



# Fundamental Analysis Of Nickel Companies' Stock Prices Listed On The Indonesia Stock Exchange For The Period 2020–2024

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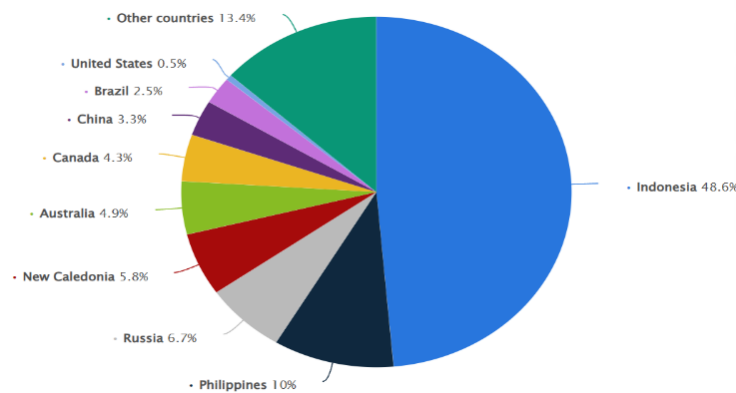
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**Abstract:** This study was conducted to examine the influence of financial ratios on stock price movements of nickel mining companies listed on the Indonesia Stock Exchange (IDX) from 2020 to 2024. Indicators used in the analysis include Return on Equity (ROE), Earnings per Share (EPS), Debt to Equity Ratio (DER), Price Earning Ratio (PER), and Price to Book Value (PBV), which represent aspects of profitability, solvency, and market valuation of the company. A quantitative approach was used in this study by processing secondary data in the form of annual financial reports from issuers that met the selection criteria. The results showed that each company has a different performance pattern based on the five ratios, where ANTM shows stability and growth, TINS presents high volatility, while INCO excels in a conservative financial structure. These findings are expected to serve as a reference for investors in making decisions based on fundamental analysis, as well as provide additional references for management and academics in assessing the dynamics of the nickel industry in Indonesia.

**Keywords:** Financial Ratios, Stocks, Investments

## INTRODUCTION

Indonesia is one of the largest nickel producing countries in the world (Tsirwiyati, 2023). The Indonesian nickel industry has shown significant development during the 2020–2024 period. Indonesia has become one of the largest nickel producers and exporters in the world, with reserves accounting for approximately 21% of total global reserves (Aksi Ekologi dan Emansipasi Rakyat, 2023). The government has implemented a nickel downstreaming policy through a ban on the export of raw nickel ore since 2020, aimed at increasing domestic value-added and encouraging investment in smelter development (Ministry of Energy and Mineral Resources, 2021). In 2022, Indonesia's nickel production reached approximately 1.6 million tons, nearly 50% of total global production, making this commodity a strategic mainstay in the mining sector.



**Figure 1.**Indonesia's Nickel Production Trends 2020–2024

Source : Statista (2024)

Global nickel demand shows a continuously increasing trend, especially due to its vital role in the electric vehicle battery industry as a key component of the cathode (Arif, 2023). This encourages Indonesia to not only pursue production volume but also increase added value through downstreaming policies.

In response to the need for domestic added value, the Indonesian government banned the export of raw nickel ore in 2020 and mandated domestic refining. This downstreaming program resulted in a surge in the export value of processed nickel products, from US\$11 billion in 2020 to US\$33 billion in 2022 (Directorate General of Minerals and Coal, 2024). However, increasing production capacity and exports of processed nickel also poses its own challenges. According to the report CNBC Indonesia (2024) A flood of nickel supply from Indonesia and the Philippines has caused global nickel prices to plummet to their lowest level since 2021, around US\$16,000 per ton. This price pressure could negatively impact the performance of nickel issuers listed on the IDX, such as PT Vale Indonesia Tbk (INCO), PT Aneka Tambang Tbk (ANTM), and PT Timah Tbk, which have come under investor scrutiny due to their heavy dependence on global commodity prices.

However, stock price movements of nickel issuers in the capital market are influenced not only by government policies or global demand, but also by internal company factors. To assess investment viability, investors generally use fundamental analysis, which includes financial ratios such as Return on Equity (ROE), Earnings per Share (EPS), Debt to Equity Ratio (DER),



Price Earnings Ratio (PER), and Current Ratio (CR). These ratios provide insight into a company's operational efficiency, return on capital, profitability, and capital structure.

Based on this description, this study aims to analyze the influence of fundamental ratios on stock prices in nickel companies listed on the Indonesia Stock Exchange (IDX) during the 2020–2024 period. The results of this study are expected to contribute to investment decision-making based on company financial performance and serve as an additional reference for investors and academics in understanding the dynamics of the nickel industry amidst global market challenges.

## **METHOD**

This study uses a quantitative descriptive method focused on examining and describing the fundamental financial situation of the companies studied, based on numerical data derived from financial statements. The quantitative approach was chosen because it provides objective and systematically measurable information, particularly in assessing the company's financial performance through various relevant financial ratios.

Fundamental analysis is used as a basis for assessing the viability of an investment by examining the company's financial condition. This approach focuses on reviewing financial statements to identify the intrinsic value of a stock and assess the company's overall condition. This method allows investors to gain a more comprehensive understanding of the profit opportunities and risks involved in investing in shares of companies operating in the nickel subsector.

This research falls into the descriptive quantitative category because it does not focus on hypothesis testing, but rather aims to systematically present the results of various financial ratios, such as ROE, DER, PER, and PBV. These ratios are used to describe the company's level of profitability, solvency, and stock valuation. The data used are sourced from secondary financial reports officially published by the company for the period 2020 to 2024.

The population in this study includes all companies in the nickel subsector listed on the Indonesia Stock Exchange (IDX). The sample was selected using purposive sampling, which establishes several specific criteria as the basis for selection. The sample selection criteria used in this study are as follows:



Information	Amount
Population: Food and beverage sub-sector companies listed on the Indonesia Stock Exchange for the 2020-2024 period	8
The sample was selected using purposive sampling technique which was determined by the following criteria:	
1. Companies that are not listed on the IDX consecutively from the period 2020-2024	-2
2. Companies that are not listed on the main stock exchange	-3
Number of samples that meet the criteria	3
Number of samples (n x research period) (3 x 5)	15

**Table 1.** Sample Selection Criteria

Source: Processed data, 2025

Based on the established criteria, three companies were selected as samples in this study, with a total of 15 observation data (3 companies × 5 years). The list of companies that met these criteria were PT Aneka Tambang Tbk. (ANTM), PT Vale Indonesia Tbk. (INCO), and PT Timah Tbk. (TINS).

## RESULTS AND DISCUSSION

### Research result

The following are the results of a fundamental analysis of a sample of selected companies based on established criteria for 5 consecutive years, namely from 2020 to 2024:

#### 1. PT Aneka Tambang Tbk

Year	PT Aneka Tambang Tbk				
	ROE	DER	EPS	PER	PBV
2020	6.04%	66.7%	48	40	2.44
2021	8.93%	58.0%	77	3	0.26
2022	16.11%	41.9%	159	12	2.01
2023	9.88%	37.5%	128	13	1.31
2024	11.96%	38.3%	160	10	1.14

**Table 2.** Financial Performance Analysis PT Aneka Tambang Tbk 2020-2024 period

Source: Processed data, 2025



PT Aneka Tambang Tbk (ANTM) has demonstrated consistently improving profitability year after year, as reflected in its Return on Equity (ROE) ratio. In 2020, ROE stood at 6.04%, rising consistently to 8.93% in 2021 and peaking at 16.11% in 2022. This ROE increase reflects the company's ability to manage its own capital to generate optimal net profit. Despite a slight decline to 9.88% in 2023, ANTM was able to rebound to 11.96% in 2024. A stable ROE above 10% over the past three years indicates ANTM as an efficient mining company and able to maintain competitiveness in an industry that is very sensitive to commodity prices.

In terms of capital structure, ANTM has shown an improving trend, with a consistent decline in its Debt-to-Equity Ratio (DER) from 66.7% in 2020 to around 38% in 2024. This DER decline demonstrates ANTM's success in reducing its reliance on debt and strengthening its financial structure. With a consistently lower DER, the company's financial risk is lower, providing management with more room to expand or develop its business without the burden of high debt interest. This increasingly healthy capital structure is a significant advantage, particularly amidst the volatility of the mining sector.

In terms of earnings per share (EPS), ANTM recorded significant growth, from 48 in 2020 to 160 in 2024. This upward EPS trend demonstrates ANTM's ability to increase profits, which are truly enjoyed by shareholders. The EPS surge is also a strong indicator that the company has successfully improved operational performance and efficiency, thereby creating added value for investors.

In terms of market valuation, ANTM's Price-to-Earnings Ratio (PER) dropped drastically to 3 in 2021, likely due to a sharp increase in net profit, making the stock significantly undervalued at the time. However, the PER returned to the 10–13 range in 2022–2024, indicating that the market valuation of ANTM shares is beginning to reflect the company's fundamentals more rationally and stably. This PER range remains quite attractive compared to the average for the mining sector, which is often influenced by sentiment and global nickel price volatility.

*Price to Book Value* ANTM's (PBV) also showed a decline, from 2.44 in 2020 to 1.14 in 2024. This decline in PBV could mean that ANTM shares are becoming cheaper relative to their book value. If fundamentals remain sound and the national nickel outlook is positive, this low valuation presents an accumulation opportunity for long-term investors, as the stock price has the potential to rise when the market begins to appreciate the strong fundamentals.



Overall, ANTM has demonstrated consistent fundamental improvements over the past five years, both in terms of profitability, capital structure efficiency, and the potential for sustainable earnings growth. With reduced financial risk and an increasingly attractive market valuation, ANTM is well worth considering as a key component of a fundamentally-based investment portfolio.

## 2. PT Timah Tbk

PT Timah Tbk 2020-2024					
Year	ROE	DER	EPS	PER	PBV
2020	-6.89%	193.87%	-46	(32)	2.24
2021	20.65%	132.88%	175	8	1.72
2022	14.79%	85.56%	140	8	1.24
2023	-7.20%	105.90%	-60	(11)	0.77
2024	15.93%	71.81%	159	6	1.03

*Table 3. Financial Performance Analysis of PT Timah Tbk for the 2020-2024 Period*

*Source: Processed data, 2025*

PT Timah Tbk (TINS) has exhibited highly volatile performance over the past five years, as clearly reflected in its five key ratios. In terms of Return on Equity (ROE), TINS experienced significant volatility: in 2020 and 2023, ROE was negative (-6.89% and -7.20%), indicating the company suffered a net loss and failed to generate profits from its equity. However, in 2021 and 2024, TINS recorded a significant surge in ROE, reaching 20.65% and 15.93%, respectively, indicating periods of recovery and high, albeit inconsistent, profitability. TINS's Debt to Equity Ratio (DER) is also relatively high compared to other nickel mining issuers, starting at 193.87% in 2020 and remaining at 71.81% in 2024, despite a downward trend. This shows that TINS has a fairly large debt burden, so the company's financial risk is higher, especially when its profitability is poor.

In terms of Earnings per Share (EPS), TINS also experienced sharp dynamics with negative EPS values in 2020 (-46) and 2023 (-60), confirming a loss per share in those two years, while in other years the company was able to record significant earnings per share, especially in 2021 and 2024 (175 and 159). This indicates that TINS is in a very vulnerable position to market volatility and high production costs, so that profits achieved are inconsistent from year to year. The Price to Earnings Ratio (PER) is also affected, where in the loss years (2020 and 2023) it recorded a negative value, while when the company was profitable, the PER was in the low



range, namely 6-8, indicating that the stock valuation tends to be cheap when its financial performance improves. However, due to inconsistent profit performance, this valuation should still be viewed with caution.

TINS's Price-to-Book Value (PBV) decreased from 2.24 in 2020 to 1.03 in 2024, indicating that TINS's stock market price is approaching, or even below, its book value. While a decline in PBV is generally attractive to investors seeking undervalued stocks, caution is warranted in TINS's case, as the decline could also be caused by weakening market confidence due to fluctuating earnings performance and a high debt burden.

TINS exhibits unstable fundamentals, with fluctuating earnings performance, still relatively high financial risk, and a relatively low market valuation. The company has the potential to deliver high returns when profitability improves, but also carries significant risks when financial performance declines. Given these characteristics, TINS is more suitable for aggressive investors willing to take high risks. For a long-term, fundamentals-based portfolio, TINS still needs improvements and consistency in generating profits and reducing its debt burden.

### 3. PT Vale Indonesia Tbk

PT Vale Indonesia Tbk 2020-2024					
Year	ROE	DER	EPS	PER	PBV
2020	4.10%	14.57%	137	37	<b>1.51</b>
2021	7.70%	14.78%	274	17	<b>1.30</b>
2022	8.51%	12.88%	331	21	<b>1.80</b>
2023	10.70%	14.09%	453	9	<b>1.00</b>
2024	2.11%	16.24%	95	38	<b>0.85</b>

**Table 4.** Financial Performance Analysis of PT Vale Indonesia Tbk for the 2020-2024 Period

Source: Processed data, 2025

PT Vale Indonesia Tbk (INCO) demonstrates relatively stable and healthy fundamental performance compared to other nickel issuers, particularly in terms of financial management and profit-generating capabilities. INCO's Return on Equity (ROE) generally experienced an upward trend from 4.10% in 2020 to a peak of 10.70% in 2023, although it declined quite sharply to 2.11% in 2024. The increase in ROE over the first four years reflects the company's ability to manage its equity to generate profits efficiently, although the decline in 2024 indicates pressure on profitability that requires further scrutiny. In terms of Debt to Equity Ratio (DER), INCO has



a very low and stable ratio, ranging from 12.88% to 16.24% over the five years. This indicates the company's very healthy and conservative capital structure, with minimal reliance on debt. This makes INCO's financial risk relatively small and provides more flexibility for management to face market fluctuations or expansion opportunities without the pressure of interest expenses.

In terms of Earnings per Share (EPS), INCO shows impressive performance with EPS continuing to rise from 137 in 2020, successively to 274, 331, and even 453 in 2023, before dropping drastically to 95 in 2024. The consistent increase in EPS until 2023 shows that the company is able to maintain good profit growth and provide added value for shareholders, but the sharp decline in 2024 is a warning signal that the company's profitability could be severely affected by external conditions or rising operating costs. In terms of Price to Earnings Ratio (PER), INCO shows quite wide fluctuations: PER is high in low EPS years (37 in 2020 and 38 in 2024), but drops to a more attractive figure in 2023 (9), reflecting that the stock was undervalued during high profits, then returned to being relatively expensive when profits fell. INCO's Price-to-Book Value (PBV) also experienced a downward trend, from 1.51 in 2020 to just 0.85 in 2024. This means INCO shares are now trading below their book value. If financial performance and earnings can improve, this low PBV level presents a compelling opportunity for future price appreciation.

PT Vale Indonesia Tbk has a very solid capital structure and low financial risk, with a track record of profitability that is quite good until 2023. Although earnings and profitability in 2024 experienced a significant decline, the company's fundamentals remain relatively healthy, particularly with very minimal debt. For investors who prioritize financial stability and low risk, INCO could be an attractive defensive option in a long-term portfolio, provided that future earnings prospects can recover quickly.

## **CONCLUSION**

Analysis of five financial ratios in three nickel companies showed varying results, as follows:

1. PT Aneka Tambang Tbk (ANTM) is performing steadily with an increasing return on equity (ROE) and steadily decreasing debt (DER), coupled with strong earnings per share (EPS)



growth. Its stock valuation, based on its PER (Per Share) ratio (PER), has begun to improve, while its PBV (Price to Price) has declined, signaling potential undervaluation.

2. PT Timah Tbk (TINS) has shown inconsistent performance. ROE and EPS were negative, indicating losses, while DER remained high, indicating a heavy reliance on debt. Although its valuation appears low through PER and PBV, this is more due to weak performance.
3. PT Vale Indonesia Tbk (INCO) is showing a healthy financial position, marked by a very low DER and increasing EPS through 2023, despite a decline in the last year. ROE is quite good but has declined, and the continued decline in PBV signals that the stock may be trading below fair value..

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