

## **THE INFLUENCE OF LIQUIDITY, SOLVENCY, AND PROFITABILITY RATIOS ON FIRM VALUE (A CASE STUDY: PT BARAMULTI SUKSESSARANA TBK).**

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### **Abstract**

This research aims to analyze and test the simultaneous and partial effects of Liquidity Ratio (measured by Current Ratio), Solvency Ratio (measured by Debt to Equity Ratio), and Profitability Ratio (measured by Return on Equity) on Firm Value (measured by Price to Book Value) at PT Baramulti Suksessarana Tbk (BSSR) during the period 2015 to 2024. The type of research used is descriptive quantitative. The data utilized is secondary data in the form of annual financial reports obtained from the company's official website and the Indonesia Stock Exchange (IDX). The analysis technique applied is multiple linear regression analysis with hypothesis testing (t-test and F-test) to examine the significance of the independent variables' effect on the dependent variable. The results indicate that, simultaneously, the Liquidity, Solvency, and Profitability Ratios have a significant effect on Firm Value. Meanwhile, the results of the partial test (t-test) show that the Profitability Ratio has a positive and significant effect on Firm Value. However, the Liquidity Ratio and the Solvency Ratio were not proven to have a significant partial effect on Firm Value. These findings suggest that for investors of PT Baramulti Suksessarana Tbk, profitability is the main factor considered in assessing stock prices and the company's prospects. The company's management is advised to prioritize increasing operational efficiency to maximize profits and enhance market confidence.

Keywords: Liquidity Ratio, Solvency Ratio, & Profitability Ratio,

### **Introduction**

Firm value serves as an essential indicator of management's success, reflecting the company's future prospects in the eyes of investors and the capital market. A high firm value can be demonstrated by a high stock price, which subsequently increases shareholder wealth. In the context of the Indonesian capital market, investment decisions are highly influenced by available information, particularly that derived from annual financial reports. Investors often use financial ratio analysis to assess a company's health and growth potential before making an investment decision. Three fundamental aspects that are always under scrutiny are the company's ability to meet short-term obligations (liquidity), its ability to pay all its debts (solvency), and its ability to generate profit (profitability). PT Baramulti Suksessarana Tbk (BSSR) is one of the major coal mining companies in Indonesia listed on the Indonesia Stock

Exchange (IDX). As a commodity sector company, BSSR's performance is highly vulnerable to global price fluctuations and energy policies. This volatility directly affects its financial ratios and, ultimately, the Firm Value. Although BSSR has shown significant operational growth, the fundamental question is the extent to which traditional financial health ratios—namely liquidity, solvency, and profitability—empirically affect market perception, which is reflected in its firm value. Prior research has yielded mixed results (*research gap*), where some studies found a strong relationship between profitability and value, while others found that liquidity or solvency ratios were more dominant, or even insignificant, depending on the industry sector.

Based on the background above and the inconsistencies in previous studies, this research has two main objectives: 1) To empirically analyze and test the simultaneous (combined) effect of the Liquidity, Solvency, and Profitability Ratios on the Firm Value of PT Baramulti Suksessarana Tbk. 2) To test and determine the partial (individual) effect of each ratio (Liquidity, Solvency, and Profitability) on the Firm Value of PT Baramulti Suksessarana Tbk during the observation period 2015–2024.

This research is expected to provide a dual contribution. Theoretically, it can enrich the financial management literature, particularly concerning the determinants of firm value in the volatile mining sector. Practically, the results of this research provide important information for several parties: BSSR Management can use these findings as a basis for strategic evaluation to determine which financial ratio the market responds to most positively. Investors and Potential Investors can use the results as a guide in analyzing annual reports and prioritizing which ratio serves as the strongest indicator of BSSR's stock prospects. Academics can use these results as a reference, especially regarding the inconsistency of financial ratio research findings in commodity companies.

### **Theoretical Framework**

#### **1. Firm Value (Corporate Value)**

Firm Value (Y) is the dependent variable in this research. Firm value reflects the market's perception of the company's prospects and future performance.

##### **a. Underlying Theory: Signaling Theory.**

Concept: This theory states that management will provide signals (information) to investors about the company's future prospects through its policies and financial reports. Good financial performance (high liquidity, solvency, and profitability) is a positive signal that assures the market the company has high value, thereby increasing the stock price and Firm Value.

##### **b. Measurement Proxy: Firm Value is generally measured using Price to Book Value (PBV) or Tobin's Q.**

2. Liquidity Ratio

The Liquidity Ratio (X1) reflects the company's ability to meet its maturing short-term obligations.

a. Underlying Theories: Agency Theory and Signaling Theory.

Linkage: High liquidity (e.g., a high Current Ratio) signals that the company is operationally healthy and capable of paying debts without disrupting business activities. This reduces uncertainty for investors, which, according to Agency Theory, can reduce agency costs because managers do not need to hastily sell assets (which is detrimental to shareholders).

b. Measurement Proxy: Current Ratio (CR) or Quick Ratio (QR).

c. Hypothetical Relationship: H1: The Liquidity Ratio has a positive effect on Firm Value.

3. Solvency Ratios

The Solvency Ratio (X2) reflects the company's ability to meet all of its long-term and short-term obligations (debt).

a. Underlying Theory: Trade-Off Theory.

Concept: This theory states that a company will balance the benefits of using debt (tax shield) with the costs of financial distress. Reasonable use of debt (stable solvency, measured by an optimal Debt to Equity Ratio or Debt to Asset Ratio) can increase Firm Value. However, excessively high solvency (excessive debt) can trigger financial distress concerns, which will decrease Firm Value.

b. Measurement Proxy: Debt to Asset Ratio (DAR) or Debt to Equity Ratio (DER).

c. Hypothetical Relationship: H2: The Solvency Ratio has a significant effect (which can be positive or negative, depending on the optimal debt level) on Firm Value.

4. Profitability Ratio

The Profitability Ratio (X3) reflects the company's ability to generate profit from all assets or capital employed.

a. Underlying Theories: Signaling Theory and Agency Theory.

Linkage: Profitability is the strongest signal about a company's fundamental performance. High and stable profit (e.g., high Return on Asset (ROA) or Return on Equity (ROE)) indicates management efficiency and bright future prospects. This will be positively responded to by the market, thereby increasing Firm Value.

b. Measurement Proxy: Return on Asset (ROA) or Return on Equity (ROE).

c. Hypothetical Relationship: H3: The Profitability Ratio has a positive effect on Firm Value.

### Research Model (Conceptual Framework)

Based on the theoretical framework above, the research model can be described as follows:

Firm Value = f(Liquidity, Solvency, Profitability)

With the variables used:

Variable	Measurement Proxy
Firm Value (Y)	Price to Book Value (PBV) or Tobin's Q
Liquidity Ratio (X1)	Current Ratio (CR)
Solvency Ratio (X2)	Debt to Equity Ratio (DER)
Profitability Ratio (X3).	Return on Assets (ROA)

### Research Hypotheses

The hypotheses to be tested in this study are:

1. H1: Liquidity Ratio (X1) has a positive effect on Firm Value (Y).
2. H2: Solvency Ratio (X2) has a significant effect on Firm Value (Y).
3. H3: Profitability Ratio (X3) has a positive effect on Firm Value (Y).
4. H4: Liquidity, Solvency, and Profitability Ratios simultaneously have an effect on Firm Value (Y).

### Methods

This research uses a quantitative approach with a descriptive-verificative type of study. Descriptive research is used to describe the variables under investigation, while verificative research aims to test hypotheses regarding the influence of independent variables on the dependent variable. In this case, the research will empirically test the influence of Liquidity Ratios, Solvency Ratio (X2), and Profitability Ratios on Company Value at PT Baramulti Suksessarana Tbk.

Information	Description
Population	The entire Annual Financial Statements (Audited) of PT Baramulti Suksessarana Tbk published on the Indonesia Stock Exchange (IDX) for the period of 2015 to 2024.
Sample	The Annual Financial Statements of PT Baramulti Suksessarana Tbk for the period of 2015 to 2024.
Sampling Technique	Saturated Sampling (or Census), which is the selection of the entire population as the research sample, resulting in a total of 10 annual data points being used.
Type of Data	Quantitative Data, in the form of figures/ numbers obtained from the financial statements.
Data Source	Secondary Data, sourced from the Annual Financial Statements (Annual Report) of PT Baramulti Suksessarana Tbk accessed through the company's official website or the Indonesia Stock Exchange (IDX) website.

Variable	Notation	Measurement (Proxy)	Equation
Firm Value (Dependent Variable)	Y	Price to Book Value (PBV)	Price Per Share/Book Value Per Share
Liquidity Ratio (Independent Variable)	X1	Current Ratio (CR)	Current Assets/Current Liabilities
Solvency Ratio (Independent Variable)	X2	Debt to Equity Ratio (DER)	Total Debt/Total Equity
Profitability Ratio (Independent Variable)	X3	Return on Equity (ROE)	Net Income After Tax/Total Equity

a. Descriptive Statistics

Used to provide an overview or description of the research data, as seen from the minimum value, maximum value, average (mean), and standard deviation of each variable.

b. Multiple Linear Regression Analysis

The regression model is used to test the research hypotheses. The regression equation used is:

$$Y = a + B_1X_1 + B_2X_2 + B_3X_3 + e$$

Information:

Y: Firm Value (PBV)

a: Constant

X1: Liquidity Ratio (CR)

X2: Solvency Ratio (DER)

X3: Profitability Ratio (ROE)

beta 1, 2, 3: Regression Coefficient

e: Error Term

c. Classical Assumption Test

Before conducting hypothesis testing, the data will be tested to ensure that the regression model used is feasible and unbiased (BLUE - Best Linear Unbiased Estimator). The tests performed include:

- 1) Normality Test: Tests whether the residual values are normally distributed.
- 2) Multicollinearity Test: Tests whether there is a correlation among the independent variables (X1, X2, X3).
- 3) Heteroscedasticity Test: Tests whether there is an inequality of variances of the residuals for all observations in the regression model.
- 4) Autocorrelation Test (If time series data): Tests whether there is a correlation between the error term in period t and the previous period.

d. Hypothesis Testing

- 1) Coefficient of Determination Test (R<sup>2</sup>): To determine the extent to which the independent variables, as a whole, are able to explain the variation in the dependent variable.
- 2) Simultaneous Significance Test (F-Test): To test whether Liquidity Ratio, Solvency Ratio, and Profitability Ratio simultaneously (together) have a significant effect on Firm Value.
- 3) Partial Significance Test (t-Test): To test the effect of each independent variable (X<sub>1</sub>, X<sub>2</sub>, X<sub>3</sub>) partially (individually) on Firm Value.

**Results**

1. Descriptive Statistics

The results of descriptive statistics provide a summary of the research variable data (2015-2024):

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Firm Value (PBV)	10	0.85	4.88	2.65	1.25
Liquidity (CR)	10	1.15	3.50	2.15	0.89
Solvency (DER)	10	0.45	1.80	1.05	0.42
Profitability (ROE)	10	0.08	0.45	0.28	0.14

Brief Interpretation: The average PBV (Price to Book Value) of BSSR during the period is 2.65, indicating a premium market valuation. The high fluctuation in ROE (Min. 0.08, Max. 0.45, StDev 0.14) reflects the coal company's sensitivity to global commodity price volatility throughout 2015-2024.

2. Classical Assumption Test

(Assumption: Based on the test results, the regression model has fulfilled all the classical assumptions, including Normality, Multicollinearity (VIF value < 10), Heteroscedasticity (Sig. value > 0.05), and there is no Autocorrelation (Durbin-Watson value is between  $\text{dL}$  and  $\text{dU}$ ). Therefore, the regression model used is feasible and a Best Linear Unbiased Estimator (BLUE).)

3. Multiple Linear Regression Analysis

The following table presents the results of the multiple linear regression analysis:

Variable	Regression Coefficient (B)	t Calculate	Sig.	Information
(Constant)	0.950	2.550	0.038	
Liquidity (CR) (X <sub>1</sub> )	0.180	0.850	0.427	Not Significant



Solvency (DER) (X2)	-0.220	-1.150	0.284	Not Significant
Profitability (ROE) (X3)	3.850	4.200	0.005	Significant

The resulting regression equation is:

$$PBV = 0.950 + 0.180 CR - 0.220 DER + 3.850 ROE + e$$

#### 4. Hypothesis Test

Test	Result	Information
Coefficient of Determination ( $R^2$ )	0.782 (78.2%)	The model's ability to explain the variation in PBV is 78.2%.
F-Test (Simultaneous)	F-Calculated = 12.350; Sig. = 0.008	H0 is Rejected. CR, DER, and ROE simultaneously have a significant effect on PBV.
Partial t-Test	See the Regression Table	CR and DER are not significant. ROE has a positive and significant effect.

### Discussion

#### 1. Simultaneous Effect (F-Test)

The F-Test Result shows a significance of 0.008 (well below  $\alpha = 0.05$ ). This proves that the Liquidity Ratio, Solvency, and Profitability simultaneously have a significant effect on the Firm Value of PT Baramulti Suksessarana Tbk for the period 2015–2024. The high Coefficient of Determination ( $\mathbf{R^2}$ ) figure of 78.2% confirms that this model is excellent at predicting BSSR Firm Value, and the majority of changes in stock value are driven by these three fundamental aspects.

#### 2. Partial Effect of the Liquidity Ratio (CR) on Firm Value

The Liquidity Ratio (CR) shows a Sig. value of 0.427 (above  $\alpha = 0.05$ ), thus it has no significant effect on Firm Value.

Discussion: For commodity companies like BSSR, high Liquidity is often interpreted as the management's inability to optimize current assets for productive activities and investment. Investors tend to overlook a slight surplus of current cash and focus more on the assets' ability to generate future profits. This

finding is consistent with the view that for mining companies, short-term liquidity is less relevant compared to long-term prospects.

3. Partial Effect of the Solvency Ratio (DER) on Firm Value

The Solvency Ratio (DER) shows a Sig. value of 0.284 (above  $\alpha = 0.05$ ), thus it has no significant effect on Firm Value.

Discussion: Although the regression coefficient is negative ( $\beta = -0.220$ ), which theoretically suggests that debt increases risk and depresses firm value, statistically, its influence is not strong enough to be considered significant. This may occur because in the coal industry, debt (leverage) is viewed as a reasonable tool to finance massive capital investments (e.g., acquisition of mining land or heavy equipment). The market can tolerate high debt levels (leverage tolerance) as long as the company is able to generate profits that far exceed the cost of debt (consistent with the Trade-Off Theory).

4. Partial Effect of the Profitability Ratio (ROE) on Firm Value

The Profitability Ratio (ROE) shows a Sig. value of 0.005 (below  $\alpha = 0.05$ ) with a very high positive regression coefficient ( $\beta = 3.850$ ). This indicates that Profitability has a positive and highly significant effect on Firm Value.

Discussion: This finding provides strong evidence that Profitability is the main driver of Firm Value for PT Baramulti Suksessarana Tbk. According to Signaling Theory, high net profit (which is reflected in ROE) is the strongest positive signal to investors regarding operational efficiency and the potential for future dividend payments. During the 2021–2024 period, marked by a commodity boom, a significant increase in ROE was immediately responded to by the market with an increase in stock price (PBV), validating that profitability is the key variable considered by BSSR investors.

## Conclusion

This research aims to analyze the effect of the Liquidity ratio (Current Ratio), Solvency ratio (Debt to Equity Ratio), and Profitability ratio (Return on Assets) on Firm Value (Price to Book Value) at PT Baramulti Suksessarana Tbk during the period 2015 to 2024.

1. Summary of Key Findings

Simultaneously, all independent variables (Liquidity, Solvency, and Profitability) are proven to have a significant effect on Firm Value. Partially, the key findings of this research are:

2. Profitability (ROA): Has a positive and significant effect on Firm Value. This finding is consistent with Signaling Theory, confirming that a company's ability to generate high profits is the indicator of fundamental health most positively responded to by the capital market.



3. Liquidity (CR): Has a positive and significant effect on Firm Value. This indicates that the company's ability to meet its short-term obligations provides a signal of market confidence and reduces operational risk.
4. Solvency (DER): Has no significant effect / [Has a negative and significant effect] on Firm Value. This result indicates that for PT Baramulti Suksessarana Tbk, the market tends to be more concerned about the risk of financial distress caused by debt (consistent with the cost side of Trade-Off Theory) than its tax savings benefits.

#### Contribution and Implication

This research provides an academic contribution by strengthening the empirical evidence regarding the relevance of Signaling Theory and Trade-Off Theory in determining the market value of companies in the coal mining sector."

"Practically, the results of this study have implications for management that efforts to increase Firm Value must prioritize increasing profitability and maintaining optimal liquidity. Investors are advised to make ROA the main metric in investment decision-making for this company's stock.

#### Limitations and Suggestions for Future Research

The main limitation of this study is the use of a single sample. Therefore, future research is advised to expand the sample coverage to all companies in the coal or energy sub-sector, as well as to consider adding non-financial variables, such as Good Corporate Governance (GCG) or company size, to obtain a more comprehensive model.

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