

ANALYSIS INFLUENCE OF WORKING CAPITAL ON PROFIT OF PT BUMI RESOURCES TBK (2020 TO 2023)

Zikri Ferdinan^{1*}, Muhammad Fikri Ardafa²

Pamulang University¹

Pamulang University²

* Email : Badaiferdinan@gmail.com

Abstract

This study aims to analyze the effect of working capital on the profitability of PT Bumi Resources Tbk during the 2020–2023 period. Working capital is an essential factor in maintaining operational continuity and determining a company's profitability level. The research period covers the Covid-19 pandemic and the subsequent economic recovery phase, during which external conditions significantly affected the financial performance of the mining sector. The data used are secondary data obtained from the annual financial statements of PT Bumi Resources Tbk published by the Indonesia Stock Exchange (IDX). The research method employed is descriptive quantitative analysis to evaluate the relationship between working capital efficiency and net income. The results show that during 2020–2021, working capital management was less efficient due to the pandemic's impact, resulting in lower profitability. However, in 2022–2023, the company achieved significant improvement in working capital efficiency and profit growth, supported by global economic recovery and rising coal prices. This study concludes that effective working capital management has a positive influence on the profitability of PT Bumi Resources Tbk. Efficient utilization of working capital enhances liquidity, operational efficiency, and long-term financial performance.

Keywords:

Working Capital, Profit, PT Bumi Resources Tbk

Introduction

In 2020, the business world faced major shocks due to the COVID-19 pandemic: falling global demand, volatile commodity prices, and operational disruptions across supply chains. For coal mining companies like PT Bumi Resources Tbk (hereinafter: BUMI), these conditions impacted sales volumes, realized prices, and – crucially for short-term liquidity – working capital. Working capital, simply measured as the difference between current assets and current liabilities, serves as a key buffer for operational continuity: financing material purchases, payroll payments, and other short-term obligations. As liquidity pressures increase, companies often face a trade-off between maintaining production and delaying capital expenditures, ultimately

impacting profit and loss. BUMI's financial data reflects these pressures in 2020, the shift in direction in 2021, and the ongoing situation in 2023.

Empirically, BUMI recorded a loss in 2020. Many financial summaries show a significant net loss for the year—a reflection of the combined decline in revenue, as well as the associated fixed expenses and financing costs. Under these conditions, working capital tends to decline as companies reduce inventory cycles, delay material purchases, or optimize receivables; however, overly aggressive working capital reductions can reduce production capacity and subsequent revenue. In summary, in 2020, depressed working capital contributed to BUMI's reduced ability to generate profits, both through lower sales and through increased indirect costs (e.g., short-term debt refinancing costs).

Entering 2021, a performance turnaround was evident: BUMI successfully turned losses into profits—that year, it recorded a significant net profit compared to 2020. This turnaround was driven by increased revenue driven by improving commodity demand and improving coal prices. However, beyond market factors, improvements in working capital also played a role: increased cash and current assets, improved inventory turnover, and tighter accounts receivable management helped reduce the need for external financing. With healthier working capital, the company was able to fund operational activities without increasing interest expenses or disposing of valuable assets, thus improving profit margins. Conceptually, when working capital increases effectively (not excessively), the company has room to increase sales volume and capitalize on price momentum—a relationship evident in BUMI's 2021 turnaround.

A more detailed analysis reveals two key mechanisms by which working capital impacted earnings in BUMI's context during this period. First, liquidity: Adequate cash and cash equivalents reduce the need for short-term financing and interest expenses. When companies have to rely on emergency loans or costly refinancing, interest expenses erode operating profits. Signs of improved cash and current assets in 2021 helped reduce these costs. Second, operating cycle efficiency: Faster inventory and receivables turnover improved the conversion of sales to cash, enabling revenue realization without increasing working capital. If inventory builds up too much (or receivables pile up due to customer delays), working capital is locked up and margins decline—a real risk in crisis years. Third-party balance sheet data shows changes in cash flow components and current assets between 2020 and 2021 that support this narrative.

Looking ahead to 2023, macroeconomic conditions and coal prices have fluctuated, but BUMI has returned to profitability (albeit at a different level than during the peak of the recovery). Net profit in 2023 was relatively lower than in previous recovery years, indicating that despite market improvement, structural pressures (such as historical finance costs, asset adjustments, or other expenses) continue to impact profitability. From a working capital perspective, 2023 will require a more careful balance: maintaining sufficient liquidity to weather price volatility

while avoiding excess working capital that could reduce capital efficiency. Reports and analyst summaries for 2023 indicate that cash flow, current liabilities, and working capital management policies (e.g., accounts receivable and inventory management) continue to be key drivers of profit levels in the year.

From a management policy perspective, BUMI's experience during 2020–2023 offers several important lessons. First, working capital resilience—cash availability and flexibility to access funding—is a key buffer against external shocks; companies with healthy working capital tend to be able to capitalize on price rebounds without being trapped by high financing costs. Second, operating cycle management (inventory turnover, accounts receivable management) can moderate the impact of revenue declines on profits; this efficiency becomes especially valuable when access to credit is expensive. Third, the composition of working capital matters: too much working capital (e.g., excess inventory) ties up capital and lowers ROA/ROE, while too little working capital increases the risk of operational disruptions. Optimal decisions require continuous quantitative measurement and stress-testing of price and demand scenarios.

In conclusion, the relationship between BUMI's working capital and profits during the pandemic and post-pandemic period is causal and reciprocal: healthy working capital enabled the company to survive and capitalize on price recovery, which subsequently improved profits; conversely, working capital pressures in 2020 contributed to losses. In 2021, improved market conditions, reinforced by better working capital management, resulted in significant profits; while 2023 demonstrated the need for a more refined balance due to market volatility and historical burdens. Further quantitative analysis (calculation of the net working capital ratio, inventory turnover, days sales outstanding, and profit sensitivity to changes in cash flow) in each annual report would strengthen the empirical evidence and provide a more measurable basis for policymaking.

Theoretical Framework

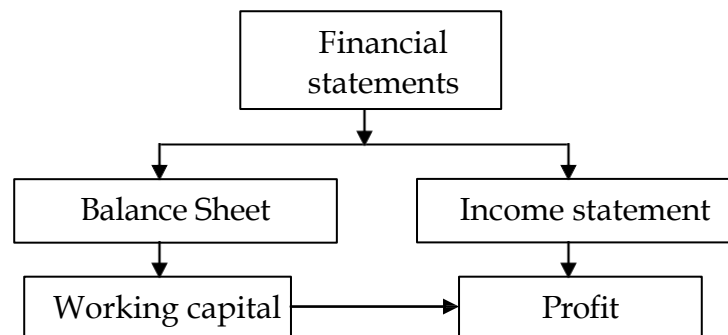


Figure 1. Conceptual Framework

This research is based on the understanding that capital is a fundamental factor in supporting operational activities and determining a company's level of profit

(profitability). In modern financial theory, capital reflects the economic resources used to generate profits through investment and operational activities. According to Brigham and Houston (2021), efficiently managed capital can increase a company's value because it provides the financial capacity to expand production capacity, cover operational costs, and mitigate business risks.

The relationship between capital and profit can be explained through several basic theories. Modigliani and Miller's (1958) theory of capital structure explains that financing decisions (between equity and debt) will affect the cost of capital and firm value. Although this theory initially assumed perfect market conditions, in practice, factors such as taxes, risk, and agency costs contribute to capital structure's significant impact on net profit. When the debt ratio is too high, interest expenses increase, thus decreasing net profit. However, if a company is able to utilize borrowed funds efficiently, profits can increase significantly.

Furthermore, the Trade-Off theory (Myers, 1984) states that companies will seek a balance between the benefits of using debt (such as tax reductions) and the financial risks arising from excessive debt. In the context of PT Bumi Resources Tbk, a mining company heavily relies on substantial capital to finance exploration activities, mine operations, and infrastructure development. Therefore, a balanced capital structure is crucial to ensure stable profits despite fluctuations in coal prices on the global market.

Meanwhile, the Pecking Order theory (Myers & Majluf, 1984) emphasizes the order of preference in financing, where companies prioritize internal capital, such as retained earnings, before using external sources like debt. The COVID-19 pandemic has caused economic uncertainty and decreased commodity demand, so companies with a high dependence on debt are likely to face liquidity pressures. In this situation, companies like PT Bumi Resources Tbk need to maximize the use of internal capital to maintain financial stability and maintain profitability.

A company's profit is the end result of all operational activities and is a key indicator of management's success in managing its resources (Kieso, Weygandt, & Warfield, 2020). Profit reflects the efficiency of asset utilization, the ability to control costs, and the effectiveness of financial strategies. Therefore, capital that is used productively will increase the company's chances of achieving optimal profits. Conversely, if capital management is ineffective, profits can decline even if the capital owned is substantial.

In resource-based theory (Barney, 1991), capital is a strategic resource that can provide a competitive advantage if managed efficiently and sustainably. For PT Bumi Resources Tbk, capital is not only financial funds, but also includes investments in physical assets such as mining equipment, technology, and human resources. Proper use of capital can increase production capacity, improve operational efficiency, and ultimately drive increased profits.

In addition to internal theory, external factors such as the COVID-19 pandemic also play a significant role in influencing the relationship between capital and profit.

According to a 2021 World Bank report, the pandemic caused significant disruption to global economic activity, including declining prices for energy and logistics commodities. For mining companies like PT Bumi Resources Tbk, this has placed significant pressure on revenue and cash flow. Therefore, a company's ability to manage capital is a determining factor in sustainable profitability during the 2020–2022 period.

Based on previous theories and research findings, the relationship between capital and profit can be conceptually formulated as indicating that increased capital managed efficiently will increase company profits. Research by Rahmawati and Nugroho (2021) shows that working capital has a significant impact on net profit in manufacturing companies. Research by Santoso (2020) also confirms that an optimal capital structure can increase profitability. However, research by Putra and Sari (2022) shows that during the COVID-19 pandemic, the effect of capital on profit became more variable due to external pressures that disrupt market stability and commodity prices.

Empirically, PT Bumi Resources Tbk faced significant challenges during the 2020–2022 period due to the pandemic, such as declining coal demand, export delays, and international price fluctuations. Despite this, the company continued to implement operational efficiency strategies and capital structure adjustments. The company's financial reports show that sound capital management helped maintain positive earnings amidst challenging circumstances. This demonstrates that effective capital utilization has a significant impact on earnings performance, even during the global crisis.

Based on the theoretical and empirical explanations, the following framework can be formulated: increased capital (both equity and borrowed capital) will increase a company's operational capacity. Increased capacity allows a company to produce more, expand markets, and increase sales, ultimately increasing profits. However, if the increase in capital is not accompanied by efficient management, such as high interest expenses or low asset productivity, profits can actually decline. Thus, the effect of capital on profits depends on how well a company manages its capital structure and external factors that influence economic stability.

Conceptually, the relationship between the independent variable (capital) and the dependent variable (profit) can be explained as a conditional positive relationship, namely that an increase in capital tends to increase profit if accompanied by effective financial management. In the context of this study, capital is proxied by total equity and long-term debt, while profit is measured using net profit after tax.

Theoretically, this research is expected to contribute to the development of financial management science, particularly in understanding the role of capital in maintaining profit stability during a crisis. Practically, the results of this study can serve as a basis for the management of PT Bumi Resources Tbk in formulating a capital management strategy that is more adaptive to changing global economic conditions in the future.

Method

A. Research Variables and Research Design

1. Research Variables The variables used in this study consist of independent and dependent variables.

a) Independent variables are variables that influence or cause changes in or the emergence of the dependent variable. Therefore, the independent variable in this study is working capital.

b) Dependent variables are variables that are influenced by or are the result of the independent variable. Therefore, the dependent variable in this study is profit.

2. Research Design

Research design is the steps that serve as guidelines in conducting research.

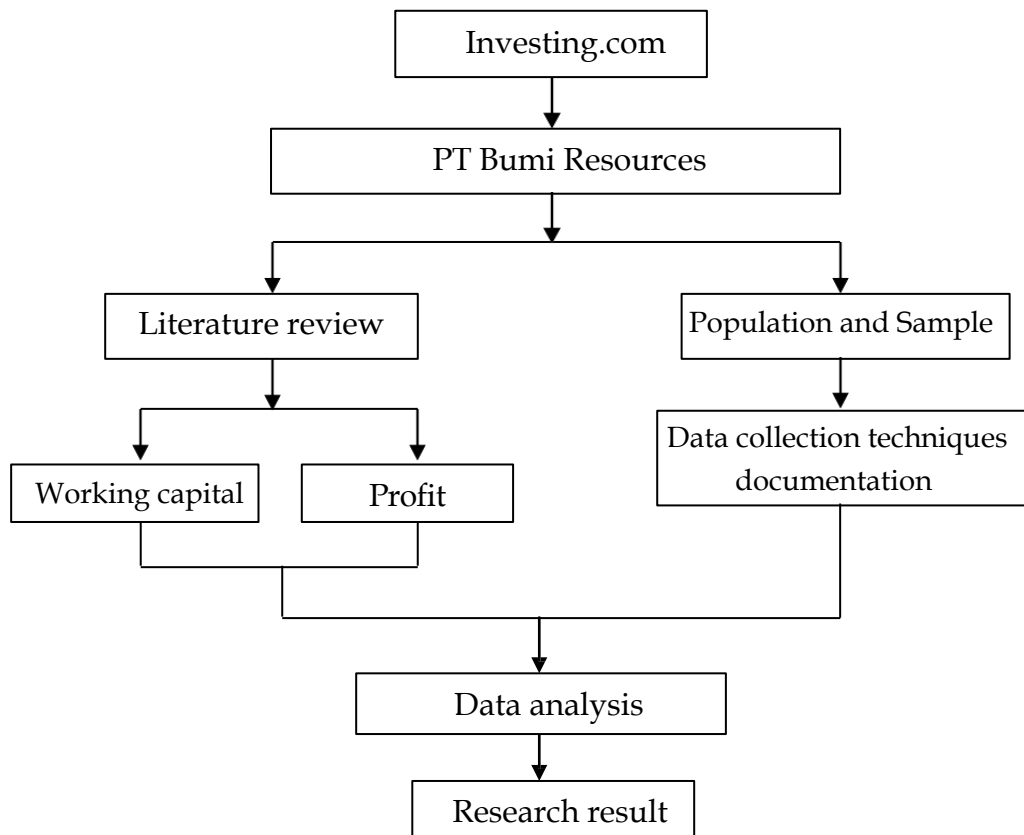


Figure 2. Research Design

B. Operational Definitions and Variable Measurement

1. Operational Definitions

The operational definitions of the research variables are explanations of each variable used in the study in relation to the indicators that form them.

- a) Net working capital is all current assets after deducting current liabilities used by PT Bumi Resources Tbk for operations over the past four years (2020-2023).
 - b) Profit is the profit earned by PT Bumi Resources Tbk from its operations over the past four years (2020-2023).
2. Variable Measurement The variable measurements used in this study consist of two: net working capital and net profit. Net working capital is the total current assets owned by the company after deducting current liabilities. Meanwhile, net profit is the excess of the company's revenue after deducting expenses, namely the company's expenses.
- C. Population and Sample
- The population in this study is all consolidated financial statement data for PT Bumi Resources Tbk for the 2020-2023 period. The sample consists of the statement of financial position (balance sheet) and income statement for PT Bumi Resources Tbk for the 2020-2023 period.
- D. Data Collection Techniques
- To obtain the data needed for this study, we used documentation as a data collection technique, namely by studying company documents to obtain data on net working capital and net profit. This data was obtained from the financial statements of PT Bumi Resources Tbk by accessing the Investing.com website.
- E. Data Analysis Techniques
1. Simple Linear Regression Method Simple linear regression is an analytical method used to determine the relationship between an independent variable and its dependent variable. According to Hasan (2016:250), the general equation for simple linear regression is as follows:
$$Y = a + bX$$

Wich is :

Y = Net profit
a = Constant
b = Regression coefficient
X = Working capital
 2. Hypothesis Testing Hypothesis used:
 - a) If $t_{table} > t_{count}$ then H_0 is accepted H_1 is rejected, working capital has no significant effect on profit.
 - b) If $t_{table} < t_{count}$ then H_0 is rejected H_1 is accepted, working capital has a significant effect on profit.
 3. Determination Coefficient Test The determination coefficient test (R^2) is used to determine the percentage contribution of the independent variable to the dependent variable. According to Hasan (2016:248) the formula for the determination coefficient is as follows:

$$R^2 = r^2 \times 100\%$$

Wich is:

R² = Coefficient of determination

r = Correlation coefficient

Results

1. Net Working Capital Analysis of PT Bumi Resources Tbk

Table 1. Development of Net Working Capital of PT Bumi Resources Tbk for the Period 2020-2023

Year	Current Assets (USD .000.000)	Current Liabilities (USD .000.000)	Working Capital (USD.000.000)	Changes (USD.000.000)
2020	397,38	1.298,66	-901,28	
2021	775,58	2.877,19	-2.101,61	-1.200,33
2022	772,73	922,76	-150,03	1.951,58
2023	704,72	785	-80,28	69,75

Source: Investing.com (data processed, 2025)

Based on Table 1, it can be seen that the development of PT Bumi Resources Tbk's net working capital increased during the 2020-2023 period. The highest increase occurred in 2022, amounting to 1,951.58 (in millions of USD). In 2021, working capital experienced a drastic decrease of 1,200.33 (in millions of USD). This was due to an increase in current liabilities, while the increase in current assets was not as significant as the current liabilities.

2. Net Profit Analysis of Bumi Resources Tbk

Table 2. Net Profit Development of PT Bumi Resources Tbk for the 2020-2023 Period

Year	Revenue (USD.000.000)	Net Profit (USD.000.000)	Changes (USD.000.000)
2020	790,44	-338,02	
2021	1.008,21	168,02	506,04
2022	1.830,08	525,27	357,25
2023	1.679,95	10,92	-514,35

Source: Investing.com (data processed, 2025)

Based on Table 2, it can be seen that the development of PT Bumi Resources Tbk's net profit tends to increase and decrease in 2023. The highest increase occurred in 2021, amounting to 506.04 (in millions of USD). Net profit increased due to the company's drastic increase in revenue. In 2023, net profit decreased by 514.35 (in millions of rupiah). This is because the increase in the company's expenses was greater than the increase in the company's revenue.

3. Simple Linear Regression Analysis

Table 3. Results of Simple Linear Regression Analysis of Working Capital on Profit

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	142.848	305.012		.468	.686
	Working Capital	.063	.266	.166	.239	.834

a. Dependent Variable: Net Profit

Source: processed data (SPSS 26 program output)

Based on Table 3, if it is entered into a simple linear regression equation, the results can be seen as follows:

$$Y = 142,848 + 0,063X$$

The meaning of this equation is as follows:

- a) The constant value (a) of the equation is 142.848. This figure indicates

the company's profit if the working capital variable is ignored.

- b) The regression coefficient (b) is 0.063, meaning that if working capital increases by 1 USD, there will be an increase in profit of 0.063 USD.

4. Hypothesis Testing

Based on Figure 3, it shows that $t = 0.236$ with a significance level (α) of 5% or 0.05. The degrees of freedom (df) can be calculated as $df = n - 2$ ($4 - 2$) = 2. From this result, the t table value is 4.303. These results indicate that $t \text{ table} > t \text{ count}$ ($4.303 > 0.236$), so H_0 is accepted and H_1 is rejected, meaning that working capital has no significant effect on profit.

5. Coefficient of Determination Test

Table 4. Results of the Coefficient of Determination Test between Working Capital and Profit

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.166 ^a	.028	-.458	432.631

a. Predictors: (Constant), Working Capital

Source: processed data (SPSS 26 program output)

Based on Table 4, the coefficient of determination (R^2) is 0.028, or 2.8%. This means that the independent variable, working capital, contributes 2.8% to the dependent variable, profit. The remaining 97.2% is influenced by factors outside of this study.

Discussion

This study aims to determine the effect of working capital on profit at PT Bumi Resources Tbk. In theory, "if the working capital used in operations increases, it should increase profit, and vice versa, if the working capital used is small, profit will decrease." The conditions at PT Bumi Resources Tbk show this, where working capital has increased and profit obtained at PT Bumi Resources has increased.

To determine the effect of working capital on profit at PT Bumi Resources Tbk, a simple linear regression analysis was conducted. From the results of the simple linear regression analysis of working capital on profit, a regression coefficient of 0.063 was obtained, which means that if working capital increases by 1 USD, then profit also increases by 0.063. Then, from the determination coefficient test, the result was 2.8%, which means that the independent variable, namely working capital, is able to contribute 2.8% to the dependent variable, namely profit, and the remaining 97.2% is influenced by other factors not examined.

Based on the research conducted, it was found that working capital has a positive but insignificant effect on profit at PT Bumi Resources Tbk. Working capital has a positive effect because each increase in working capital is followed by an increase in profit. However, working capital has an insignificant effect. This is because the company's working capital decreased while profit continued to increase.

Conclusion

Based on the results of the study on the analysis of working capital on profit at PT Bumi Resources Tbk, the following conclusions can be drawn:

1. PT Bumi Resources Tbk's working capital has increased. Meanwhile, PT Bumi Resources Tbk's net profit has both increased and decreased.
2. Based on the results of a simple linear regression analysis, working capital has a positive but insignificant effect on profit, where every USD 1 increase in working capital results in a profit increase of USD 0.063.
3. Based on the results of the hypothesis testing (t-test), it was found that $t_{table} > t_{count}$, i.e., $4.303 > 0.236$. This indicates that H_0 is accepted and H_1 is rejected, meaning working capital has an insignificant effect on profit.
4. The coefficient of determination test yielded a result of 2.8%, indicating that working capital contributes 2.8% to profit, with the remaining 97.2% influenced by other factors not examined.

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