROE) on the example of companies from metallurgy and mining sector in Poland. Metalurgija, 55(2), 285–288.

La Rosa, F., Liberatore, G., Mazzi, F., & Terzani, S. (2018). The impact of corporate social performance on the cost of debt and access to debt financing for listed European non-financial firms. *European Management Journal, 36*(4), 519-529. https://doi.org/10.1016/j.emj.2017.09.007

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (1998). Law and finance. *Journal of Political Economy*, 106(6), 1113–1155. https://doi.org/10.1086/250042

Lokuwaduge, C. S. D. S., & Heenetigala, K. (2017). Integrating environmental, social, and governance (ESG) disclosure for a sustainable development: An Australian study. *Business Strategy and the Environment*, 26(4), 438–450. https://doi.org/10.1002/bse.1927

Li, W., Yi, Z., Liu, S., et al. (2023). The impact of ESG rating on stock price synchronization of listed companies: Evidence from China. *E3S Web of Conferences*. https://doi.org/10.1051/e3sconf/202340901002

Lins, K. V., Servaes, H., & Tamayo, A. (2017). Social capital, trust, and firm performance: The value of corporate social responsibility during the financial crisis. *Journal of Finance, 72* (4), 1785-1824. https://doi.org/10.1111/jofi.12505

Lokuwaduge, C. S. D. S., & Heenetigala, K. (2017). Integrating environmental, social and governance (ESG) disclosure for a sustainable

development: An Australian study. *Journal of Accounting & Organizational Change*, 13(3), 373–394. https://doi.org/10.1108/JAOC-02-2016-0026

Mitra, W. A., & Anas, P. E. (2021). Impact of ESG/corporate social responsibility on company performance before and during Covid-19 crisis: Study of listed companies in Indonesia. *International Journal of Business and Technology Management*.

Morningstar Sustainalytics. (2023). *ESG risk ratings methodology*. Morningstar, Inc.

Naughton, J. P., Wang, C., & Yeung, I. A. Y. (2019). Investor attention and ESG performance: Do investors care about ESG? *Journal of Business Ethics, 152* (3), 593-626. https://doi.org/10.1007/s10551-016-3362-3

Nguyen, T. H., Vu, T. H., & Tran, Q. T. (2021). Profitability, firm size, and stock price volatility: Evidence from emerging markets. *Journal of Asian Finance, Economics and Business*, 8 (3), 123–132. https://doi.org/10.13106/jafeb.2021.vol8.no3.0123

Otoritas Jasa Keuangan (OJK). (2017). Peraturan OJK No. 51/POJK.03/2017 tentang penerapan keuangan berkelanjutan bagi lembaga jasa keuangan, emiten, dan perusahaan publik.

Otoritas Jasa Keuangan (OJK). (2021). *Sustainable finance roadmap phase II* (2021–2025). Jakarta: OJK.

Penman, S. H. (2013). *Financial statement analysis and security valuation* (5th ed.). McGraw-Hill Education.

Pratama, I. G. B., & Wibowo, S. (2022). The effect of profitability and leverage on stock prices: Evidence from Indonesian manufacturing firms. *Jurnal Keuangan dan Perbankan*, 26 (2), 356–369. https://doi.org/10.26905/jkdp.v26i2.7890

Ross, S. A., Westerfield, R. W., Jaffe, J., & Jordan, B. D. (2020). *Corporate finance* (12th ed.). McGraw-Hill Education.

Santoso, D., & Christiani, S. (2019). The effect of ESG performance on stock prices: Evidence from Indonesia. *Indonesian Journal of Sustainability Accounting and Management, 3*(1), 85-96.

Sartono, A., Nugroho, A., & Susilowati, Y. (2020). Profitability, firm size, and firm value: Evidence from Indonesian listed companies. *International Journal of Economics and Business Administration*, 8(4), 307–318. https://doi.org/10.35808/ijeba/600

Schramade, W. (2016). Integrating ESG into valuation models and investment decisions: The value-driver adjustment approach. *Journal of Sustainable Finance & Investment, 6* (2), 95-111. https://doi.org/10.1080/20430795.2016.1176425

Scholtens, B. (2017). Why finance should care about ecology. *Trends in Ecology & Evolution*, 32(7), 500–505. https://doi.org/10.1016/j.tree.2017.03.013

Sihotang, D. G., & Siregar, S. V. (2025). The effect of ESG performance on firm value and financial distress with ESG controversies as a moderating variable. *Petra International Journal of Business Studies, 8*(2), 257-270. https://doi.org/10.9744/petraijbs.8.2.257-270

Spence, M. (1973). Job market signaling. *The Quarterly Journal of Economics, 87*(3), 355-374. https://doi.org/10.2307/1882010

Stevens, P. (2020, February 7). *ESG high controversy events can cost stocks*. CNBC. https://www.cnbc.com/2020/02/07/esg-high-controversy-events-can-cost-stocks.html

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

Utama, S., & Mirhard, R. R. (2016). The effect of sustainability reporting quality on corporate performance in Indonesia. *International Journal of Economics and Financial Issues*, 6(2), 46–52.

Xie, J., Nozawa, W., Yagi, M., Fujii, H., & Managi, S. (2019). Do environmental, social, and governance activities improve corporate financial performance? *Business Strategy and the Environment*, 28(2), 286–300. https://doi.org/10.1002/bse.2224

Zerbini, F. (2017). CSR initiatives as market signals: A review and research agenda. *Journal of Business Ethics, 146*(1), 1-23. https://doi.org/10.1007/s10551-015-2922-8