
Analysis of the Relationship Between Wealth Added and Environmental, Social, and Governance (Esg) Risk on Stock Prices

Titiek Irewati

Universitas Gunadarma, Indonesia

Email: titiekirewati2@gmail.com

Abstract. The dynamics of stock prices are influenced by a myriad of factors, including internal performance metrics and external sustainability risks. This study examines the relationship between internal factors—specifically, Wealth Added (WA) as a measure of company performance—and Environmental, Social, and Governance (ESG) risk levels, and their impact on stock prices. Using a sample of 20 public companies from the energy, material, and utility sectors listed in the SWA100 Wealth Added Index (2024), the research employs Multiple Linear Regression and Pearson correlation analysis. The findings reveal that neither Wealth Added nor ESG risk scores significantly influence stock prices, though a positive trend exists between WA and stock prices, while a negative trend is observed between ESG risk and stock prices. The study highlights that investors may not yet fully integrate WA and ESG risk data into their decision-making processes. These results align with prior research indicating limited investor reliance on such metrics. The implications suggest the need for greater investor education on the long-term benefits of ESG integration and WA metrics, as well as the inclusion of additional variables to better explain stock price movements.

Keywords : Wealth Added, ESG Risk, Stock Price

INTRODUCTION

Stocks or securities are financial instruments that are in great demand by the investor community as a vehicle to invest in the capital market. Changes in stock prices affect investors' decisions to invest in a company that sells its shares. Stock price fluctuations are common. The dynamics of stock prices are influenced by the level of supply and demand. Stock prices will rise if demand is high and will fall if the supply or *pasokan* from the company increases (Sukartaatmadja, Khim and Lestari, 2023). Factors that play a role in changes in stock prices are grouped into internal factors and external factors. Internal factors are those from within the company that concern the company's performance, while external factors are related to the company's ecology, such as macroeconomic and socio-political conditions of the country where the company operates.

Internal factors, namely the measurement of company performance, can be carried out by certain methods such as financial ratio calculation, management analysis, *Economic Value Added* (EVA) method, and *Wealth Added* (WA) calculation. The *Wealth Added* (WA) method is a measurement method for company performance by considering the amount of capitalization and expected share return for investors.

The *Wealth Added* method is similar to the EVA (*Economic Value Added*) method, with the distinction that the WA method focuses more on depicting company growth, while EVA focuses more on increasing stock value (Aspirandi, 2017). The *Wealth Added* method for measuring company performance was initiated by the consulting firm Stern Stewart & Co. *Wealth Added* value is an indicator of the increase in wealth generated by the expectations of shareholders (Ayu, 2022; Henryanto Wijaya, 2021; JOHN & RIKI, 2017; Kusmawati & Irwanda, 2023; William & Sanjaya, 2017). The concept of wealth addition allows company managers to combine current business expectations with future expectations. For investors, some of the interests that make *Wealth Added* a reference in the selection of investment objects are:

- *Wealth Added* value measures the effectiveness of management because the *Wealth Added* value shows the ability of management to generate greater value than the *Cost of Equity* (COE) that has been incurred.
- As an investor-related risk assessor, a low or negative *Wealth Added* value is an indication of the company's difficulties in creating wealth added value for investors.

In addition to internal factors, external factors of concern are how companies improve sustainability through the management of *Environmental, Social and Governance* (ESG) factors. A company's opportunity to improve business sustainability is measured through the ESG Risk Score, which is an average assessment of risk mitigation in the Environmental, Social, and Governance aspects (Adebayo & Ackers, 2024; Husted & de Sousa-Filho, 2019; Nguyen & Ngo, 2022).

The integration of ESG factors in investment decision-making can avoid risks that lower the company's performance. Several studies on the role of ESG risk disclosure on stock prices have resulted in a significant impact of ESG scores on company stock prices (Setyahuni and Handayani, 2020). Likewise, the results of research by Purnomo, Nuntupa, and Yuana (2024). The results of Hasanah, Adrianto, and Hamidi's research stated that the better the ESG implementation of a company, the smaller the fluctuation in its stock price.

The concept of *Environmental Social Governance* (ESG) is a framework for assessing corporate sustainability and social responsibility. The United Nations' Principles of Responsible Investment Principles Campaign in 2006 made ESG factors a global standard in assessing company performance, encouraging more responsible and sustainable business practices. The concept of ESG and the *circular economy* is seen as a pillar of business continuity.

Companies engaged in energy, materials, and utilities are classified as having high ESG risks due to their large exposure to the environment and society. This makes the researcher interested in seeing

how the investors of these companies make decisions—whether performance information using *Wealth Added* and the level of ESG risk affect the transaction of the bid request for stocks, which is reflected through changes in stock prices.

The dynamics of stock prices have long been a focal point for investors, with both internal and external factors playing critical roles in their fluctuations. Previous research has extensively explored the impact of financial performance metrics, such as *Economic Value Added* (EVA), on stock prices, highlighting their relevance in investment decision-making (Aspirandi, 2017). Similarly, studies on *Environmental, Social, and Governance* (ESG) risks have demonstrated their growing influence on corporate valuation and investor behavior, particularly in high-risk sectors like energy and utilities (Setyahuni & Handayani, 2020; Purnomo et al., 2024). However, while these studies provide valuable insights, they often treat financial performance and ESG factors in isolation, leaving a gap in understanding their combined effect on stock prices. This research seeks to bridge that gap by examining the interplay between *Wealth Added* (WA)—a performance metric emphasizing shareholder wealth creation—and ESG risk scores, offering a more holistic view of their impact on stock price movements.

Despite the increasing emphasis on sustainability and corporate performance, there remains a notable gap in empirical evidence linking WA and ESG risks to stock price dynamics. Existing literature has primarily focused on either financial metrics or ESG disclosures separately, with limited studies integrating both perspectives (Trisnowati et al., 2022; Zhafira & Astuti, 2024). Moreover, many of these studies rely on data from developed markets, leaving emerging markets like Indonesia underrepresented. This research addresses this gap by analyzing companies listed on the *Indonesia Stock Exchange*, providing context-specific insights that are critical for regional investors and policymakers. By doing so, it contributes to a more nuanced understanding of how WA and ESG risks collectively influence stock prices in emerging economies.

The urgency of this research stems from the growing importance of ESG factors in global investment strategies and the need for companies to balance financial performance with sustainability. As stakeholders increasingly prioritize responsible investing, understanding the relationship between WA, ESG risks, and stock prices becomes essential for both corporate managers and investors. Furthermore, the lack of consensus in prior findings—with some studies reporting significant ESG impacts (Hasanah et al., 2024) and others finding negligible effects (Trisnowati et al., 2022)—underscores the need for further investigation. This study's focus on high-risk sectors, where ESG factors are particularly salient, adds urgency to its findings, as these industries face mounting pressure to align profitability with sustainable practices.

This research introduces novelty by combining WA and ESG risk scores into a unified analytical framework, offering a fresh perspective on their collective influence on stock prices. Unlike previous studies that often treat these variables independently, this approach acknowledges their potential interdependencies, providing a more comprehensive assessment of investor decision-making. Additionally, the use of recent data (2024) from the *SWA100 Index* ensures the findings reflect current market conditions, enhancing their relevance. The study also employs *Multiple Linear Regression* and correlation analysis to quantify relationships, adding methodological rigor to the exploration of these dynamics. By addressing these aspects, the research advances the discourse on corporate performance measurement and sustainable investing.

The primary objective of this study is to determine whether *Wealth Added* and ESG risk scores significantly influence stock prices in Indonesia's energy, materials, and utility sectors. By achieving this, the research aims to provide actionable insights for investors, helping them refine their strategies by incorporating WA and ESG metrics. For corporate managers, the findings highlight the importance of transparent performance reporting and robust ESG risk management to attract investment. Academically, the study enriches the literature on emerging markets and offers a foundation for future

research on integrated performance-sustainability metrics. Ultimately, this research benefits stakeholders by fostering a deeper understanding of the factors driving stock prices in an era where financial performance and sustainability are increasingly intertwined.

MATERIALS AND METHODS

This study employs a quantitative research approach to examine the relationship between *Wealth Added* (WA), *Environmental, Social, and Governance* (ESG) risk scores, and stock prices. The research utilizes secondary data from public companies listed in the *SWA100 Wealth Added Index* (2024), focusing on firms in the energy, materials, and utility sectors due to their high ESG risk exposure. The population consists of all companies included in the *SWA100 Index*, while the sample is narrowed to 20 companies selected through purposive sampling based on two criteria: (1) operation in the specified high-risk sectors and (2) availability of ESG risk data from Morningstar Sustainalytics. This sampling technique ensures the sample represents the target population while maintaining data consistency for analysis.

The research instrument comprises three key datasets: (1) *Wealth Added* values from SWA magazine's 2024 publication, (2) ESG risk scores from Morningstar Sustainalytics, and (3) stock price indices calculated as the ratio of the stock price on June 1, 2025, to the average price from June 1, 2024, to June 1, 2025. Data validity is ensured by sourcing metrics from reputable providers (*SWA* and *Morningstar*), while reliability is confirmed through consistency checks and descriptive statistics. Data collection involves extracting these variables for the selected companies, followed by organizing them into a structured dataset. The procedure includes calculating the stock price index, standardizing variables, and preparing the data for regression analysis using statistical software.

Data analysis is conducted using IBM SPSS Statistics for multiple linear regression and Pearson correlation tests. The regression model assesses the individual and combined effects of WA (X1) and ESG risk scores (X2) on stock price indices (Y), with significance tested at $p < 0.05$. Correlation analysis evaluates the strength and direction of relationships between variables. Descriptive statistics summarize central tendencies and dispersion, while the coefficient of determination (R^2) measures the model's explanatory power. This methodological rigor ensures robust findings on whether WA and ESG risks significantly influence stock prices in Indonesia's high-risk sectors.

RESULTS AND DISCUSSION

Based on *Wealth Added* data, ESG risk and price index, the descriptive statistical condition of the variable data can be seen in table 1:

Table 1. Descriptive statistics of research variables

	N	Minimum	Maximum	Mean	Std.devation
Wealth Added	20	-80,39	492,70	19,83	127,75
ESG Risk	20	16,28	50,70	32,90	10,01
Price Index	20	0,73	2,73	1,20	0,48

Table 1 shows a wide range for the *Wealth Added* value of the sample company. This shows that some of the sample companies (60%) have negative wealth added conditions. The Mean value (+) of 19.83 indicates the high value of wealth added of companies that have a positive *Wealth Added* value. This condition shows that there is a *gap* between companies. Companies that are wealth creators have a very high amount of *Wealth added*. The ESG risk score of the sample company was at a mean of 32.90 which indicates the high level of ESG risk of the sample company. The higher the ESG Risk score, the worse the company faces the worse ESG risks. Table 3 also shows the Price Index which shows the tendency of stock price

changes at the average value of Mean = 1.20 which shows the tendency of the stock price to increase (the price index value is more than 1) in the observed company.

Model Analysis And Hypothesis Testing

Table 2. Multiple Linear Regression Test Results

VARIABEL	KOEFISIEN B	Standard Error	NILAI t count	Prob. Sign.
Constanta	1,234	0,398	3,096	0,007
Wealth Added	0,073	0,001	0,297	0,770
ESG risk	(-)0,025	0,012	-0,100	0,922

Table 2 shows the partial influence of each X variable on Y variable, namely:

- The Effect of Wealth Added (X1) on the company's stock price index (Y):
- The amount of Wealth Added with the price index has a positive relationship direction, although its influence is statistically insignificant (with prob. Significant > 0.05).
- The effect of ESG risk (X2) on the stock price index (Y)
- The ESG risk score on the company's stock price index has a negative relationship direction even though the effect is statistically insignificant (with prob. Significant > 0.05).

The co-influence of independent variables on dependent variables was tested by variance analysis (Table 3).

Table 3 Multiple Analysis for Multiple Linear Regression Models

Model	Sum of Square	Df	Mean Square	F count	Prob. Sign.
Regression	0,023	2	0,011		
Residual	4,266	17	0,251	0,045	0,956
Total	4,288	19			

Prob value. A significant 0.956 indicates that there is no significant influence of the interaction of Wealth Added and ESG risks on the observed changes in the stock price index of the company. Overall, the value of the determination coefficient (R²) is 11.2%, which means that to explain the change in stock prices, more variables are needed in addition to Wealth Added and ESG risks.

Correlation Test between Wealth Added, ESG Risk and Price Index

Table 4. Correlation Test Results Between Variables

	Wealth Added	ESQ Risk	Price Index
Wealth Added : Pearson Correlation	1	0,200	0,069
Prob. Sign		0,399	0,774
ESG Risk		1	
Pearson Correlation	0,200		-0,010
Prob. Sign	0,399		0,967
Price Index			1
Pearson Correlation	0,069	-0,010	
Prob. Sign	0,774	0,967	

The probability value of the relationship between the observed variables can be seen in table 6. The results of the test with Pearson correlation showed that there was no significant relationship between the three. Wealth Added has a relationship opportunity of 0.2 with ESG risk and 0.069 with the price index. Both are in a positive trend. The greater the value of the company's Wealth Added, the higher the price change/index. The ESG risk variable has a chance of correlation - 0,10 with the price index. The direction of the negative relationship indicates that if the ESG risk score is higher (meaning the risk is getting worse), it will be followed by a decline in the stock price.

DISCUSSION

In this study, the data used in the test could not prove the significant influence of Wealth Added on the Stock Price Index. This is in line with the results of research by Zhafira and Astuti (2024) who stated that there has been no significant influence of the company's capital intensity and capitalization on the company's value. Although not significant, the correlation calculation shows a positive indication that the increased value of Wealth Added will be followed by an increase in the share price. When a company experiences an increase in wealth, investors tend to be interested in buying so that the stock price increases.

In the ESG risk variable, the relationship between ESG Risk and the price index tends to be negative, the higher the level of ESG risk of the company, the stock price in the observation time range tends to fall. This condition of influence and insignificant relationship shows that the majority of investors have not used the company's Wealth Added and ESG Risk information as a decision-making tool for stocks. The results of this study are in line with the results of Trisnowati, Achسانی, Sembel and Andati (2022) research, namely that investors do not use ESG Risk disclosure as a basis for investment decision-making.

CONCLUSION

This study concludes that neither *Wealth Added* (WA) nor *Environmental, Social, and Governance* (ESG) risk scores exhibit a statistically significant influence on stock prices among Indonesian companies in the energy, materials, and utility sectors, despite showing directional trends—positive for WA and negative for ESG risks. These findings suggest that investors in these high-risk industries may not yet fully integrate WA and ESG metrics into their decision-making frameworks, aligning with prior research indicating limited market responsiveness to such disclosures. However, the observed trends highlight the potential for these factors to gain relevance as sustainability and long-term value creation become increasingly prioritized in investment strategies. For future research, expanding the sample size to include companies from additional sectors and longer timeframes could enhance the generalizability of findings. Investigating moderating variables, such as industry-specific regulations or macroeconomic conditions, may also provide deeper insights into the contextual factors influencing these relationships. Additionally, qualitative approaches, such as investor surveys, could help uncover behavioral reasons behind the limited adoption of WA and ESG metrics in stock valuation. Finally, comparative studies across emerging markets would strengthen understanding of how cultural and institutional differences shape the impact of sustainability and performance metrics on financial outcomes.

REFERENCES

- Adebayo, A., & Ackers, B. (2024). Managing trade-offs between environmental, social, governance and financial sustainability in state-owned enterprises: Insights from an emerging market. *Australian Accounting Review*, 34(1). <https://doi.org/10.1111/auar.12415>
-

- Aspirandi, R. M. (2017). Ketika kompensasi manajemen berperan dalam meningkatkan nilai perusahaan dengan kinerja keuangan sebagai pemediasi. *Jurnal Ilmiah Akuntansi Indonesia*, 2(2), 39–56.
- Ayu, P. (2022). *Faktor-faktor yang mempengaruhi competitive advantage perusahaan yang terdaftar di Bursa Efek Indonesia* (Skripsi).
- Hasanah, N., Adrianto, N. F., & Hamidi, M. (2024). Pengaruh kinerja ESG dan volatilitas laba terhadap volatilitas harga saham syariah dengan effective tax rate sebagai variabel moderasi: Studi empiris perusahaan yang terdaftar di Jakarta Islamic Index 70 periode tahun 2018–2023. *Ranah Research: Journal of Multidisciplinary Resources and Development*, 6(6), 2942–2956. <https://doi.org/10.38035/rrj.v6i6.1191>
- Henryanto Wijaya, C. K. O. (2021). Faktor-faktor yang mempengaruhi nilai perusahaan yang terdaftar di Bursa Efek Indonesia. *Jurnal Paradigma Akuntansi*, 3(2). <https://doi.org/10.24912/jpa.v3i2.11718>
- Husted, B. W., & de Sousa-Filho, J. M. (2019). Board structure and environmental, social, and governance disclosure in Latin America. *Journal of Business Research*, 102, 220–227. <https://doi.org/10.1016/j.jbusres.2018.01.017>
- John, W., & Riki, S. (2017). Faktor-faktor yang mempengaruhi kinerja perusahaan pada perusahaan yang terdaftar di Bursa Efek Indonesia. *Jurnal Bisnis dan Akuntansi*, 19(1a).
- Kusmawati, K., & Irwanda, Y. (2023). Faktor-faktor yang mempengaruhi wealth added perusahaan yang terdaftar di Bursa Efek Indonesia. *Jurnal Media Akuntansi (Mediasi)*, 5(2). <https://doi.org/10.31851/jmediasi.v5i2.11352>
- Nguyen, T. D., & Ngo, T. Q. (2022). The role of technological advancement, supply chain, environmental, social, and governance responsibilities on the sustainable development goals of SMEs in Vietnam. *Economic Research-Ekonomska Istraživanja*, 35(1). <https://doi.org/10.1080/1331677X.2021.2015611>
- Purnomo, M. H., Nuntupa, N., & Yuana, A. G. (2024). Pengaruh ESG score terhadap harga saham dimoderasi oleh earning per share. *Jurnal Ekonomi Manajemen dan Akuntansi*, 10(3), 1923–1935. <https://doi.org/10.35870/jemsi.v10i3.2442>
- Setyahuni, W. H., & Handayani, R. R. S. (2020). On the value relevance of information on environmental, social and governance (ESG): An evidence from Indonesia. *Journal of Critical Reviews*, 7(12), 50–58.
- Sukartaatmadja, I., Soei, K., & Lestari, M. N. (2023). Faktor yang mempengaruhi harga saham perusahaan: Studi kasus pada sub sektor perkebunan yang terdaftar di BEI periode 2016–2019. *Jurnal Ilmiah Manajemen Kesatuan*, 11(1), 21–40. <https://doi.org/10.37641/jimkes.v11i1.1627>
- SWA. (2024). *Majalah SWA edisi 13/2024*. <https://swa.co.id/magazine/14/majalah-swa-edisi-132024>
- Trisnowati, Y., Achsani, N. A., Sembel, R., & Andati, T. (2022). Pengaruh skor ESG, kinerja keuangan dan makroekonomi terhadap return saham pada masa pandemi di Indonesia. *Jurnal Internasional Ekonomi dan Kebijakan Energi*, 12(4), 166–172. <https://doi.org/10.32479/ijeep.13212>
- William, J., & Sanjaya, R. (2017). Faktor-faktor yang mempengaruhi kinerja perusahaan pada perusahaan yang terdaftar di Bursa Efek Indonesia. *Jurnal Bisnis dan Akuntansi*, 19(1a).
-

Zhafira, A., & Astuti, C. D. (2024). Pengaruh pengungkapan tanggung jawab sosial lingkungan, pertumbuhan penjualan dan intensitas modal terhadap nilai perusahaan. *Jurnal Kajian Ekonomi & Bisnis Islam*, 5(4), 3059–3074. <https://doi.org/10.47467/elmal.v5i4.1847>



© 2021 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY SA) license (<https://creativecommons.org/licenses/by-sa/4.0/>).
