# THE INFLUENCE OF PROFITABILITY, LIQUIDITY, AND LEVERAGE ON THE FIRM VALUE OF MANUFACTURING COMPANIES IN THE COAL MINING SUBSECTOR LISTED ON THE INDONESIA STOCK EXCHANGE (IDX) DURING THE 2021–2024 PERIOD

Journal of Strategic Behavior — Accounting —

**Authors**
*Intan Nur'aini[1], Anzani Mutiara Puwitasari[2], Aisyah Diah Hapsari[3]*
**Affiliations**
*[1]Bachelor of Accounting Study Program, Faculty of PSDKU, Universitas Negeri Surabaya, Indonesia*
**Corresponding Author Email**
intanurain000@gmail.com
anzanimutiara8@gmail.com
aisyah.diah255@gmail.com

**Abstract**

*This study aims to examine the effect of profitability, liquidity, and leverage on firm value in coal mining manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the period 2021–2024. Profitability is measured using Return on Equity (ROE), liquidity is measured using the Current Ratio (CR), leverage is measured using the Debt to Equity Ratio (DER), and firm value is measured using Price to Book Value (PBV). This study uses a quantitative method with an inferential statistical approach. The study population consists of 22 coal mining companies listed on the IDX between 2021 and 2024, of which 6 companies were selected by purposive sampling based on specific research criteria.Using multiple linear regression analysis with SPSS 25, the results show that liquidity has a positive and significant effect on firm value (coefficient = 0.126; p = 0.016). Profitability shows a positive but not statistically significant effect (coefficient = 0.968; p = 0.051), and leverage has a positive but not significant effect (coefficient = 0.012; p = 0.755). Collectively, these variables significantly affect firm value (F = 4.853, p = 0.011), explaining 42.1% of its variability. This study uses secondary data obtained from audited annual financial reports and published on the official website of the Indonesia Stock Exchange (IDX). Data analysis techniques include descriptive statistical analysis, classical assumption tests (normality, multicollinearity, autocorrelation, and heteroscedasticity), and hypothesis testing through multiple linear regression analysis using t-tests and F-tests with SPSS version 25. The findings of this study are expected to provide insight into the financial factors that influence company value in the Indonesian coal mining subsector.*

**Keywords:** *Profitability, Liquidity, Leverage, Company Value, Coal Mining, Indonesia Stock Exchange.*

## 1. Introduction

### Reasons for Choosing an Idea

*The coal mining sector remains a vital pillar of the Indonesian economy due to its contribution to state revenues, exports, investment, and domestic energy supply. However, the intensifying global transition to clean energy and international policies emphasizing sustainability,especially within the framework of SDG Goal 7 (Affordable and Clean Energy) and Goal 13 (Climate Action), This puts increasing pressure on the industry. This situation requires companies to maintain financial performance while preserving corporate value amidst demands for*

*efficiency and sustainability. In financial studies, firm value is a crucial indicator reflecting market perception of a company's long-term prospects. Firm value can be influenced by profitability, liquidity, and leverage, which reflect a company's ability to generate profits, meet short-term obligations, and manage its capital structure, respectively. These three variables are highly relevant for analysis, particularly in the coal industry, which is subject to high volatility due to commodity price fluctuations.*

## Research Gap

*Previous research on the relationship between profitability, liquidity, leverage, and firm value has yielded mixed results and largely focused on the coal subsector. Furthermore, studies using post-pandemic data (2021-2024), a period when significant changes occurred in the global energy market, are limited. Most studies only analyze the pre-pandemic period or the period ending in 2022-2023, thus not reflecting current industry conditions. Available research also suffers from limitations in terms of variable coverage, as many examine only one or two indicators without considering simultaneous effects, and methodological limitations, as some only use descriptive analysis. This suggests the need for more comprehensive studies using inferential methods such as multiple linear regression, t-tests, and F-tests to produce stronger and more generalizable findings. The conflicting results, particularly for Leverage and Liquidity, suggest that the relationship between variables is highly dependent on time and sector context.*

*This study aims to address the following gaps in previous research:*

*a) Subsector Focus: While previous research has generally focused on the mining sector as a whole, this study specifically examines the Indonesian coal mining subsector, which faces particular pressures from the global energy transition (SDGs 7 & 13) and stringent domestic regulations.*

*b) Post-Pandemic Period: This study covers the period 2021-2024, a period marked by economic recovery, significant increases in commodity (coal) prices, and increased attention to ESG (Environmental, Social, and Governance) that has changed the way the market views traditional financial ratios.*

*c) Context Integration: This study analyzes how traditional financial indicators (ROE, CR, DER) transform into Enterprise Value (PBV) in a sector undergoing structural change, and provides new empirical evidence related to the Indonesian capital market context.*

## Research Contributions

*This study aims to fill this gap by analyzing the influence of profitability, liquidity, and leverage on company value in the coal mining subsector listed on the Indonesia Stock Exchange (IDX), using the latest data for the 2021 period.-2024. This research provides relevant empirical contributions, both academically, by enriching the literature on financial performance in high-risk sectors, and practically, as a reference for investors, management, and policymakers in understanding the factors that influence company value in the Indonesian coal industry.*

## Problem Statement

1) *How does profitability affect firm value in the coal mining sector in Indonesia?*
2) *How does liquidity affect firm value in the coal mining sector in Indonesia?*
3) *How does leverage affect firm value in the coal mining sector in Indonesia?*
4) *To what extent do profitability, liquidity, and leverage simultaneously influence firm value in the coal mining sector?*
5) *Why does the coal mining sector play a strategic role in enhancing state revenue and attracting investor interest in the Indonesian capital market?*

### Research Objectives

1) *To determine the effect of profitability on firm value in coal mining companies listed on the Indonesia Stock Exchange during the research period.*
2) *To determine the effect of liquidity on firm value in coal mining companies listed on the Indonesia Stock Exchange during the research period.*
3) *To determine the effect of leverage on firm value in coal mining companies listed on the Indonesia Stock Exchange during the research period.*
4) *To analyze the simultaneous influence of profitability, liquidity, and leverage on firm value in coal mining companies listed on the Indonesia Stock Exchange.*
5) *To understand the strategic role of the coal mining sector in increasing state revenue and attracting investor interest in the Indonesian capital market.*

## 2. *Literature Review and Hypotheses Development*

### Theoretical Framework

*Company value indicates how well management safe guards shareholder wealth, as measured by the capital market's perception of the company's prospects. Three key financial indicators conceptually influence company value (proxied by Price to Book Value/PBV). Profitability indicates how well a company can generate returns on invested capital, liquidity indicates how well a company can meet its short-term obligations, and leverage indicates how much debt a company uses relative to its invested capital. The combination of these three factors provides a comprehensive picture of a company's risk strategy and financial health.*

*Three main theories are used in this study to build a framework for thinking:*

*1. Signaling Theory: According to Spence (1973) if a company shows results finances that well, that's it will to inform investors that the company is well managed and have the opportunity to grow in the future. In this study, it is expected that advantages and capabilities of companies to manage money well will have an impact positive for company value in the capital market.*

*2. Liquidity Theory: This theory says that the company which has liquidity ratio good is at deep better position formaintain continuity operational and make investors believe. Ability for paying short-term debt is a sign of stability appreciated by the market.*

*3. Trade-Off Theory: This theory shows that there is a level use of debt which can increase company value by getting tax benefits (Modigliani & Miller, 1963). However, If a company owes too much, that matter can increase financial risks, and can reduce investor confidence and company values. So, companies need to find balance between profit and risk swho came from debt.*

### *Review of Previous Empirical Research*

*Previous research on firm value has typically focused on the manufacturing sector in general. However, specific research on the coal mining subsector remains limited, particularly following the pandemic, which was marked by sharp commodity price fluctuations (2021-2024).*

*The following is a summary of the results of previous studies testing the same variables, showing conflicting results:*

***Profitability (ROE)** to firm value: This relationship is mostly consistent.*

*Several studies (Agustin et al., 2025) found a positive and significant effect, consistent with signaling theory. High profits are considered a sign of efficient management and a bright future for the company. However, inconsistent results are also available, such as in a study of the mining subsector (Rajaguguk & Sudjiman, 2022), which*

*showed no significant effect on firm value, suggesting that investors are more concerned with profit balance amidst the changing structure of the energy sector.*

***Liquidity (CR)** on company value: Research results on liquidity look different.*

*Some studies (Sidabutar, 2024) found no significant effect, with investors prioritizing long-term returns. However, other research specifically focused on the commodity sector (Agustin et al., 2025) showed a positive and significant effect, which aligns with liquidity theory, as it ensures companies can operate without short-term financial constraints.*

***Leverage (DER)** to company value: Results regarding debt are also mixed.*

*Significant positive effect: Several studies (Agustin, et al., 2025) support the trade-off theory, where the optimal debt level increases firm value due to tax shield benefits.*

*Negative/insignificant effect: On the other hand, other research (Rajaguguk & Sudjiman, 2022) found no significant effect, indicating that the market may perceive the additional risk of debt (financial distress costs) as greater than the tax savings benefits.*

### *Research gap & novelty*

*Conflicting findings, particularly regarding leverage and liquidity,indicate that the relationships among these variables are highly dependent on sectoral and temporal contexts. This study aims to fill the gaps in previous research as follows:*

*a) Subsector Focus:*

*Previous studies generally focused on the mining sector as a whole, whereas this research specifically examines the Indonesian coal mining subsector, which faces unique pressures stemming from the global energy transition (SDG 7 & 13) and stringent domestic regulations.*

*b) Post-Pandemic Period:*

*This study covers the 2021–2024 period, a time marked by economic recovery, extreme increases in commodity (coal) prices, and heightened attention to ESG (Environmental, Social, and Governance) considerations, which have reshaped how the market evaluates traditional financial ratios.*

*c) Contextual Integration:*

*This study analyzes how traditional financial indicators (ROE, CR, DER) translate into firm value (PBV) within a sector undergoing structural transformation, providing new empirical evidence within the context of the Indonesian capital market.*

### *Hypothesis Development*

*Based on the theoretical framework, empirical review, and conceptual model, the following hypotheses are proposed:*

#### *Profitability (ROE) and Firm Value (H1)*

*Profitability (ROE) shows the company's ability to generate profits from the capital owned by shareholders.In general, high profitability can convey a positive signal that increases company value (Alamsyah, 2024). However, in the energy sector, which faces transition risks, high profitability influenced by external factors such as commodity price fluctuations is often perceived as unsustainable. This perception weakens the long-term impact of profitability on price-to-book value (PBV).*

*H1: Profitability (ROE) has a significant positive influence on Company Value (PBV).*

#### *Liquidity (Current Ratio) and Firm Value (H2)*

*Liquidity (CR) indicates a company's capacity to meet its short-term obligations. In volatile industries, strong liquidity provides a signal of operational resilience and the firm's ability to withstand market fluctuations* (Silviani, 2024). *In the coal subsector, investors highly value robust cash reserves. Sector-specific data show that liquidity has become a key determinant of firm value in coal-producing companies after 2020* (Kusuma, 2024)

*H2: Liquidity (CR) has a significant positive effect on Firm Value (PBV).*

***Leverage (Debt to Equity Ratio/DER) and Firm Value***

*Leverage (DER) evaluates the proportion of debt relative to equity. According to the Trade-Off Theory, the impact of leverage can be viewed from two perspectives. Optimal debt levels may increase firm value up to a certain point, but excessive leverage can reduce value due to heightened financial distress risks. In the coal industry, high risk levels amplify investor concerns regarding substantial debt* (Syah, 2024). *Consequently, excessive leverage in such a high-risk sector is typically perceived negatively by the market.*

*H3: Leverage (DER) has a significant negative effect on Firm Value (PBV).*

***Simultaneous Effects of ROE, CR, and DER on Firm Value***

*A company's value is not determined by a single financial indicator, but depends on a combination of various factors that management conveys to the market. Profitability, liquidity, and leverage are three important elements that collectively reflect a company's financial condition and potential. According to Signaling Theory, the market evaluates a company based on complete financial information. These three ratios, profitability as a performance indicator, liquidity as a risk protection indicator, and leverage as a capital structure indicator, if optimal and mutually supportive, convey a stronger and more convincing message to investors, thus collectively increasing the company's value (Alamsyah, 2024). While individual results may vary, overall, these ratios provide a comprehensive picture of the company's condition, allowing for simultaneous hypothesis formulation.*

*H4: Profitability (ROE), Liquidity (CR), and Leverage (DER) simultaneously have a significant effect on Firm Value (PBV).*

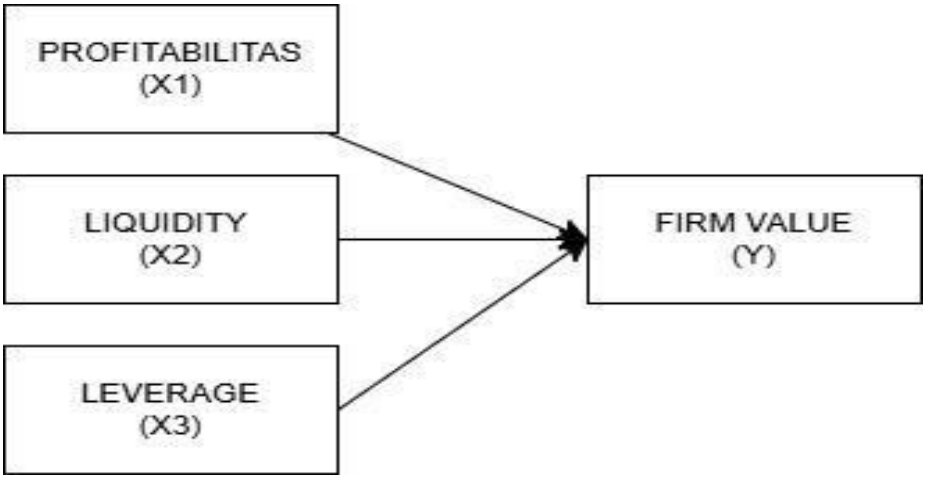



***Figure 2.1 Research Model***

*Independent Variable:*

1) *Profitability (X1)*
2) *Liquidity (X2)*
3) *Leveage (X3)*

*Dependent Variable:*

1) *Firm Value (Y)*

*The hypotheses of this study are:*

*H1: Profitability (ROE) has a significant positive influence on Company Value (PBV).*
*H2: Liquidity (CR) has a significant positive effect on Firm Value (PBV).*
*H3: Leverage (DER) has a significant negative effect on Firm Value (PBV).*
*H4: Profitability (ROE), Liquidity (CR), and Leverage (DER) simultaneously have a significant effect on Firm Value (PBV).*

## 3. Research Methodology

### Population and Sample

*This study uses a quantitative approach with an ex-post facto design, which is causal explanatory research. The data used are secondary data in the form of financial reports and stock market data from manufacturing companies in the coal mining subsector listed on the Indonesia Stock Exchange for the 2021-2024 period.The population of this study consists of 22 manufacturing companies operating in the coal mining subsector and listed on the Indonesia Stock Exchange (IDX) during the 2021-2024 period.*
*The research sample was selected using the purposive sampling method with the following criteria:*
*1) Coal mining sub-sector companies listed consecutively on the IDX during 2021-2024.*
*2) Companies that publish complete annual financial reports during 2021-2024.*
*3) Companies that have complete data related to research variables, namely Return On Equity (ROE), Current Ratio (CR), Debt to Equity Ratio (DER), and Price to Book Value (PBV).*

*Based on the established criteria, of the 22 companies in the population, only 6 met all the required requirements. Given the four-year observation period (2021-2024), the total observation data in this study is: 6 companies x 4 years = 24 observations.*
*The following samples meet the criteria:*
*1) PT Adaro Energy Indonesia Tbk*
*2) PT Mitrabara Adiperdana Tbk*
*3) PT Indika Energy Tbk*
*4) PT Samindo Resources Tbk*
*5) PT Atlas Resources Tbk*
*6) PT Bumi Resources Tbk*
*For clarification, for 2024 data, all figures used are the latest audit figures available for the full reporting period of 2024, in accordance with the financial reporting standards (audited financial statements) published by the IDX (Ambrozi, 2021). The use of multiple linear regression with 24 observations meets the minimum sample size rule of thumb, which is 5-10 times the number of independent variables (in this case, there are 3 independent variables), so a minimum sample size of 15 is sufficient for valid regression analysis (Hair et al., 2010; Ghozali, 2018).*

### Variables and Measuring Instruments

*Puspitasari, D.A. (2020) stated that The variable is objects in research whose values can change, variables are divided into independent variables or free variables that influence other variables and dependent variables or variables that are influenced.*
*Before the analysis, classical assumption tests were carried out including normality, multicollinearity, heteroscedasticity, and autocorrelation tests to ensure that the data met the assumptions of multiple linear regression.*
*In this study, there are two types of variables:*

***Independent Variable***
***(X1) PROFITABILITY***
*Profitability reflects a company's ability to generate profits within a specific period* (Akbar, 2017). *It indicates the efficiency of management in utilizing shareholders' equity to produce net income. In this study, profitability is measured using the Return on Equity (ROE) ratio, which compares net income after tax to total equity* (Rajaguguk & Sudjiman, 2022). *A higher ROE suggests better financial performance and greater effectiveness in the use of capital. The ROE formula is as follows:*

$$RETURN\ OF\ EQUITY\ (ROE) = \frac{EARNING\ AFTER\ INTEREST\ AND\ TAX}{EQUITY}$$

***Figure 3.1 Return of Equity***

### *(X2) LIQUIDITY*

*Liquidity represents a company's ability to fulfill its short-term financial obligations on time* (Mery, 2017). *High liquidity indicates strong financial stability and the ability to meet maturing liabilities without difficulty. In this study, liquidity is measured using the Current Ratio (CR), which compares current assets to current liabilities. The ratio shows how effectively a company manages its working capital to sustain daily operations. The formula used is:*

$$CURRENT\ RATIO = \frac{CURRENT\ ASSET}{CURRENT\ LIABILITY}$$

***Figure 3.2 Current Ratio***

### *(X3) LEVERAGE*

*Leverage describes the extent to which a company utilizes debt financing relative to its equity in supporting operational activities* (Mery, 2017). *It reflects the company's risk and ability to manage debt responsibly while maintaining profitability. In this study, leverage is measured using the Debt to Equity Ratio (DER), which compares total liabilities to total shareholders' equity. The DER indicates the proportion of debt used to finance assets.*

*The formula is:*

$$DEBT\ TO\ EQUITY\ RATIO = \frac{TOTAL\ DEBT}{EQUITY}$$

***Figure 3.3 Debt to Equity Ratio***

### *Dependent Variable*

### *(Y) FIRM VALUES*

*Firm value is an indicator of a company's performance and reflects investors' perception of the company's success in generating* (Rajaguguk & Sudjiman, 2022). *It represents how efficiently management maximizes shareholder wealth through operational and financial decisions. In this study, firm value is measured using the Price to Book Value (PBV) ratio, which compares the market price per share with the book value per share. PBV helps investors assess whether a stock is overvalued or undervalued in the market. The formula used is:*

$$PRICE\ TO\ BOOK\ VALUE\ (PBV) = \frac{MARKET\ PRICE\ PER\ SHARE}{BVPS}$$

***Figure 3.4 Debt to Equity Ratio***

## 4. Result

### Descriptive Statistical Test

***Table 4.1 Results of Descriptive Statistical Tests***

**Descriptive Statistics**

| | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| ROE | 24 | .01 | .72 | .2006 | .18275 |
| CR | 24 | .22 | 7.86 | 2.5060 | 2.09613 |
| DER | 24 | .14 | 8.45 | 1.9524 | 2.64290 |
| PBV | 24 | .37 | 2.40 | 1.0764 | .49169 |
| Valid N (listwise) | 24 | | | | |

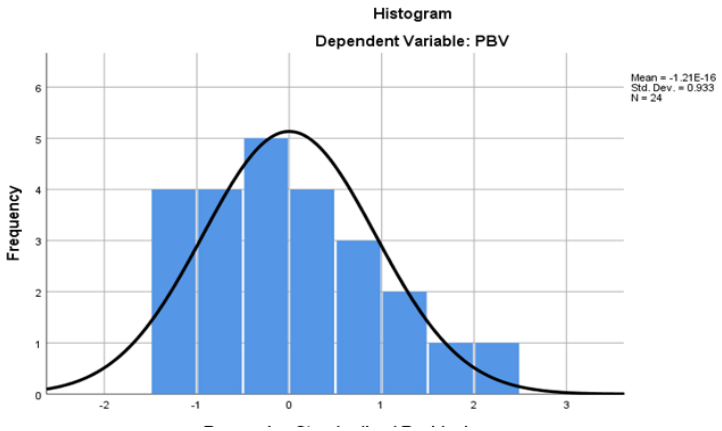
***Source: SPSS 25, secondary data processed by the author***

*Based on the results of the descriptive statistical analysis, the following interpretations can be made:*
*Return on Equity (ROE) shows an average value of approximately 0.2006 with a standard deviation of 0.18275. This indicates that the sample companies exhibit variation in their ability to generate profits from shareholders' equity, although the level of variation is still within reasonable limits. The minimum ROE value of 0.01 and the maximum value of 0.72 indicate significant differences in profitability performance between companies.*
*The Current Ratio (CR) averaged 2.5060, indicating that, on average, companies in the sample had a relatively strong ability to meet their short-term obligations. However, the relatively high standard deviation of 2.09613 indicates substantial differences in liquidity management across companies, reflecting varying levels of efficiency in managing current assets and liabilities.*
*The Debt-to-Equity Ratio (DER) averaged 1.9524 with a standard deviation of 2.64290, indicating that companies tend to rely heavily on debt financing, although leverage levels vary significantly across companies. This variation implies that each company employs a different capital structure strategy in balancing the use of debt and equity.*
*The Price-to-Book Value (PBV) ratio, which represents a company's value, averaged 1.0764 with a standard deviation of 0.49169. This means that, on average, the stock prices of the sample companies were slightly higher than their book values, indicating a generally positive market perception. This relatively moderate standard deviation also indicates that differences in market valuations between companies are not significant.*

### Classical Assumption Test

### Normality Test

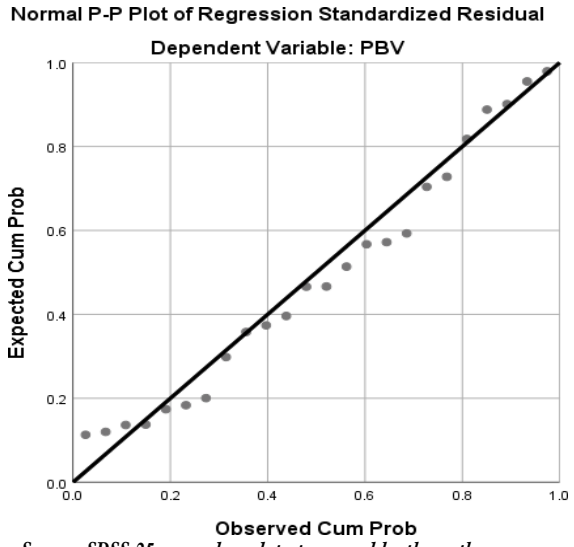
***Table 4.2 Histogram Diagram***




***Source: SPSS 25, secondary data processed by the author***

*Interpretation: If the histogram shows a symmetrical distribution, centered between the right and left sides, it indicates that the data are normally distributed. The average (mean) of the data is very small and the standard deviation obtained shows reasonable data variation in the sample of 24. Thus, the PBV data in this study can be stated to fulfill the normality assumption visually, so it can be said that the classical regression test requirements for residual normality have been fulfilled in this analysis.*

***Table 4.3 Normality Test Results (P-P Plot of Regression)***




***Source: SPSS 25, secondary data processed by the author***

*Interpretation: If the data points are distributed along or close to the diagonal line, it indicates that the data are normally distributed. If the points lie around and follow the diagonal line, it can be concluded that the residual data is normally distributed. This indicates that the normality assumption in regression analysis is met, and the regression model can be considered valid for further statistical inference.*

***Table 4.4 Normality Test Results***
***One-Sample Kolmogorov-Smirnov Test***

| | | *Unstandardized Residual* |
|---|---|---|
| *N* | | *24* |
| *Normal Parameters[a,b]* | *Mean* | *.0000000* |
| | *Std. Deviation* | *.37404492* |
| *Most Extreme Differences* | *Absolute* | *.109* |
| | *Positive* | *.109* |
| | *Negative* | *-.097* |
| *Test Statistic* | | *.109* |
| *Asymp. Sig. (2-tailed)* | | *.200[c,d]* |

*a. Test distribution is Normal.*

*b. Calculated from data.*

*c. Lilliefors Significance Correction.*

*d. This is a lower bound of the true significance.*

***Source: SPSS 25, secondary data processed by the author***

*If the tolerance value is greater than 0.10 and the Variance Inflation Factor (VIF) value is less than 10.00, it can be concluded that there is no indication of multicollinearity in the regression model. Based on the results shown in the table, all independent variables have a tolerance value greater than 0.10 and a VIF value below 10.00. Therefore, it can be concluded that all independent variables are free from multicollinearity, meeting the required assumptions for the regression model and confirming that the model is suitable for further analysis.*

**Multicollinearity Test**

***Table 4.5 Multicollinearity Test Results***

**Coefficients**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | | | Collinearity Statistics | |
|---|---|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | t | Sig. | Tolerance | VIF |
| 1 | (Constant) | .542 | .218 | | 2.487 | .022 | | |
| | ROE | .968 | .467 | .360 | 2.071 | .051 | .959 | 1.042 |
| | CR | .126 | .048 | .539 | 2.638 | .016 | .694 | 1.441 |
| | DER | .012 | .039 | .065 | .316 | .755 | .675 | 1.481 |

a. Dependent Variable: PBV

***Source: SPSS 25, secondary data processed by the author***

*If the tolerance value is greater than 0.10 and the Variance Inflation Factor (VIF) value is less than 10.00, it can be concluded that there is no indication of multicollinearity in the regression model. Based on the results presented in the table, all independent variables have a tolerance value above 0.10 and a VIF value below 10.00. Therefore, it can be concluded that all independent variables are free from multicollinearity problems, indicating that the regression model meets the classical assumptions and is suitable for further analysis.*

**Autocorrelation Test**

*The autocorrelation test in this study uses the Durbin-Watson Test (DW Test) to determine whether there is a relationship between the residual error at time t and the residual error at time t. previous time (t-1) with the following results:*

***Table 4.6 Autocorrelation Test Results***

**Model Summary[b]**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|---|---|---|---|---|---|
| 1 | .649[a] | .421 | .334 | .40112 | 1.712 |

a. Predictors: (Constant), DER, ROE, CR

b. Dependent Variable: PBV

***Source: SPSS 25, secondary data processed by the author***

*If the value of dU < D < 4 - dU, then the null hypothesis is accepted, which means that there is no autocorrelation in the regression model.*

*Interpretation: Based on the results of the Durbin–Watson (DW) test, the following values were obtained:*

*D = 1.712*

*dU = 1.6565*

*4 - dU = 3.6565*

*Since dU < D < 4 - dU (1.6565 < 1.712 < 3.6565)*

*it can be concluded that the null hypothesis is accepted. This indicates that there is no autocorrelation present in the regression model. Therefore, the regression model fulfills the assumption of no autocorrelation and is considered suitable for further analysis.*

**Heteroscedasticity Test**

***Table 4.7 Heteroscedasticity Test Results***

**Coefficients**

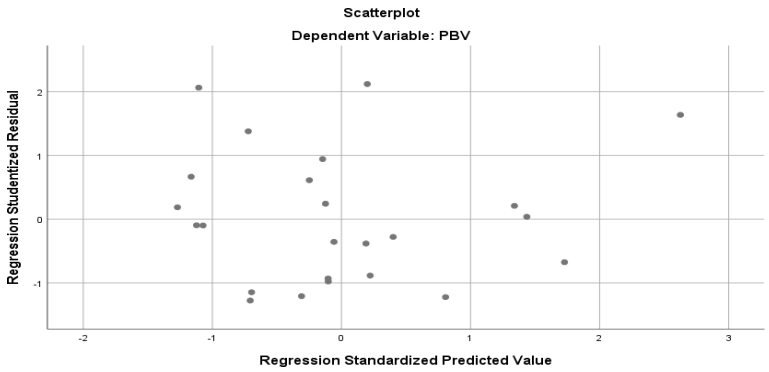
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
|---|---|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | | Tolerance | VIF |
| 1 | (Constant) | ,315 | ,126 | | 2,499 | ,021 | | |
| | ROE | ,087 | ,270 | ,073 | ,321 | ,752 | ,959 | 1,042 |
| | CR | -,011 | ,028 | -,105 | -,394 | ,698 | ,694 | 1,441 |
| | DER | -,004 | ,022 | -,047 | -,173 | ,864 | ,675 | 1,481 |

b. Dependent Variable: ABS_RES

***Source: SPSS 25, secondary data processed by the author***

*The heteroscedasticity test is used to determine whether there is inequality in residual variance between observations in the regression model. Based on the results of the Glejser test, the significance values (Sig.) for these variables are as follows: Profitability = 0.752, Liquidity = 0.698, and Leverage = 0.864. All significances*
*These values are greater than 0.05, indicating the absence of heteroscedasticity in the regression model. Therefore, it can be concluded that the model meets the homoscedasticity assumption and is worthy of further analysis.*

***Table 4.8 Scatterplot Diagram***




***Source: SPSS 25, secondary data processed by the author***

*Interpretation: If the data are normally distributed, the points in the scatterplot will appear randomly and evenly dispersed around the axis. Based on the figure above, the data points are spread without forming any specific pattern, indicating that the data are normally distributed.*

## Hypothesis Testing
## T-Test (Partial)

***Table 4.9 T-Test Results***
**Coefficients**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
|---|---|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | | Tolerance | VIF |
| 1 | (Constant) | .542 | .218 | | 2.487 | .022 | | |
| | ROE | .968 | .467 | .360 | 2.071 | .051 | .959 | 1.042 |
| | CR | .126 | .048 | .539 | 2.638 | .016 | .694 | 1.441 |
| | DER | .012 | .039 | .065 | .316 | .755 | .675 | 1.481 |

a. Dependent Variable: PBV

***Source: SPSS 25, secondary data processed by the author***

*A t-test is conducted to determine the extent to which each independent variable individually influences the dependent variable. The results can be interpreted as follows:*

*Interpretation:*
*A partial t-test was used to examine the effect of each independent variable on the dependent variable. Based on the test results, the Return on Equity (ROE) variable has a significance value of 0.051, slightly higher than 0.05.This shows that ROE has a positive but not statistically significant influence on Price to Book Value (PBV).*
*The Current Ratio (CR) variable shows a significance value of 0.016, which is less than 0.05, indicating that CR has a positive and statistically significant effect on PBV. Meanwhile, the Debt-to-Equity Ratio (DER) variable has a significance value of 0.755 (>0.05), which means DER does not have a significant effect on PBV.*
*Therefore, among the three independent variables, only liquidity (CR) has a statistically significant influence on the company's market value (PBV), while profitability (ROE) and leverage (DER) do not show a significant influence.*

**Multiple Linear Regression Equation**

*Based on the results of the coefficient analysis, the following regression equation was obtained:*

$Y = 0{,}542 + 0{,}968X_1 + 0{,}126X_2 + 0{,}012X_3$

*Description:*
*Y = Firm Value (Price to Book Value / PBV)*
$X_1$ *= Profitability (Return on Equity / ROE)*
$X_2$ *= Liquidity (Current Ratio / CR)*
$X_3$ *= Leverage (Debt to Equity Ratio / DER)*
*The regression equation shows that Return on Equity (ROE) and Current Ratio (CR) have a positive effect on Price to Book Value (PBV), while Debt to Equity Ratio (DER) also has a positive but very small effect. The ROE regression coefficient (0.968) implies that a one-unit increase in ROE will increase PBV by 0.968 units, assuming other variables remain constant. Similarly, a one-unit increase in CR will increase PBV by 0.126 units. Meanwhile, the effect of DER on PBV is only 0.012 units, indicating a very weak contribution of leverage to the company's market value.*

**F Test (Simultaneous)**

***Table 4.10 F-Test Results***
***ANOVA***

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 2.342 | 3 | .781 | 4.853 | .011[b] |
| | Residual | 3.218 | 20 | .161 | | |
| | Total | 5.560 | 23 | | | |

**Source: SPSS 25, secondary data processed by the author**

a. Dependent Variable: PBV
b. Predictors: (Constant), DER, ROE, CR

*The F test is used to determine whether the independent variable, namely Leverage ($X_1$), Profitability ($X_2$), and Liquidity ($X_3$), simultaneously have a significant influence on Company Value (Y).*
*Interpretation:*
*The F-test results show an F-value of 4.853 with a significance level of 0.011, which is less than 0.05. This indicates that simultaneously, the variables Return on Equity (ROE), Current Ratio (CR), and Debt to Equity Ratio (DER) have a significant influence on Price to Book Value (PBV). Thus, it can be concluded that these three independent variables representing profitability, liquidity, and leverage collectively explain variations in a company's market value as measured by PBV.*

## 5. Discussions and Conclusions

***$H_1$: Profitability ($X_1$) has an effect on Company Value (Y)***
*The significance value for the profitability variable (ROE) is 0.051, which is higher than the threshold of 0.05. Thus, $H_1$ is rejected, indicating that profitability does not have a statistically significant effect on firm value. However, the positive regression coefficient (0.968) indicates that increased profitability tends to be followed by increased firm value, but the relationship is not strong enough to be declared statistically significant.*

***$H_2$: Liquidity ($X_2$) has an effect on Company Value (Y)***
*The liquidity significance value (CR) of 0.016, which is below 0.05, indicates that $H_2$ is accepted, thus proving that liquidity has a positive and significant effect on firm value. This finding indicates that a company's ability to meet short-term obligations provides a strong financial signal to investors, thereby increasing trust and driving up the company's market value.*
*These results align with previous research that suggests that liquidity can strengthen investors' perceptions of a company's prospects (Utami & Widati, 2020; Ariana et al., 2023), although several studies show varying results depending on the company's condition and sector (Purnama & Sembiring, 2024; Mahalia & Nurwita, 2023).*
***$H_3$: Leverage ($X_3$) has an effect on Company Value (Y)***
*The significance value of the leverage variable (DER) is 0.755, which is well above the significance limit of 0.05. Therefore, $H_3$ is rejected, and it can be concluded that leverage has no significant effect on firm value. Although the regression coefficient is positive (0.012), the magnitude of this effect is not statistically strong enough to influence market valuation. This finding indicates that the use of debt in the company's capital structure during the study period was not a factor that investors considered substantially in determining firm value.*
***H4:Profitability ($X_1$), Liquidity ($X_2$), and Leverage ($X_3$) simultaneously have a significant influence on Company Value (Y)***
*The significance value of the F test is 0,011, which is less than 0.05, indicating that profitability, liquidity, and leverage simultaneously have a significant effect on firm value. This means that these three variables, when considered together, can make a significant contribution to explaining variations in firm value. This finding confirms that market valuation of a company depends not solely on a single financial ratio, but on a combination of profit-generating ability, liquidity adequacy, and the company's financing structure.*

## Conclusion and Recomendation
### Conclusion
*Based on the research objectives that analyze the effect of profitability (ROE), liquidity (CR), and leverage (DER) on company value (PBV) in coal mining sub-sector companies listed on the IDX for the 2021-2024 period, the following conclusions were obtained:*

1. *Profitability (ROE) has a positive but insignificant impact on company value. This indicates that increasing profits have not significantly reassured investors, particularly since profits in the coal industry often fluctuate with commodity prices.*
2. *Liquidity (CR) has a positive and significant impact on firm value and is the most important factor in this study. Investors consider a company's ability to meet short-term obligations as a strong indicator of stability and resilience to risk.*
3. *Leverage (DER) shows a positive but insignificant effect on firm value. This indicates that debt financing structures were not a primary concern for investors during the study period, likely due to the relatively high risk faced by the industry.*

4. *When viewed together, ROE, CR, and DER have a significant influence on company value, which means that these three financial ratios are important indicators in assessing a company's market value.*
   *Overall, this study confirms that liquidity plays a more dominant role than profitability and leverage in determining the value of coal companies in the post-pandemic period.*

**Recommendations**

*Based on the research results, here are some recommendations that can be given:*
*1. For companies, maintaining and improving liquidity must be a top priority to boost investor confidence and enhance company value. More efficient cash flow and working capital management is expected to strengthen company stability.*
*2. For investors, liquidity can be a key indicator in making investment decisions in the coal subsector, considering its significant influence on company value.*
*3. Regulators need policy support that can maintain the operational sustainability of coal companies, particularly in terms of financial reporting transparency and risk management.*

**Limitations and Suggestions for Further Research**

*This study has several limitations that need to be considered:*
*1) The variables used in the study were limited to ROE, CR, and DER. Other variables such as company size, sales growth, dividend policy, global coal prices, and ESG factors were not included despite their potential to have a significant impact.*
*2) The research period only covers four years (2021–2024), so it is not able to reflect long-term changes in the coal industry, especially related to the global energy transition.*
*3) The number of samples used was limited, namely only 6 companies from the 22 existing populations, so the generalization of research findings is still limited.*

*Suggestions for further research:*

a) *Adding other variables such as Tobin's Q, DPR, company size, sales growth, commodity price index, and sustainability factors (ESG score).*
b) *Using more powerful analysis methods such as panel data regression, SEM, or path analysis.*
**c)** *Expanding the observation year range so that long-term trends can be seen.*
**d)** *Increase the sample size by including other energy subsectors to make the comparison broader and more diverse.*

**References**


2), V. I. 1); D. R. H. (2025). The Effect Of Capital Structure, Profitability, And Liquidity On Company Value In Coal Subsector Mining Companies Listed On The Indonesia Stock Exchange 2019-2023 Period. *Journal of Management, Economic, and Accounting.*, *4*(2), 949–964. CC–BY-SA license

Abhirama Alam Syah1*, M. A. A. (2024). Leverage, Profitability , And Liquidity: Their Effect On Company Value By Moderating Dividend Policy Variables. *Management Studies and Entrepreneurship Journal*, *5*(2), 5476–5490.

Agustine Sulviani1, Robi Maulana M2, L. S. F. (2024). PENGARUH LIKUIDITAS, LEVERAGE, PROFITABILITAS TERHADAP NILAI PERUSAHAAN SEBELUM DAN SELAMA PANDEMI COVID-19. *J-AKSI: Jurnal Akuntansi dan Sistem Informasi*, *5*(3). https://ejournal.unma.ac.id/index.php/jaksi

Akbar, M. H. (2017). Pengaruh ukuran perusahaan, profitabilitas, struktur modal, tingkat suku bunga dan kebijakan dividen terhadap nilai perusahaan. *STIE Perbanas Surabaya.*, 2618.

Bahrul Ulum Alamsyah. (2024). PENGARUH PROFITABILITAS, LEVERAGE, DAN LIKUIDITAS TERHADAP NILAI PERUSAHAAN. *Syntax Literate: Jurnal Ilmiah Indonesia p–ISSN: 2541-0849 e-ISSN: 2548-1398*, *9*(3).

Dian Widiyati. (2020). PENGARUH PROFITABILITAS, UKURAN PERUSAHAAN, LEVERAGE DAN CASH ON HAND TERHADAP NILAI PERUSAHAAN (STUDI EMPIRIS PADA PERUSAHAAN PERTAMBANGAN BATU BARA YANG GO PUBLIC TAHUN 2017-2018 DI BURSA EFEK INDONESIA)e. *Going Concern : Jurnal Riset Akuntansi 15(2), 2020, 279-289*, *15*(2), 279–289.

M, M. C. J. and W. H. M. (1976). THEORY OF THE FIRM: MANAGERIAL BEHAVIOR, AGENCY COSTS AND OWNERSHIP STRUCTURE. *Journal of Financial Economics 3 (1976) 305-360. Q North-Holland Publishing Company*, *3*, 305–360.

Martonius Ngongo1, Untung Lasiyono2, W. O. K. (2025). NILAI PERUSAHAN PADA PERUSAHAN SEKTOR ENERGI YANG TERDAFTAR DI BURSA EFEK INDONESIA (BEI). *Jurnal Penelitian Ilmiah Interdisipliner*, *9*(7), 428–432.

Mery, K. (2017). PENGARUH LIKUIDITAS, LEVERAGE DAN PROFITABILITAS TERHADAP NILAI PERUSAHAAN DENGAN KEBIJAKAN DIVIDEN SEBAGAI VARIABEL MODERASI PADA PERUSAHAAN PERTAMBANGAN YANG TERDAFTAR DI BURSA EFEK INDONESIA TAHUN 2011-2014. *JOM Fekon*, *4*(1), 2000–2014.

Nurul Qomariah1*, Khristina Yunita2, N. Y. (2025). Determinan Financial Distress pada Industri Batu Bara Indonesia. *AKUA: Jurnal Akuntansi dan Keuangan*, *4*(3), 292–301. https://doi.org/10.54259/akua.v4i3.4589

Rajaguguk, S. W. &, & Sudjiman, L. S. (2022). PENGARUH PROFITABILITAS, LIKUIDITAS DAN LEVERAGE TERHADAP NILAI PERUSAHAAN PADA PERUSAHAAN MANUFAKTUR SUB SEKTOR PERTAMBANGAN BATU BARA YANG TERDAFTAR DI BEI PERIODE 2018 – 2020. *New Phytologist*, *51*(1), 2022.

Vidia Nanda Kusuma 1, M. (2024). Pengaruh Likuiditas, Leverage, dan Profitabilitas terhadap Nilai Perusahaan pada Perusahaan Industri Sektor Coal Production yang Terdaftar di BEI Tahun 2020-2023. *AKADEMIK Jurnal Mahasiswa Humanis*, *4*(3), 1236–1251.

Siti Nurjanah1*, (2023) PENGARUH LIKUIDITAS, UKURAN PERUSAHAAN DAN PROFITABILITAS TERHADAP NILAI PERUSAHAAN. CURRENT Jurnal Kajian Akuntansi dan Bisnis Terkini. Universitas Stikubank

Fika Ariana1, Joelianti Dwi Supraptiningsih2, (2024) Pengaruh Likuiditas dan Profitabilitas terhadap Nilai Perusahaan. Universitas Pertiwi

Winda Rizky Amalia1*, Purwohandoko1, (2021) Pengaruh profitabilitas, likuiditas, leverage, firm size dan kebijakan dividen terhadap nilai perusahaan pada perusahaan sektor

properties and real estate yang terdaftar di Bursa Efek Indonesia periode 2019-2021. Jurnal Ilmu Manajemen. Universitas Negeri Surabaya, Surabaya, Indonesia

*Job Market Signaling Author ( s ): Michael Spence Published by : Oxford University Press Stable URL : https://www.jstor.org/stable/1882010*, (2018)

Abhirama Alam Syah1*, (2024) Leverage, Profitability , And Liquidity: Their Effect On Company Value By Moderating Dividend Policy Variables. Management Studies and Entrepreneurship Journal. Universitas Muhammadiyah Surakarta

Erika Agustin a*, (2025) PENGARUH CURRENT RATIO, DEBT TO EQUITY RATIO, EARNING PER SHARE DAN NET PROFIT MARGIN TERHADAP HARGA SAHAM. JURNAL ILMIAH MANAJEMEN DAN AKUNTANSI. Universitas Budi Luhur, Jakarta, Indonesia