



The Effect of Green Investment, Return On Asset (And Economic Value Added On Company Value in Mining Sector Companies Listed On The Indonesia Stock Exchange In 2019-2023

BY

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Abstract

Indonesia's rich mining resources support a large number of mining firms, but the non-renewable nature of these resources exposes them to higher risks. This study examines the (EVA), (ROA), and green investment have partial and simultaneous influences on firm value in mining companies on the Indonesia Stock Exchange from 2017 to 2022. Using a quantitative explanatory survey method and panel data regression, nine companies were selected through purposive sampling. The findings reveal that green investment doesn't significantly affect firm value, while ROA and EVA possess favorable and significant effects. Collectively, all three variables significantly influence firm value

Keywords: Green Investment, ROA, EVA, Firm Value, Mining Sector.

Introduction

Indonesia is known as a country rich in natural resources, including the mining sector. The wealth in the form of natural gas, mining products, and oil reserves are the main attractions for domestic and international investors. With a contribution of \$13.8 million to the Gross Domestic Product (GDP) growth of 7.2%, the mining sector is one of the main drivers of increasing market capitalization in Indonesia. This contribution is even recorded as the highest compared to other sectors in the Southeast Asia region. (Elisabeth Putri Lahitani Tampubolon, 2021)

To determine a reliable, effective, and efficient investment strategy, a manager needs to have a deep understanding aims of the business, so that he can carry out his responsibilities optimally. Determining The worth of the business is a crucial

way to gain the trust of investors and creditors. The business's

value reflects The business's success and is an indicator of the extent to which the public has placed trust since the company was founded until now (Ferjiana & Natalylova, 2023). The mining industry it self is considered to carry more risk relative to other sectors, because availability of its resources continues to decline. This is due to the nature of the resources in this sector which cannot be renewed.

Financial success is frequently linked to a company's worth among the elements that influence it. Shares of a business will be purchased by investors if its financial operations show a profitable trend, which will ultimately affect the value of the shares. One method for evaluating business productivity is to conduct a financial performance analysis, which includes financial ratio analysis. (Pujarini, 2020)

Meanwhile, according to Cakranegara (2021), ESG considerations are crucial for bolstering the company's long-term viability and performance, which impacts its expansion. Value drivers are present in every firm, and if environmental conditions alter, will cause disruption, which means the business will fail. Green investment is another term for green investment or sustainable investment. Green investment aims to provide economic stability and ecosystem health by prioritizing social, environmental, and governance factors. (Syabilla et al., 2021).

Mining activities have a strong relationship with the environment, so monitoring these activities is very important to prevent negative impacts on the availability of mining resources. Given that mining products are used in various industrial sectors and can even act as high-value assets such as national currency, mining commodities are one of the main assets that make a significant contribution to the Indonesian economy.

One form of policy implemented by the Indonesian government is related to efforts to preserve the ecosystem. (Ekawati, 2015). The Ministry of Natural Systems (KLH) has a PROPER Rating program that measures the performance of a company's work. PROPER is a Public Information Disclosure Program on Environmental Compliance which is implemented by utilizing the ability of the community and market to provide information to business actors or industries so that they can improve their performance in assessing the environment analyzed during their business operations. The community and market are served by collecting accurate information, which results in a positive reputation. Information on company performance is provided by providing a rating.

PROPER is one of the initiatives of the Ministry of Environment which aims to assist the business world in conducting environmental assessments through the use of information instruments. The target participants of PROPER are companies that possess a substantial impact Upon the environment, are listed o Upon the stock market, sell their goods abroad, or have goods that are used by the wider community. In accordance with

statutory provisions, PROPER is one of the government initiatives designed to increase efficiency in environmental management by business actors. This program also functions as a means to encourage public involvement and transparency in environmental conservation efforts in Indonesia. Through this instrumentThe Environment Ministry is dedicated to putting the principles of goodgovernance—including transparency, fairness, aAccountability, community involvement—in the practice of managing natural factors. (Novia & Candy, 2023).

Based on the background explanation above, This study seeks to analyze and assess the influence of financial performance and green investment on the valuation of mining companies listed on the Indonesia Stock Exchange during the period from 2019 to 2023

Theoretical Studies

Investment Theory

Based on Article 1 paragraph (1) of Law Number 25 of 2007, investment is defined as an investment activity carried out to run a business in the territory of Indonesia, both by domestic and foreign investors.

According to Jayadi et al., investment is an item purchased by a person or a business entity to increase its capital sales turnover. There are two reasons why someone makes an investment, namely: Real assets refer to the type of investment made in tangible objects, such as property, buildings, or works of art. Meanwhile, financial assets include investments in the financial sector, such as deposits, stocks, bonds, and mutual funds. Referring to various expert opinions, it can be concluded that investment today is a form of financial commitment that aims to obtain profits within a certain period of time, through the purchase of real or financial assets by a business entity in order to increase its income or business capital. (Vicky, 2022)

Green Investment Theory

Green investment, also known as sustainable finance, is a form of innovation in the banking industry that concentrates on environmental conservation efforts. The main goal is to lessen air pollution brought on by greenhouse gas emissions and business activities. This investment focuses on companies that integrate environmentally friendly principles into their operations, where environmental aspects are one of the main considerations in the investment decision-making process. (Larasati, 2023)

Measurement of ESG investment is carried out with This study uses the PROPER rating indicator, which is a form of award given by the Ministry of Environment (KLH) as an instrument for assessing company performance in environmental management. which is given to companies that show a high commitment to environmental management. According to the tenets of green investment, assessment in PROPER includes two main categories. First, the criteria for compliance with regulations, such as the fulfillment of aspects assessed include environmental documents and their reporting, control of water and air pollution, management of Hazardous and Toxic Materials (B3) waste, control of marine pollution, and efforts to prevent forest damage. In addition, there are also beyond compliance criteria, namely assessments that are adaptive and constantly evolving along with technological advances and the implementation of best practices in environmental management. The measurement process is carried out by providing an assessment based on predetermined criteria, which represent the degree of compliance and performance of the business in environmental management as a whole. score 1 to 5 for each PROPER award rating according to the color obtained by the company with the following description:

Return On Asset Theory

ROA, according to Hery, is a metric that expresses how much a bussiness assets contribute to making money. A higher ROA value indicates a higher net profit made on each unit of capital invested in assets. On the other hand, a decline in ROA suggests that assets' capacity to produce net profit has also

diminished. (Larasati, 2023This study measures ROA using the Horne and Wachowicz algorithm.

$$ROA = EAT : \text{Total aktiva}$$

An indicator of a company's capacity to turn a profit through the utilization of its assets is return on assets (ROA). The degree of value for shareholders is reflected in this indicator. The higher the ROA number, the more efficiently the business uses its assets to maximize profits.

Economy Value Added Theory

Sri, *“The concept of EVA is based upon the theory of economic profit and calls for the organisations to have strong economic wealth in order to have strong and sustained growth”*. Horne and Wachowicz, *“Economic Value Added (EVA) is the another way of expressing the fact that to create value a company must earn returns on invested capital greater than its cost of capital. Basically, EVA is the economic profit a company earns after all capital costs are deducted”*.

$$EVA = NOPAT - \text{CAPITAL CHARGE}$$

$$EVA = (RONA - WACC) \times$$

$$\text{Invested Capital } EVA = NOPAT - (WACC \times \text{INVESTED CAPITAL})$$

A technique called EVA demonstrates that a business must produce A return on invested capital that exceeds the incurred cost of capital. Essentially, Economic Value Added (EVA) represents the difference between net operating profit after taxes and the opportunity cost of capital, or in other words, the economic profit obtained after deducting the cost of capital. (Yanti, 2020).

Theory of corporate

Corporate value refers to the process a business goes through to get feedback from the public about its business. Stock prices and corporate value are frequently linked, and this can be verified by tracking changes in stock prices on stock market Corporate value is a

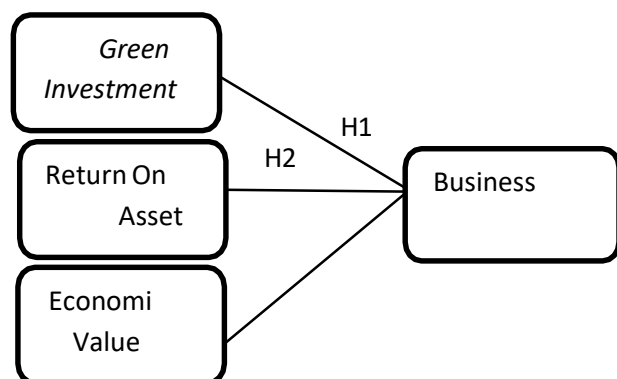
company's sales figure that illustrates the success of the business's management determining business's daily resources, which is related to increasing stock prices.

A financial measure called PBV Highlights the difference between a stock's market price and its book value per share . This ratio is used to determine if the market has overvalued (too high) or undervalued (too low) a company's stock price. The following formula is used to determine the PBV value:

Harga saham ; Nilai Buku Saham x 100%

A company's value reflects both its performance and how it is perceived by the market; the higher the company's value, the more favorable or optimistic investors' sentiment tends to be. The company's worth may not reflect its full potential, on the other hand, if it is unable to send a good signal to the market. Therefore, in order to raise the company's worth, management must efficiently manage and use all of its resources. (Ningrum, 2022)

Framework of thinking



Research Metoded

Teks for Panel Data Regression

The quantitative methodology used in this study aims to explaining a phenomenon through the examination of the relationship between variables, using inferential statistical techniques. This research's primary goal is to examine the

relationship between causation and influence between the indepe\$nde\$nt and depe\$nde\$nt facts. All 58 mining companies that we've listed on the \$Indone\$sia Sto\$k Exchange\$ (IDX) between 2019 and 2023 are included in the study's sample. We selected five businesses that met the requirements as research samples based on the pre\$se\$t se\$le\$ctio\$n criteria. All information was obtained on the official IDX website, www.idx.co.id.

The hypothesis of this study is :

- H1 : Ho : For the 2019–2023 timeframe, there is no discernible relationship between green investment and the firm value of mining businesses traded on the Indonesia Stock Exchange
- Ha : Nonetheless, for mining companies listed on the Indonesia Stock Exchange between 2019 and 2023, green investment significantly influences corporate value
- H2 : Ho : During the 2019–2023 period, return on assets (ROA) did not exhibit a significant effect on the value of mining companies listed on the Indonesia Stock Exchange.
- Ha : However, for the 2019–2023 period, Return on Assets (ROA) has a significant impact on the value of mining companies listed on the Indonesia Stock Exchange
- H3 : Ho : For mining companies listed on the Indonesia Stock Exchange between 2019 and 2023, Economic Value Added (EVA) did not show a significant effect on corporate valuation.
- Ha : However, for mining companies listed on the Indonesia Stock Exchange between 2019 and 2023, Economic Value Added (EVA) has a significant impact on corporate valuation.
- H4 : Ho : Currently, for mining companies listed on the Indonesia Stock Exchange between 2019 and 2023, the company's value is not significantly affected by green investment, Return on Assets (ROA), or Economic Value Added (EVA)
- Ha : However, for mining companies listed on the Indonesia Stock Exchange, Economic Value Added (EVA), Return on Assets (ROA), and green investment all simultaneously have a significant impact on the company's value.

Result and Discussion

Panel data regression Teks

The panel data regression model can be constructed as follows, using the random effects output as a reference

Table 1 Panel Data Test

Dependent Variable: NP

Method: Panel Least Squares

Number of periods included: 5

Number of cross-sections included: 5

Total panel (balanced) observations: 24

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.032102	3.324575	3.104300	0.0031
GI	0.029162	0.088530	0.329407	0.7432
ROA	0.048846	0.014024	3.482937	0.0010
EVA	2.35E-13	1.07E-13	-2.201805	0.0323

$$Y = 1,0321 + 0.029162X_1 + 0.048846X_2 + 2.35E-13X_3$$

Based on the panel data regression equation that has been formulated, the following interpretations can be made

1. The resulting constant value, 1.032102, shows that if the variables EVA, ROA, and Green Investment are considered to be If zero, then the company value is estimated to be at 1.032102. This means that in the absence of influence from the three independent variables, the company value still has a basic estimate of the constant value
2. The Green Investment regression coefficient of 0.029162 indicates that for every one-unit increase in the Green Investment variable, the company's value is expected to rise by 0.029162, assuming all other independent variables in the model remain constant. Conversely, a one-unit decrease in Green Investment will lead to a decrease in the company's value by 0.029162

3. Assuming all other independent variables remain constant, the regression coefficient of Return on Assets (ROA) of 0.048846 indicates that for every one-unit increase in ROA, the company's value will increase by 0.048846. Conversely, a one-unit decrease in ROA will lead to a corresponding decrease of 0.048846 in the company's value
4. ROA has a regression coefficient of 0.048846, meaning that, assuming all other independent variables remain constant, each one-unit increase in ROA will lead to a 0.048846 increase in the company's value. On the other hand, if ROA decreases by one unit, the company's value will decrease by 0.048846

T- Test Parcial

1. To determine if each If an independent variable has a significant impact on the dependent variable, the t-test is applied The significance level for the test is set at 0.05. The table that follows displays the t-test findings.
2. The Green Investment variable has a probability value (p-value) of 0.7432 and a t-statistic value of 0.329407. The (PBV) variable is not significantly impacted by Green Investment, Since the probability value is greater than the significance level of 0.05
3. The probability value (p-value) for the (ROA) variable is 0.0010, and the t-statistic value is 3.482937. It can be inferred that ROA significantly influences PBVBecause this number is lower than the significance level of 0.05.
4. The probability value (p-value) for the (EVA) variable is 0.0323 and a t-statistic value of -2.201805. Given that the aforementioned value is below the significance level of 0.05, it can be concluded that the EVA variable significantly affects PBV.

T- Test (Simultaneous)

To determine if every independent variable has an impact on the dependent variable at the same time, the F test is utilized. By contrasting the comput

ed F value derived from the ANOVA output with the F table value, the test is conducted using the F distribution. The following table displays the findings of this F test.

The panel data regression analysis's F test findings indicate a probability value of 0.010167. (PBV) is significantly impacted by the independent variables Green Investment (GI), (ROA), and (EVA) All at once, because this value is less than the significance level of 0.05 ($0.010167 < 0.05$).

Determination Coefficient Test (R-square)

The ability of each independent variable (X) to explain the variation in the dependent variable (Y) is referred to as the coefficient of determination. Simply put, the correlation value (r) is squared to calculate this coefficient of determination

Given that the Adjusted R-squared value is 0.340, it can be concluded that (GI), (ROA), (EVA) collectively account for 34% of the impact on (PBV), considering the influence of independent variables on the dependent variable. Other factors not covered by this research framework, however, account for the remaining 66%.

CONVERSATION

The Impact of Green Investment on Corporate Value

The Green Investment The variable has a positive coefficient of 0.0291 with a probability level of 0.7432, according to the analysis's findings. Given that this probability value above the 5% significance level ($0.7432 > 0.05$), it can be said that, from 2019 to 2023, Green Investment has no discernible impact On the value of mining companies listed on the Indonesia Stock Exchange. Consequently, study's first hypothesis remains unproven Green investment is evaluated using the Ministry of Environment's PROPER grade, which is given to businesses who demonstrate their dedication to environmental management by allocating capital for eco-friendly projects. On a scale of 1 to 5, this rating is translated into a numerical score, with 1 denoting a Black rating, 2 a Red rating, 3 a Blue rating, 4 a Green rating, and 5 a Gold rating.

The Influence of ROA on Company Value

A financial metric called (ROA) is used to evaluate how well a business uses its assets to produce net profit. The percentage of profit earned from the entire investment in the company's assets is displayed by this ratio. The ability of the business to effectively manage assets in order to produce profits is reflected in a high ROA value. On the other hand, a low ROA indicates that the company is not effectively utilizing its assets to generate profits.

According to the study's results, Return on Assets (ROA) has a significant and positive impact on a company's value. This indicates that raising ROA directly raises the value of the company. A high ROA increases a company's appeal to investors by demonstrating strong financial performance through its capacity to turn a profit. Stock prices typically rise in response to investor interest, which eventually raises the company's total worth.

The Influence of Economic Value Added on Company Value

(EVA) variable has a positive coefficient of 2.3467 and a probability value of 0.0323, according to the test results. Given that the probability value is less than the 5% significance level ($0.0323 < 0.05$), it can be concluded that EVA has a significant and favorable effect on the value of mining companies listed on the Indonesia Stock Exchange between 2019 and 2023. Therefore, the study's third hypothesis is considered to be valid."

Economic Value Added (EVA) is a metric used to assess financial performance that gauges a company's capacity to make more money than it spends on capital. EVA serves as a gauge of a business's added value; a positive value shows that the business has been successful in adding value, whereas a negative value shows that the cost of capital exceeds operating profit after taxes, indicating that the business's financial performance has fallen short of expectations.

The Impact of Green Investment, Return on Assets, and Economic Value Added on Corporate Value

According to the study's findings, the variables ROA, EVA, and green investment all concurrently have a favorable impact on a company's value. With a probability of 0.01016 and an F-statistic value of 4.1844, the panel data regression analysis's F test findings fall below the 5% significance level ($0.01016 < 0.05$). This demonstrates that, taken together, The three factors significantly increase the value of mining companies listed on the Indonesia Stock Exchange between 2019 and 2024."

Consequently, it can be said that the fourth theory is accurate. The results of the study show that a company's worth is affected by both its environmental and financial performance at the same time. This is due to the fact that the company's worth is a reflection of how successfully it has handled its financial and environmental issues. The rise in the company's value shows that investors and

prospective investors may trust that the company runs responsibly and efficiently.

Final Results

According to the research findings and pre-sentend discussions, it can be concluded that, for the 2019–2023 period, green investment has a negligible effect on the PBV of mining companies listed on the Indonesia Stock Exchange (IDX). ROA has a significant impact on PBV in mining companies on the IDX throughout the 2019–2023 period. EVA also has a substantial impact on PBV in mining businesses on the IDX for the 2019–2023 timeframe. Additionally, throughout the 2019–2023 timeframe, the variables Green Investment, ROA, and EVA have a substantial impact on PBV in mining companies listed on the IDX.

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