

ANALYSIS OF COAL PRICES AND GOVERNMENT POLICIES THEIR IMPLICATIONS ON THE FINANCIAL PERFORMANCE OF MINING COMPANIES IN INDONESIA



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Abstract

This study aims to analyze the influence of coal price fluctuations and government policies on the financial performance of coal mining companies in Indonesia for the 2019–2025 period. The performance indicators used include Net Profit Margin (NPM), Return on Assets (ROA), and Return on Equity (ROE). The results of the discussion show that the financial performance of coal mining companies has a strong relationship and is in line with global coal price movements. In 2020, when coal prices fell due to the COVID-19 pandemic, the company's revenue and net profit decreased, so the profitability ratio also weakened. This condition occurs because most operating costs are relatively fixed, while revenue is highly dependent on the selling price of commodities. On the other hand, in the 2021–2022 period, the increase in coal prices drove a significant increase in revenue, net profit, NPM, ROA, and ROE. However, entering 2023–2025, the normalization of coal prices has caused profitability to be corrected again, although the rate of decline differs between companies because it is influenced by cost efficiency, capital structure, business diversification, and investment strategies. In addition to global prices, government policies through the Domestic Market Obligation (DMO) scheme also affect financial performance. A case study of PT Adaro Energy Indonesia Tbk shows that the implementation of a 25% DMO reduces profits by around 19%, while a 30% DMO reduces profits by around 23%. These findings confirm that the performance of coal companies is pro-cyclical and is greatly influenced by commodity prices and government policies.

Keywords: Coal Price, Financial Performance, Profitability, DMO, Mining Company

INTRODUCTION

According to the Central Statistics Agency (2026), coal is one of Indonesia's important export commodities that has a major market in the Asian region. This position shows that the coal mining sector not only functions as an extractive activity, but also as a support for foreign trade, a source of foreign exchange, and an important part of the country's revenue structure. In a global context, the International Energy Agency (2024) explained that world coal demand is still largely concentrated in the Asian region, especially China, India, and ASEAN countries. This places Indonesia as one of the important actors in the regional energy supply chain. Domestically, coal also still plays a major role in the provision of national energy, especially as a fuel for steam power plants. The Ministry of Energy and Mineral Resources (2025) emphasized that coal price dynamics remain an important concern because they are directly related to energy policy, domestic supply, and the stability of the national electricity system.

The coal mining sector also has extensive economic linkages with supporting sectors, such as mining contractor services, transportation, ports, heavy equipment, banking, and the energy industry. The World Bank (2025) states that changes in the price of energy commodities can affect the economic performance of exporting countries, especially if these commodities have a large role in national exports. In the context of Indonesia, coal mining activities not only generate income for companies, but also create economic activities in mine-producing areas through labor absorption, infrastructure development, and turnover of local business activities. Ross et al. (2022) explain that sectors with broad economic linkages tend to have a multiplier effect on other business activities. Therefore, changes in the condition of the coal industry can have an impact not only on mining companies, but also on government revenue, supporting industry activities, and regional economic stability.

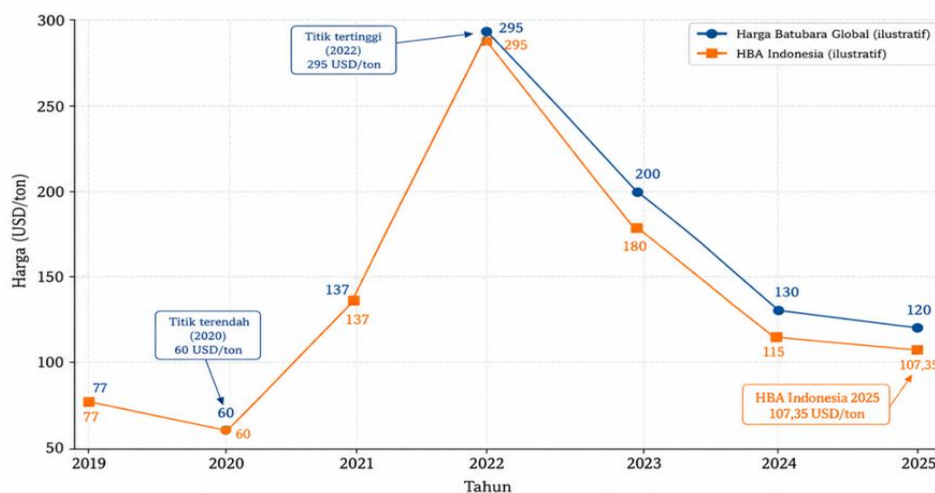
Despite having a large economic contribution, the coal industry is a commodity-based industry that is very sensitive to global price changes. Pindyck and Rubinfeld (2018) explain that companies in the commodity market generally act as price takers because prices are formed by international demand and supply mechanisms. In the coal industry, prices are influenced by global economic growth, energy demand, destination country import policies, logistics costs, geopolitical conditions, and the development of new and renewable energy. The International Energy Agency (2024) shows that changes in demand from major countries such as China and India can affect the balance of the world coal market. Thus, Indonesian coal companies face high external risks because the selling price of products cannot be fully controlled by the company. Endri et al. (2021) also found that the Benchmark Coal Price has a relationship with the profitability of coal companies in Indonesia.

Another characteristic of the coal industry is the high fixed costs in operational activities. Brigham and Houston (2021) explain that companies with large fixed costs will experience stronger profit pressures when revenues decrease. In mining activities, the costs of heavy equipment, land stripping, contractors, labor, transportation, maintenance, and infrastructure cannot always be reduced quickly when coal prices fall. This condition causes the company's profit margins to be highly dependent on the selling price of coal. When prices rise, profits can increase significantly because costs do not rise as quickly as revenue. Conversely, when prices fall, profits can decline sharply because fixed costs still have to be incurred. Ross et al. (2022) stated that the cost structure and operating leverage can magnify

the impact of revenue changes on a company's profit. Therefore, the coal industry has a very cyclical financial character.

The 2019–2025 period is an important phase to study because coal prices are experiencing very dynamic changes. In 2019, the coal market was still in a relatively normal condition, although it began to face pressure from the slowdown in global demand and energy transition issues. Entering 2020, the COVID-19 pandemic caused world economic activity to weaken, energy consumption to decrease, and coal demand to be depressed. The World Bank (2025) explained that energy commodity prices are very vulnerable to changes in global demand, especially during economic slowdowns. In that period, coal prices fell to a low range of around USD60 per ton. This decline had a direct impact on mining companies' revenues as sales value decreased, while most operating costs still had to be covered. The International Energy Agency (2024) showed that changes in global energy consumption during the pandemic were one of the main factors that pressured the coal market.

After the pandemic pressure began to subside, coal prices experienced a sharp spike in the 2021–2022 period. The International Energy Agency (2024) explained that the global economic recovery increased energy demand, while energy supply disruptions and rising natural gas prices made coal an energy choice again in many countries. During this period, coal prices increased to around USD137 per ton in 2021 and reached around USD295 per ton in 2022. This price increase provides great benefits for coal companies because revenues rise faster than production costs. Wildani (2022) found that the increase in coal prices has a positive influence on the Return on Assets and Net Profit Margins of coal companies listed on the Indonesia Stock Exchange. This phenomenon shows that the commodity price boom phase can result in a significant increase in profitability for mining companies.



Sumber: World Bank, IEA, Kementerian ESDM, dan data narasi penelitian; diolah penulis.
Catatan: angka 2023–2025 bersifat ilustratif mengikuti narasi normalisasi harga.

Figure 1.

Global Coal Price Trends and Indonesia's Benchmark Coal Prices

Source: International Energy Agency, and Ministry of Energy and Mineral Resources, 2026

Figure 1 shows the dynamics of coal prices from the downward phase in 2020, a sharp spike in 2021–2022, to price normalization in 2023–2025. The World Bank (2025) noted that coal prices in 2025 weakened due to weakening Asian import demand and relatively stable

supply. Price normalization is also reflected in Indonesia's Benchmark Coal Price data. The Ministry of Energy and Mineral Resources (2025) noted that the HBA for the first period of July 2025 was in the range of USD107.35 per ton. The International Energy Agency (2025) also explained that global coal demand tends to be in a flat phase, with changes strongly influenced by the demand dynamics of China and India. Therefore, Figure 1 strengthens the argument that Indonesian coal companies operate in a highly volatile price environment. Fluctuations in coal prices have a direct impact on the financial performance of mining companies, especially on revenue, net profit, Net Profit Margin, Return on Assets, and Return on Equity. Brigham and Houston (2021) explain that Net Profit Margin indicates a company's ability to convert sales into net profit. When coal prices rise, the company's revenue increases because each ton of coal generates a higher selling value. Ross et al. (2022) stated that Return on Assets reflects the effectiveness of assets in generating profits. In the context of mining companies, assets such as heavy equipment, mining land, infrastructure, and port facilities will look more productive when net profits increase. Endri et al. (2021) emphasized that coal prices and internal factors of companies both affect the profitability of coal companies in Indonesia.

Return on Equity is also an important indicator because it describes the rate of return to shareholders. According to Ross et al. (2022), ROE is influenced by the company's net profit, capital structure, and use of leverage. When coal prices increase, the company's net profit tends to rise, so the ROE also increases. Conversely, when coal prices fall, net profit can weaken and ROE is also corrected. Wildani (2022) shows that changes in coal prices and Domestic Market Obligation policies are related to the profitability ratio of coal companies. Thus, NPM, ROA, and ROE can be used to read how strongly a company's financial performance responds to changes in coal prices.

The conceptual relationship that rising coal prices will increase revenue, widen profit margins, increase net profit, and ultimately increase NPM, ROA, and ROE. Pindyck and Rubinfeld (2018) explain that commodity companies will earn increased revenues when market prices rise, even though production volumes do not change significantly. In the coal industry, the relationship becomes stronger because some operating costs are fixed and not easily reduced in the short term. Brigham and Houston (2021) stated that fixed cost structures can magnify the impact of revenue changes on profits. On the other hand, when coal prices fall, revenues weaken, margins narrow, net profits decrease, and profitability ratios are also corrected. Endri et al. (2021) show that this pattern is relevant in explaining the profitability of coal companies in Indonesia.

This pro-cyclical pattern is seen in a number of coal mining companies in Indonesia, such as PT Adaro Energy Indonesia Tbk, PT Bukit Asam Tbk, PT Indo Tambangraya Megah Tbk, PT Bayan Resources Tbk, PT Golden Energy Mines Tbk, PT Harum Energy Tbk, PT Indika Energy Tbk, PT Mitrabara Adiperdana Tbk, PT Baramulti Suksessarana Tbk, PT TBS Energi Utama Tbk, and PT Dian Swastatika Sentosa Tbk. The Indonesia Stock Exchange (2025) provides financial statements and annual reports of issuers that can be used to assess changes in revenue, net profit, and profitability ratios of these companies. In the low price period of 2020, most companies experienced performance pressure. When prices increased in 2021–2022, the company's profitability improved significantly. The World Bank (2025) shows that changes in global coal prices are an important factor that affects the performance cycle of energy companies.

Despite having the same general pattern, each company has a different level of sensitivity to coal prices. Brigham and Houston (2021) explain that differences in cost structure and capital structure can cause the impact of changes in revenue on profits to differ between companies. Companies with low production costs, efficient logistics infrastructure, good-quality reserves, and strong operational management tend to be better able to maintain margins when prices fall. In contrast, companies with high costs, large debt burdens, or high dependence on export markets will be more susceptible to price declines. Siregar and Utama (2008) point out that internal characteristics of companies can affect financial performance and reporting. Therefore, the analysis of coal companies' performance needs to pay attention to internal factors other than global prices.

Business diversification is also a factor that affects the sensitivity of companies to fluctuations in coal prices. Ross et al. (2022) explain that diversification can help companies reduce risks if the source of income does not depend only on one commodity. Some coal companies have begun to develop their businesses in the energy, logistics, mining services, waste management, and new and renewable energy sectors. These strategies can reduce dependence on coal in the long term. However, Brigham and Houston (2021) explain that expansion and diversification can also increase investment needs and financial burdens in the early stages. Thus, diversification can be a risk mitigation strategy, but it can also affect profits if it does not generate stable cash flow. The International Energy Agency (2025) emphasized that the direction of the global energy transition is an important factor that coal companies need to pay attention to in designing long-term strategies.

Global price fluctuations, government policies are also an important factor that affects the financial performance of coal companies. One of the main policies in Indonesia's coal industry is the Domestic Market Obligation or DMO. The Ministry of Energy and Mineral Resources (2020) sets the DMO obligation at 25% of the production plan and the selling price of coal for power plants at USD70 per ton. This policy aims to maintain domestic coal supply, especially for steam power plant needs. From an energy policy perspective, DMO is an instrument to ensure that domestic needs are not disrupted when export prices are higher. Amri and Khajar (2023) explain that DMO and capping price policies can affect the profitability of coal mining companies.

In terms of national interests, DMO has an important role in maintaining energy security and stability of power plant costs. The Ministry of Energy and Mineral Resources (2021) emphasized that the selling price of coal for electricity remains at USD70 per ton to maintain the sustainability of supply for the public interest. This policy provides certainty for the electricity sector because power plants are not fully affected by the increase in global coal prices. However, from a company's perspective, DMO can reduce revenue potential because some production must be sold at a lower domestic price than export prices. Amri and Khajar (2023) show that the capping price and DMO policies are related to the profitability of mining companies. Thus, DMO has a dual consequence, namely maintaining the public interest while reducing company margins.

The impact of the DMO policy can be seen through a case study of PT Adaro Energy Indonesia Tbk in 2025. Based on the simulation in the research discussion, the export price is assumed to be USD120 per ton, while the domestic price or DMO is USD70 per ton. PT Adaro Energy Indonesia Tbk (2025) can be used as an example of a large company that has exposure to the domestic and export markets. With a production of 17.4 million tons and

operating costs of around USD53 per ton, a scenario without DMO results in higher profits because all production can be sold at export prices. When the 25% DMO is applied, profits are estimated to fall by around 19%. When the portion of DMO increases to 30%, profits fall by around 23%. Wildani (2022) supports that the DMO policy has a relationship with the profitability of coal issuers in Indonesia.

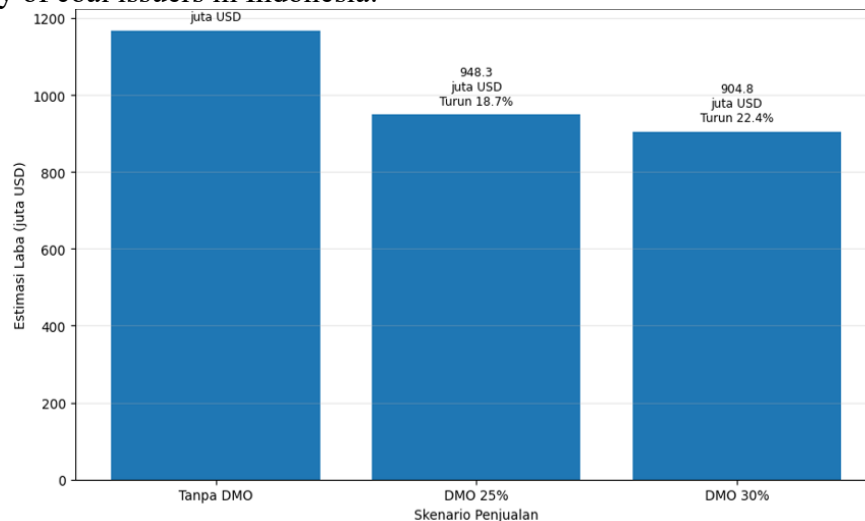


Figure 2.
Impact of DMO Policy on Profit in 2025
Source: PT Adaro Energy Indonesia Tbk

Figure 2 can be presented in the form of a bar chart that compares three scenarios, namely a scenario without a DMO, a 25% DMO scenario, and a 30% DMO scenario. The illustration of PT Adaro Energy Indonesia Tbk shows that an increase in the portion of DMO by 5% can reduce profits by around USD44 million. The Ministry of Energy and Mineral Resources (2020) explains that the DMO obligation is set to guarantee domestic needs, but the difference in domestic and export prices can create opportunity costs for companies. When global prices are higher than domestic prices, companies lose the opportunity to obtain larger export margins. Amri and Khajar (2023) emphasized that the policy of capping coal prices for electricity needs can affect the profitability of mining companies. Thus, Figure 3 strengthens the argument that government policies are an important variable other than global prices in determining the financial performance of coal mining companies.

Based on this description, the financial performance of coal companies is influenced by a combination of external and internal factors. The World Bank (2025) shows that external factors such as Asian import demand and global supply play an important role in shaping coal prices. Other external factors are government policies, especially DMO and domestic pricing for electricity needs. On the internal side, companies face differences in operational efficiency, cost structure, capital structure, asset quality, and diversification strategies. Endri et al. (2021) show that coal companies' profitability is influenced by HBAs and internal variables such as leverage, growth, liquidity, and company size. Therefore, it is not enough to analyze financial performance only to look at profits, but it is necessary to look at the interaction between prices, policies, and company characteristics.

Several previous studies have discussed the relationship between commodity prices and the profitability of mining companies. Endri et al. (2021) examined the influence of HBA and internal factors on the profitability of Indonesian coal companies. Wildani (2022) examined the influence of commodity supercycle and Domestic Market Obligation on profitability ratios, especially Net Profit Margin and Return on Assets. Amri and Khajar (2023) discussed the influence of capping prices and DMO implementation on the profitability of mining companies. However, research that combines global coal price fluctuations, corporate financial indicators, and the impact of DMO policies in a single framework for the 2019–2025 period still needs to be developed. This gap is important because the period includes the pandemic phase, price boom, price normalization, and policy consequences changes on company margins.

The research gap of this research lies in the need to analyze in an integrated manner the influence of coal price fluctuations and government policies on the financial performance of coal mining companies in Indonesia. The International Energy Agency (2025) explained that the global coal demand trend is still moving dynamically and is greatly influenced by Asian countries. The World Bank (2025) noted that coal prices in 2025 will weaken due to weaker demand and stable supply. Meanwhile, the Ministry of Energy and Mineral Resources (2025) shows that Indonesia's HBA also moves to follow market dynamics. Therefore, the period 2019–2025 provides a rich space for analysis because it reflects pandemic pressures, price spikes, price normalization, and the influence of DMO policies on company profitability. Thus, research on the influence of coal price fluctuations and government policies on the financial performance of coal mining companies in Indonesia for the 2019–2025 period is important to be conducted. Pindyck and Rubinfeld (2018) explain that the commodity industry is strongly influenced by market price cycles. In the context of Indonesian coal, the cycle is strengthened by global demand dynamics, energy policies, and domestic supply obligations. Brigham and Houston (2021) explain that profitability analysis is important to assess a company's ability to generate profits from sales, assets, and equity. Therefore, this study aims to analyze the influence of coal price fluctuations and government policies on the financial performance of coal mining companies in Indonesia, especially through indicators of revenue, net profit, NPM, ROA, and ROE.

REVIEW OF LITERATURE

Commodity Price Theory

Commodity price theory explains that the price of a commodity is determined by the interaction between demand and supply, both in domestic and global markets. In the context of coal, prices are not only influenced by the amount of production and consumption, but also by geopolitical conditions, changes in exchange rates, transportation costs, trade policies, supply levels, as well as changes in the direction of energy policies of major consumer countries. Pindyck and Rubinfeld (2018) explain that commodity markets have a character that is strongly influenced by the balance of demand and supply, so small changes on one side of the market can lead to considerable price changes. Deaton and Laroque (1992) also assert that commodity prices often show high volatility because they are influenced by market expectations, stock changes, and demand uncertainty. In the coal industry, this character is even stronger because coal is an energy commodity that is traded internationally.

In the coal mining industry, companies generally act as price takers, which are the parties that receive market prices that are formed globally. Sitepu et al. (2025) show that the price of coal commodities is related to the performance of coal mining companies because the company's revenue is greatly influenced by the selling price. When the price of coal increases, the value of sales per ton also increases, so the company's revenue and profit tend to improve. Conversely, when coal prices decline, companies face pressure on revenues because sales value falls, while operating costs cannot always be reduced quickly. The International Energy Agency (2024) explained that global coal demand is still heavily influenced by China, India, and the Asian region, so changes in energy consumption in these countries can have an impact on international coal prices.

In the Indonesian context, coal price movements can be seen through the Benchmark Coal Price or HBA set by the government, as well as international price indices such as the Newcastle Coal Index. HBA is an important reference in national coal transactions because it is used as a basis for determining selling prices and evaluating the domestic coal market. The Ministry of Energy and Mineral Resources (2025) notes that HBA moves to follow global market dynamics, although it is still influenced by national formulas and policies. Therefore, commodity price theory is an important basis for explaining why coal price fluctuations can affect revenue, net profit, Net Profit Margin, Return on Assets, and Return on Equity of coal mining companies.

Commodity Cycle Theory

Commodity price cycle theory explains that commodity prices tend to move in cyclical patterns, i.e., experiencing a sharp rise or boom phase and a sharp decline or bust phase. This pattern often occurs because adjustments between demand, supply, production investment, and market expectations do not occur quickly. Cashin, McDermott, and Scott (2002) explain that the price of primary commodities often moves in long cycles characterized by periods of price increases and decreases. In the mining industry, this cycle is especially important because production decisions, heavy equipment investments, new mine openings, and infrastructure development usually take a long time. As a result, when prices rise, companies cannot always immediately increase production quickly; instead, when prices fall, companies are also not always able to immediately reduce production capacity.

In the coal industry, the price cycle is clearly visible in the 2019–2025 period. Coal prices weakened in 2020 due to the COVID-19 pandemic, then increased sharply in 2021–2022 due to the global economic recovery and energy crisis. The World Bank (2025) explained that coal prices will experience pressure again in 2025 due to weakening demand for Asian imports and relatively stable supply. This phenomenon shows that coal prices do not move linearly but follow the dynamics of the global cycle. The International Energy Agency (2025) also shows that global coal demand is greatly influenced by the Asian region, especially China and India, so that changes in demand from these regions can strengthen the boom and bust phases.

For mining companies, commodity price cycles have direct consequences on financial performance. When prices are in the boom phase, companies earn higher revenues, profit margins widen, cash flows increase, and ability to pay liabilities becomes stronger. However, when prices enter the bust phase, companies face margin pressure, declining profits, and potential solvency weakening if debt burdens are high. Ross et al. (2022) explain that companies with fixed cost structures and high leverage will be more sensitive to changes

in revenue. Therefore, commodity price cycle theory is relevant to explain why the profitability of coal companies in Indonesia increased sharply in 2021–2022 and then corrected in the price normalization period of 2023–2025.

Theory of Government Policy and Public Policy

Government policy theory explains that state regulations can affect company behavior through legal, fiscal, trade, and market control instruments. In the coal mining sector, government policies not only act as administrative rules, but also as instruments to maintain a balance between corporate interests, state revenues, national energy needs, and public interests. Dye (2017) explained that public policy is a choice of government action to regulate, limit, or encourage the behavior of actors in society. In the context of the coal industry, these policies can be in the form of setting Benchmark Coal Prices, Domestic Market Obligation obligations, royalties, taxes, export restrictions, downstream policies, and environmental regulations.

The Domestic Market Obligation or DMO is one of the most relevant policies in Indonesia's coal industry. The Ministry of Energy and Mineral Resources (2020) set the DMO obligation at 25% of the production plan and the selling price of coal for power plants at USD70 per ton. This policy aims to maintain the availability of domestic coal supply, especially for the benefit of steam power plants. From a public policy perspective, DMO can be understood as a form of government intervention to ensure that domestic energy needs are not disrupted when export prices are higher. However, from a corporate perspective, this policy can reduce margins because some production must be sold at a domestic price lower than the export market price.

Government policies can also affect the cost structure and profitability of companies. Amri and Khajar (2023) explain that the capping price policy and the implementation of DMO can affect the profitability of coal mining companies in Indonesia. When export prices are higher than domestic prices, companies experience opportunity costs because they lose the opportunity to sell all production at international market prices. In addition to DMOs, royalty policies, taxes, reclamation obligations, and environmental regulations can also affect the company's operational costs and business strategy. Thus, government policy theory is the basis for explaining how state regulations can affect the selling price, sales volume, cost structure, profit margin, and financial performance of coal companies.

Financial Performance Theory

Financial performance is an overview of a company's ability to generate profits, manage assets, utilize capital, and maintain business sustainability. Brigham and Houston (2021) explain that financial performance can be analyzed through the ratio of profitability, liquidity, solvency, and activity. In coal mining company research, the indicators that are often used are Net Profit Margin, Return on Assets, Return on Equity, and Debt to Equity Ratio. Net Profit Margin shows the company's ability to generate net profit from sales. Return on Assets describes the company's effectiveness in using assets to generate profits. Return on Equity shows the level of return on shareholder capital. Debt to Equity Ratio describes the level of dependence of the company on debt financing.

In the coal industry, financial performance is greatly influenced by the selling price of commodities. When coal prices increase, the company's revenue tends to increase because each ton of coal produces a higher sales value. Ross et al. (2022) explain that an increase in

revenue will improve profitability if operational costs can be controlled. Conversely, when coal prices fall, the company's profits can weaken because a decrease in revenue is not always followed by a decrease in costs in the same proportion. Safutri et al. (2024) used financial ratios such as Current Ratio, Debt to Equity Ratio, and Return on Assets to assess mining companies in the coal sub-sector, so the study shows that financial ratios can be used to read the performance and value of companies in the coal industry.

Financial performance is also an important measure for investors and creditors in assessing the company's prospects. Companies that have high ROA and ROE are generally seen as able to generate good returns on their assets and equity. However, high profitability in the coal industry needs to be analyzed carefully because it can be temporary if caused by an increase in commodity prices. Endri et al. (2021) show that coal prices and internal factors of companies have an influence on the profitability of coal companies in Indonesia. Therefore, the theory of financial performance in this study is used to explain how fluctuations in coal prices and government policies are reflected in changes in revenue, net profit, NPM, ROA, ROE, and DER.

Risk and Uncertainty Theory (I)

Risk and uncertainty theory explains that companies face future conditions that are not entirely predictable. Knight (1921) distinguishes between risk and uncertainty, where risk can be measured based on certain possibilities, while uncertainty is more difficult to calculate because it relates to changes in uncertain conditions. In the coal industry, risk and uncertainty arise from price fluctuations, changes in global demand, exchange rates, logistics costs, supply disruptions, as well as changes in government policies. Coal companies face high external risks because many important factors are beyond management's control.

Fluctuations in coal prices are one of the main sources of risk for mining companies. The World Bank (2025) explained that coal prices in 2025 will decline due to weakening demand for Asian imports and relatively stable supply. When coal prices fall, companies can experience a decrease in revenue, weakening net profit, and cash flow pressures. If a company has high debt obligations, a decrease in profit can increase solvency risks. The International Energy Agency (2025) also points out that the global coal market is greatly influenced by the demand dynamics of China and India. This shows that changes in demand from major countries can be a source of uncertainty for Indonesian coal companies.

Changes in government policies are also a source of external risk. DMO policies, domestic pricing, taxes, royalties, export restrictions, and environmental regulations can change a company's income and expense assumptions. The Ministry of Energy and Mineral Resources (2020) set the selling price of coal for power plants at USD70 per ton, so companies cannot always sell all production at export prices when global prices are higher. In this context, policy risk can affect profit margins and sales strategies. Therefore, risk theory and uncertainty are relevant to explain why companies need to anticipate price and regulatory changes in order to maintain financial performance.

Teori Sinyal (Signaling Theory)

Signal theory explains that the information conveyed by a company can be a signal for investors in assessing the company's prospects. Spence (1973) introduced the concept of signaling to explain how parties with more information can send signals to others who have less information. In the context of the capital market, financial statements, net income, dividends, capital structure, and profitability ratios can be signals to investors regarding the

company's condition and prospects. Companies with good financial performance tend to give positive signals to the market, while declining profits or increased risks can be interpreted as negative signals.

In coal companies, changes in profits due to fluctuations in commodity prices can affect investor perception. When coal prices increase and a company's profits rise, the market can catch signals that the company has better earnings and cash flow prospects. Habibah et al. (2022) explain that financial performance can provide signals to investors in valuing companies. In conditions of high coal prices, increases in NPM, ROA, and ROE can strengthen market confidence in the company. Conversely, when coal prices fall or government policies suppress margins, investors can catch negative signals as the company's profit prospects weaken.

Signal theory is also relevant to explain the relationship between government policy and market response. If the DMO policy causes a company's profit to decrease, this information can affect investors' expectations of future earnings. Wildani (2022) shows that commodity supercycle and DMO are related to the profitability ratio of coal companies on the Indonesia Stock Exchange. In the capital market, these changes in profitability can be the basis for investors' assessment of the company's value. Therefore, signal theory is used in this study to explain how changes in coal prices and government policies can be reflected in market perception through the company's financial performance.

Stakeholder Theory

Stakeholder theory explains that the company is not only responsible to shareholders, but also to various parties who have an interest in the company's sustainability. Freeman (1984) explained that stakeholders include parties that can be influenced or influenced by the company's activities, such as the government, investors, creditors, employees, the community, customers, suppliers, and the environment. In the coal mining sector, relationships with stakeholders are very important because mining activities have a wide economic, social, environmental, and energy impact. Companies are not only required to generate profits, but also fulfill legal obligations, maintain domestic energy supply, pay obligations to the state, and pay attention to social and environmental impacts.

Government policies in the coal sector are often made to balance the interests of various stakeholders. DMOs, for example, are aimed at maintaining the supply of coal for power plants and protecting the interests of the community as electricity users. The Ministry of Energy and Mineral Resources (2021) emphasizes that coal prices for electricity are set to safeguard the public interest. However, from the perspective of companies and investors, these policies can reduce profit margins because some production must be sold at a lower price. Kyere and Ausloos (2021) show that corporate governance can be related to financial performance, so a company's ability to manage stakeholder interests can affect business sustainability.

In the mining industry, stakeholder theory is also related to the social legitimacy of the company. Coal companies must maintain relationships with the government, the communities around the mine, industrial customers, investors, and creditors. If the company only pursues profits without paying attention to social and regulatory obligations, the legitimacy of the business can be compromised. Conversely, if the company is able to balance profitability, regulatory compliance, and social responsibility, then business sustainability can be better maintained. Therefore, stakeholder theory is relevant to explain how DMO

policies, royalties, environmental regulations, and energy transition demands affect the company's strategy in maintaining profitability while maintaining business legitimacy.

Risk Management Theory

Risk management theory emphasizes the importance of the process of identifying, measuring, controlling, and monitoring risks that can affect the achievement of a company's objectives. ISO 31000 (2018) explains that risk management aims to help organizations create and protect value through systematic management of uncertainty. In coal mining companies, key risks include commodity price risk, market risk, exchange rate risk, operational risk, regulatory risk, environmental risk, and financing risk. These risks can affect a company's revenue, costs, cash flow, and profitability.

Because coal prices are highly volatile, mining companies need to implement appropriate risk management strategies. These strategies can be in the form of cost efficiency, market diversification, long-term contracts, management of capital structures, exchange rate hedging, and business diversification into the energy sector or supporting businesses. Brigham and Houston (2021) explain that financial risk management is important to maintain the stability of cash flow and company value. In the coal industry, risk management also needs to consider changes in government policies such as DMOs and domestic prices. If a company does not have a good mitigation strategy, price fluctuations and regulatory changes can lead to a significant decline in profits.

Effective risk management can help companies maintain financial performance amid market uncertainty. When coal prices fall, companies with low production costs and healthy financial structures tend to be more able to survive. In contrast, companies with high costs and large debt are more vulnerable to margin pressures. The World Bank (2025) shows that coal prices can weaken due to a combination of low demand and stable supply. In these conditions, risk management strategies are important for companies to maintain NPM, ROA, and ROE. Therefore, risk management theory is used in this study to explain how coal companies can reduce the negative impact of price fluctuations and government policies on financial performance.

The above theory will form a strong conceptual foundation to analyze the influence of coal price fluctuations and government policies on the financial performance of coal mining companies in Indonesia for the 2019–2025 period.

The Effect of Falling Coal Prices on Financial Performance

Coal prices are the main factor that affects the income of coal mining companies. According to commodity price theory, coal mining companies generally act as price takers so that their income is highly dependent on the market price of commodities. Pindyck and Rubinfeld (2018) explain that changes in demand and supply of commodities can change market prices significantly. When coal prices increase, companies can sell products at higher prices so that revenue, gross profit, and net profit margins have the potential to increase. Conversely, when coal prices fall, the company's revenues will be depressed and have an impact on decreasing net profit and profitability ratios.

From the perspective of commodity cycle theory, the coal industry tends to experience boom and bust phases. Cashin et al. (2002) explained that commodity prices often experience cycles of ups and downs that have an impact on producers' income. In the boom phase, high prices encourage an increase in company profits. In the bust phase, low prices cause a decrease in profitability and pressure on cash flows. Sitepu et al. (2025) show that

coal commodity prices are related to the performance of coal mining companies. Endri et al. (2021) also show that coal prices and internal factors of companies have an influence on the profitability of coal companies in Indonesia. Based on this description, the first hypothesis is formulated as follows:

H1: Coal Prices Fall Negatively Affects the Financial Performance of Coal Mining Companies.

The Effect of Government Policies to Limit Production to Maintain Supply in the Field on Financial Performance

Government policies can affect a company's financial performance through changes in selling prices, sales volume, cost structure, and profitability levels. In the perspective of regulatory theory, Stigler (1971) explained that government regulations can affect market structure and profit distribution among economic actors. In the coal industry, government policies can be in the form of setting HBAs, DMOs, royalties, taxes, export restrictions, environmental regulations, and production restrictions. Policies that limit production can reduce the company's sales volume, especially if the company has a production capacity greater than the set limit.

In the Indonesian context, DMO is an example of government policy that has a direct impact on coal companies' revenues. The Ministry of Energy and Mineral Resources (2020) sets the DMO obligation at 25% and the selling price of coal for power plants at USD70 per ton. The policy aims to maintain domestic energy supply, but can reduce company margins when export prices are higher than domestic prices. Amri and Khajar (2023) show that price capping policies and DMO implementation can affect the profitability of coal mining companies. Dunn (2018) explained that public policies often cause trade-offs between the public interest and the interests of business actors. Based on this description, the second hypothesis is formulated as follows:

H2: Government Policy to Limit Production to Maintain Supply in the Field has a negative effect on the Financial Performance of coal mining companies.

The Influence of the Domestic Bond Market on Financial Performance

The domestic bond market is an alternative source of funding that can support a company's financial performance. In the perspective of capital structure theory, companies will choose a combination of funding between debt and equity to maximize the company's value. Modigliani and Miller (1958) explain that funding decisions have implications for the value of the company, especially when considering taxes, bankruptcy costs, and market imperfections. Bonds as debt instruments allow companies to obtain medium and long-term funds to support investment, expansion, and working capital needs.

Faulkender and Petersen (2006) show that companies' access to the bond market can expand funding sources and influence leverage levels. For coal mining companies, access to the domestic bond market can help companies obtain funds with a more planned payment structure. Funding through bonds can be used to finance productive investments, improve operational efficiency, strengthen liquidity, and reduce dependence on bank loans. If bond funds are used optimally, companies can increase operational capacity and improve financial performance. Based on this description, the third hypothesis is formulated as follows:

H3: The Domestic Bond Market has a positive effect on the Financial Performance of coal mining companies.

The Effect of Falling Coal Prices on Risk Management

Fluctuating coal prices are a major source of risk for mining companies. A decline in coal prices can pose market risks because the company's income becomes unstable. Knight (1921) explained that future uncertainty can affect a company's decision to carry out business activities. In the coal industry, price uncertainty can affect cash flow, ability to pay obligations, and investment decisions. The higher the price volatility, the greater the need for a company to implement risk management.

Risk management theory, Hull (2018) explains that companies need to identify, measure, and manage risks that can affect operational and financial performance. Companies can implement strategies such as long-term contracts, market diversification, cost efficiency, exchange rate hedging, and strengthening cash reserves. Jin and Jorion (2006) show that commodity price risk management is an important issue for companies that have large exposure to energy commodities. Thus, a decline in coal prices can encourage companies to strengthen risk management practices. Based on this description, the fourth hypothesis is formulated as follows:

H4: Coal Prices Fall Has a Positive Effect on Risk Management of Coal Mining Companies.

The Effect of Government Policies Restricting Production to Maintain Supply in the Field on Risk Management

Government policies can be a source of regulatory risk for companies. When governments implement production restrictions, set domestic prices, change royalty rates, or tighten environmental regulations, companies need to adjust their operational and financial strategies. Baker et al. (2016) explain that economic policy uncertainty can affect investment decisions, capital structure, and operational activities of companies. In the coal industry, regulatory uncertainty can increase strategic risks because government policies can change the company's income and cost assumptions.

Hull (2018) explained that regulatory risk is a form of risk that needs to be managed by companies systematically. Coal companies need to respond to policy changes through sales contract adjustments, market diversification, strengthening compliance, and managing costs. DMO policies and production restrictions can change sales volume and profit margins, so companies need to strengthen risk management to maintain profit stability. Based on this description, the fifth hypothesis is formulated as follows:

H5: Government Policy to Limit Production to Maintain Supply in the Field has a positive effect on Risk Management of coal mining companies.

The Influence of the Domestic Bond Market on Risk Management

The domestic bond market can assist companies in managing liquidity risks and funding risks. Faulkender and Petersen (2006) explain that access to the bond market can expand a company's sources of financing and reduce dependence on certain sources of funding. In the coal mining industry, the need for long-term funding is large enough that access to the bond market can provide flexibility in managing capital structures. Companies can use bonds to fund investments, extend the tenor of liabilities, strengthen cash, and reduce short-term liquidity pressures.

The theory of capital structure, Modigliani and Miller (1958) explains that funding decisions can affect the value and risk of companies. Access to the domestic bond market can help companies adjust the composition of debt and equity to be more optimal. In addition, the issuance of domestic bonds can reduce some of the exchange rate risk if the company

uses funding in local currencies. ISO 31000 (2018) explains that good risk management must consider the sources of financial, operational, and strategic risks. Thus, the domestic bond market can strengthen the capacity of companies to manage funding and liquidity risks. Based on this description, the sixth hypothesis is formulated as follows:

H6: The Domestic Bond Market has a positive effect on the Risk Management of coal mining companies.

The Influence of Risk Management on Financial Performance

Effective risk management can help companies maintain financial performance stability amid market and regulatory uncertainty. ISO 31000 (2018) explains that risk management aims to create and protect organizational value. In the context of coal companies, risk management can help companies deal with price fluctuations, changes in government policies, funding risks, exchange rate risks, and operational risks. Companies that have a good risk management system tend to be better prepared to deal with declining coal prices, production restrictions, and cost pressures.

The Enterprise Risk Management approach emphasizes the importance of integrated risk management across all organizational lines. COSO (2017) explains that ERM helps companies improve the quality of decision-making, reduce profit volatility, and improve operational efficiency. Hoyt and Liebenberg (2011) found that companies that implement ERM have higher corporate value than companies that do not implement it. Gordon et al. (2009) also show that the effectiveness of risk management affects the improvement of company performance when adjusted to the company's business environment. Therefore, risk management is seen as an important factor that can improve the stability of a company's profits, efficiency, and financial performance. Based on this description, the seventh hypothesis is formulated as follows:

H7: Risk Management has a positive effect on the Financial Performance of coal mining companies.

This study not only examines the direct influence of the variables X1, X2, and X3 on Y, but also explains how Risk Management (Z) can play a role as a mediating variable in maintaining the stability of the company's financial performance.

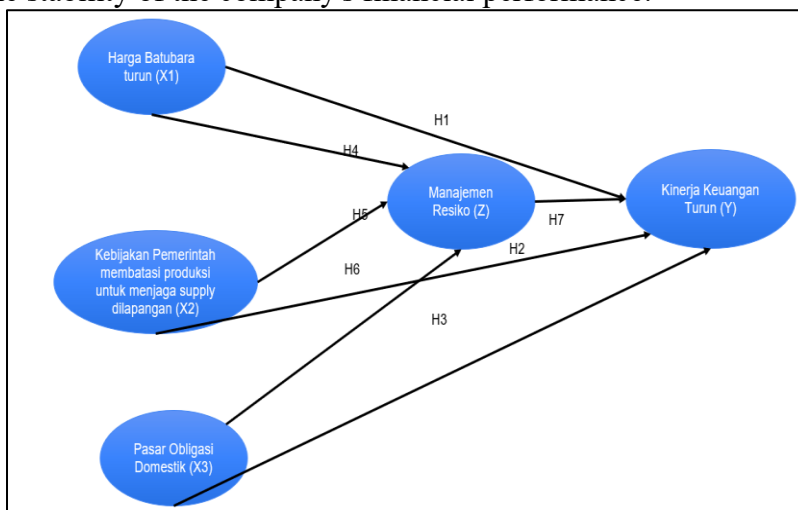


Figure 2.
Research Thinking Framework

RESEARCH METHOD

This study uses a quantitative approach with *an explanatory research* method. This approach is used because the research aims to examine the influence of Falling Coal Prices (X1), Government Policy to Limit Production to Maintain Supply in the Field (X2), and the Domestic Bond Market (X3) on the Company's Financial Performance (Y), either directly or indirectly through Risk Management (Z) as a mediating variable. The data used are secondary data obtained from annual reports, company financial statements, coal price data, government policy data, and domestic bond market information. The observation period in this study covers 2019–2025. The company's financial performance data is taken from the annual reports of coal mining companies, both those listed on the Indonesia Stock Exchange and other relevant companies that provide complete annual financial data. The components of financial data used include revenue, net profit, total assets, total equity, Net Profit Margin (NPM), Return on Assets (ROA), and Return on Equity (ROE).

The research population is a coal mining company operating in Indonesia. The sampling technique uses *the purposive sampling* method, which is the selection of samples based on certain criteria. The sample criteria include: companies engaged in the coal mining sector, have annual reports or financial statements available during the research period, have revenue and net profit data, and have information that can be used to calculate the profitability ratio.

Table 1.
Research Sample Selection Criteria

No.	Sample Criteria	Quantity
1	Coal mining companies identified/registered on IDX	42
2	Companies that do not provide a complete annual report	30
3	Number of sample companies	12
4	Observation period	2019–2025
5	Number of company-year observations	84

The dependent variable in this study is the Company's Financial Performance (Y). Financial performance is measured using profitability ratios, namely Return on Assets (ROA), Return on Equity (ROE), and Net Profit Margin (NPM). ROA is used to measure a company's ability to generate profit from total assets. ROE is used to measure the rate of return to shareholder equity. NPM is used to measure a company's ability to generate net profit from revenue. The ratio formulation used is as follows:

Return on Assets (ROA) $ROA = \text{Net Profit} / \text{Total Assets}$

Return on Equity (ROE) $ROE = \text{Net Profit} / \text{Total Equity}$

Net Profit Margin (NPM) $NPM = \text{Net Profit} / \text{Revenue}$

The first independent variable is the Coal Price Down (X1). This variable describes the change in coal prices during the research period, both domestic and global prices. The indicators used include the Benchmark Coal Price (HBA) and global coal prices such as the Newcastle Coal Index. HBA data was obtained from the Ministry of Energy and Mineral Resources, with the coal quality category which includes HBA 6,322 kcal/kg GAR, HBA I 5,300 kcal/kg GAR, HBA II 4,100 kcal/kg GAR, and HBA III 3,400 kcal/kg GAR. The second independent variable is the Government's Policy to Limit Production to Maintain Supply in the Field (X2). This variable describes government interventions that can affect

production volume, selling prices, cost structure, and profitability of coal companies. The indicators used include RKAB policies, Domestic Market Obligation (DMO), taxes and royalties, export restrictions, export bans, and domestic coal price policies. These policies are analyzed as a form of regulation that can affect the company's revenue and profit margins.

The third independent variable is the Domestic Bond Market (X3). This variable describes a company's access to funding sources through the domestic bond market. Indicators that can be used include the value of bond issuance, the availability of domestic funding, bond interest rates, and the company's ability to use bonds as a medium and long-term source of financing. This variable is important because access to the bond market can affect the company's capital structure, liquidity, and ability to finance operations and expansion. The mediating variable in this study is Risk Management (Z). Risk management describes a company's ability to identify, measure, and control risks arising from fluctuations in coal prices, changes in government policies, funding risks, market risks, and operational risks. Indicators used can include cost efficiency strategies, market diversification, long-term sales contracts, hedging, liquidity management, and strengthening of capital structures.

Government policy data is classified into several groups, namely RKAB policy or production restrictions, DMO and downstream policies, tax/royalty policies, export prohibition or restriction policies, and domestic coal price policies. RKAB policies are used to see the effect of production restrictions on sales volume and revenue. DMO policies are used to see the impact of domestic sales obligations at a certain price on profit margins. Tax and royalty policies are used to see the effect of changes in fiscal burdens on profitability. Meanwhile, export ban or restriction policies are used to see their impact on sales volume, cash flow, and the company's ability to earn export revenue.

The data analysis technique used is quantitative analysis with a regression approach. If the data is compiled by company and year, then the most appropriate analysis is panel data regression. This model is used to test the influence of independent variables on the company's financial performance and test the role of Risk Management as a mediating variable. The test is carried out through several stages, namely descriptive statistical analysis, classical assumption or model feasibility test, panel regression model selection, hypothesis testing, and mediation testing. In general, the research model can be formulated as follows:

$$\begin{aligned} Y &= \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon \\ Z &= \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon \\ Y &= \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 Z + \varepsilon \end{aligned}$$

Description: Y = Company's Financial Performance
X1 = Coal Prices
X2 = Government Policy to Restrict Production to Maintain Supply in the Field
X3 = Domestic Bond Market
Z = Risk Management
 α = Constant
 β = Regression Coefficient
 ε = Error term

With this method, this study is expected to be able to explain the direct influence of coal prices, government policies, and the domestic bond market on financial performance, as well as the indirect influence through risk management. This approach is in accordance with the research objectives that not only measure the relationship between variables, but also explain the mechanism of how market risk, policy risk, and funding risk can affect the financial performance of coal mining companies.

RESULTS AND DISCUSSION

Global coal price movements show a very close relationship with the profitability dynamics of coal mining companies in Indonesia. In the 2019–2025 period, companies such as PT Adaro Energy Indonesia Tbk, PT Bukit Asam Tbk, PT Indo Tambangraya Megah Tbk, and several other coal mining companies show a pattern of financial performance that tends to follow changes in coal prices. When coal prices increase, the company's revenue and profit generally rise. Conversely, when coal prices decline, the company's financial performance tends to weaken, especially in profitability indicators such as Net Profit Margin (NPM), Return on Assets (ROA), and Return on Equity (ROE). In low price periods, especially in 2020 when coal prices were in the range of $\pm$ USD60 per ton due to the COVID-19 pandemic, most mining companies experienced financial performance pressure. A decline in coal prices causes a decline in the company's revenue because the selling value per ton of coal becomes lower. Meanwhile, most of the operating costs of mining companies are relatively fixed, such as heavy equipment costs, labor costs, contractor costs, transportation costs, and mine infrastructure maintenance costs. These conditions cause profit margins to narrow and have an impact on reducing NPM, ROA, and ROE. Conceptually, this phenomenon is in line with commodity economics theory which explains that commodity-based companies are highly sensitive to price cycles due to their dependence on global market prices and relatively rigid cost structures (Pindyck & Rubinfeld, 2018).

In contrast, in the 2021–2022 period, coal prices experienced a very significant increase, from a range of $\pm$ USD137 per ton to around $\pm$ USD295 per ton. This increase was triggered by the recovery in global energy demand after the pandemic and the global energy crisis in 2022. In this phase, the profitability of mining companies increased significantly because the increase in selling prices directly drove an increase in revenue. On the other hand, operating costs did not increase as quickly as revenue increased, so the company gained greater margin space. As a result, NPM increased because the company was able to generate a higher net profit from each sales revenue. The increase in coal prices also had an impact on ROA and ROE. ROA increased because the company's net profit grew faster than its relatively stable total assets in the short term. Meanwhile, ROE tends to rise more sharply because the increase in net profit increases the rate of return to shareholders. In some companies, NPM can even reach its highest point due to a considerable margin expansion during the period of price increases. This phenomenon shows the existence of *windfall profits*, which are extraordinary profits that arise due to surge in commodity prices, especially in the energy and mining sectors. This condition is in line with commodity industry reports that the energy price *boom* phase can significantly increase company profitability (International Energy Agency, 2023).

Entering the 2023–2025 period, coal prices have begun to normalize. Prices, which were previously in the high range of around $\pm$ USD200 per ton, began to move down to the range of $\pm$ USD110–140 per ton. This price normalization caused the profitability ratio of mining companies to also correct. However, a decline in performance is not always proportional to a decline in prices because each company has a different strategy in dealing with market pressure. Some companies are cost-efficient, strengthen long-term sales contracts, manage cost structures, and implement *hedging* strategies to reduce the impact of price volatility. Nevertheless, the general trend still shows that the decline in coal prices has an impact on weakening the company's profitability. NPM has decreased as the gap between

selling prices and production costs has narrowed. ROA has also decreased as net profit has weakened, while total corporate assets have relatively little changed in the short term. ROE also decreases, especially if net profit falls faster than the company's equity. Thus, the normalization of coal prices after the *boom* period causes the company to face margin pressure and financial performance adjustments again.

In general, the relationship between coal prices and profitability indicators can be explained through a unidirectional pattern. When coal prices rise, the company's revenue increases, profit margins widen, net profit increases, and profitability ratios such as NPM, ROA, and ROE also increase. Conversely, when coal prices fall, the company's revenue weakens, profit margins are depressed, net profits decrease, and the profitability ratio is corrected. In other words, coal prices are one of the main external factors that determine the financial performance of coal mining companies. This relationship shows that the coal mining industry has *pro-cyclical* characteristics, namely the company's financial performance moves according to the commodity price cycle. When prices are in an upward phase, the company makes greater profits. However, when the price enters a declining phase, the company's profitability is also depressed. This characteristic is a key characteristic of commodity-based industries, where global price volatility is often a more dominant factor than the company's internal operational factors. The World Bank (2024) explains that the energy commodity market is greatly influenced by global demand dynamics, supply, and international macroeconomic conditions. Therefore, analysis of the financial performance of coal companies needs to consider global and domestic coal price movements as important variables. Based on this description, it can be concluded that coal price fluctuations have a strong influence on the financial performance of coal mining companies in Indonesia during the 2019–2025 period. The low price period in 2020 caused pressure on revenue and profitability. On the other hand, the price surge in 2021–2022 drove a significant increase in profit and profitability ratio. However, when prices began to normalize in 2023–2025, the company's financial performance corrected again. Some data on the performance of mining companies in Indonesia in this period show that changes in coal prices are closely related to changes in revenue, net profit, NPM, ROA, and ROE.

Table 8.
Financial Performance of PT. ADARO Energi 2019-2025

Year	Revenue (IDR T)	Net Income (IDR T)	Total Assets (Rp T)	Equity (Rp T)	LENGTH	ROE	NPM	Average Coal Price(USD/Ton)	Remarks
2019	21.7	4.0	28.0	18.0	14.3%	22.2%	18.4%	±0	Normal conditions before the pandemic
2020	17.3	2.4	31.0	19.0	7.7%	12.6%	13.9%	+0	Occurred due to COVID-19
2021	29.3	7.9	36.0	23.0	21.9%	34.3%	27.0%	+137	Global Recovery
2022	42.0	12.6	45.0	30.0	28.0%	42.0%	30.0%	-295	Peak (world crisis price)
2023	38.5	6.1	46.0	32.0	13.2%	19.1%	15.8%	-200	Stable start
2024	36.0	5.5	48.0	34.0	11.5%	16.2%	15.3%	-124	Significant decline

2025	42.7	2.9	43.2	22.2	6.7%	13.0%	6.9%	+110.4	Stable back (primary/unfinished data)
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The effect of coal price fluctuations on the financial performance of PT Adaro Energy Indonesia Tbk (ADRO) during the 2019–2025 period shows a strong and cyclical relationship. ADRO's financial performance tends to move in the direction of changes in coal prices. When coal prices increase, the company's revenue, net profit, Return on Assets (ROA), Return on Equity (ROE), and profit margin increase significantly. On the other hand, when coal prices decrease, the company's profitability is depressed, even in some conditions the decline in profit can occur faster than the decline in revenue. This condition shows that ADRO has a high level of sensitivity to changes in commodity prices. This is due to the characteristics of the coal mining industry which is highly dependent on global market prices. In addition, most of the company's operating costs are relatively fixed, such as production costs, heavy equipment costs, contractor costs, transportation costs, and mining infrastructure maintenance costs. As a result, when the selling price of coal falls, the company's revenue decreases while costs cannot be immediately adjusted in the same proportion. This condition causes profit margins to narrow and has an impact on a decrease in the company's profitability ratio. Thus, it can be concluded that PT Adaro Energy Indonesia Tbk's financial performance is greatly influenced by the coal price cycle. In the price increase phase, the company makes greater profits because revenue and margins increase. However, in the price decline phase, the company's profitability is under pressure due to lower selling prices and a relatively rigid cost structure. This pattern confirms that ADRO is a company that has high exposure to global coal price volatility.

Table 9.
Financial Performance of PT. Bukit Asam 2019-2025

Year	Revenue (IDR T)	Net Income (IDR T)	Total Assets (Rp T)	Equity (Rp T)	LENGTH	ROE	NPM	Average Coal Price(USD/Ton)	Remarks
2019	21.7	4.0	28.0	18.0	14.3%	22.2%	18.4%	±0	Normal conditions before the pandemic
2020	17.3	2.4	31.0	19.0	7.7%	12.6%	13.9%	+0	Occurred due to COVID-19
2021	29.3	7.9	36.0	23.0	21.9%	34.3%	27.0%	+137	Global Recovery
2022	42.0	12.6	45.0	30.0	28.0%	42.0%	30.0%	-295	Peak (world crisis price)
2023	38.5	6.1	46.0	32.0	13.2%	19.1%	15.8%	-200	Stable start
2024	36.0	5.5	48.0	34.0	11.5%	16.2%	15.3%	-124	Significant decline
2025	42.7	2.9	43.2	22.2	6.7%	13.0%	6.9%	+110.4	Stable back (primary/unfinished data)

Source: Analysis 2026

When compared to other companies such as Adaro, PTBA tends to show more stable margins in the normalization phase, but remains very vulnerable when prices fall sharply. Net income has high price elasticity, so price volatility is the Company's main risk

Table 10.
Financial Performance of PT. Indo Tambang Raya Mega 2019-2025

Year	Revenue (IDR T)	Net Income (IDR T)	Total Assets (Rp T)	Equity (Rp T)	LENGTH	ROE	NPM	Average PriceCoal(USD/Ton)	Remarks
2019	21.7	4.0	28.0	18.0	14.3%	22.2%	18.4%	±0	Normal conditions before the pandemic
2020	17.3	2.4	31.0	19.0	7.7%	12.6%	13.9%	+0	Occurred due to COVID-19
2021	29.3	7.9	36.0	23.0	21.9%	34.3%	27.0%	+137	Global Recovery
2022	42.0	12.6	45.0	30.0	28.0%	42.0%	30.0%	-295	Peak (world crisis price)
2023	38.5	6.1	46.0	32.0	13.2%	19.1%	15.8%	-200	Stable start
2024	36.0	5.5	48.0	34.0	11.5%	16.2%	15.3%	-124	Significant decline
2025	42.7	2.9	43.2	22.2	6.7%	13.0%	6.9%	+110.4	Stable back (primary/unfinished data)

Source: Analysis 2026

In brief, the data shows that the financial performance of PT Indo Tambangraya Megah Tbk is very sensitive to fluctuations in coal prices with a relationship that tends to be one-way (positive). When coal prices fell from around USD 77 to USD 60, revenue also fell (26 → 20 T) and net profit was almost cut in half (3.4 → 1.8 T). The impact can be seen in a decrease in the profitability ratio (ROA, ROE, NPM). This means that when prices fall, profit margins are depressed because revenue decreases while costs are relatively fixed.

Table 11.
Financial Performance of PT. Harum Energy 2019-2025

Year	Revenue (IDR T)	Net Income (IDR T)	Total Assets (Rp T)	Equity (Rp T)	LENGTH	ROE	NPM	Average PriceCoal(USD/Ton)	Remarks
2019	21.7	4.0	28.0	18.0	14.3%	22.2%	18.4%	±0	Normal conditions before the pandemic
2020	17.3	2.4	31.0	19.0	7.7%	12.6%	13.9%	+0	Occurred due to COVID-19
2021	29.3	7.9	36.0	23.0	21.9%	34.3%	27.0%	+137	Global Recovery
2022	42.0	12.6	45.0	30.0	28.0%	42.0%	30.0%	-295	Peak (world crisis price)
2023	38.5	6.1	46.0	32.0	13.2%	19.1%	15.8%	-200	Stable start
2024	36.0	5.5	48.0	34.0	11.5%	16.2%	15.3%	-124	Significant decline
2025	42.7	2.9	43.2	22.2	6.7%	13.0%	6.9%	+110.4	Stable back (primary/unfinished data)

Source: Analysis 2026

In summary, PT Harum Energy Tbk's financial performance shows the same pattern as other coal companies, which is strongly influenced by fluctuations in coal prices, but with additional indications of non-operational factors in the last year. Coal prices rose → performance soared sharply (2021–2022). Prices fell → profitability decreased (2023–2024).

However, 2025 shows that internal factors (costs & investments) can be more dominant than prices, meaning that PT Harum Energy Tbk is not only dependent on commodity prices, but also begins to be influenced by expansion strategies and cost structures, which makes price sensitivity more complex.

Table 12.
Financial Performance of PT. Byan 2019-2025

Year	Revenue (IDR T)	Net Income (IDR T)	Total Assets (Rp T)	Equity (Rp T)	LENGTH	ROE	NPM	Average PriceCoal(USD/Ton)	Remarks
2019	21.7	4.0	28.0	18.0	14.3%	22.2%	18.4%	±0	Normal conditions before the pandemic
2020	17.3	2.4	31.0	19.0	7.7%	12.6%	13.9%	+0	Occurred due to COVID-19
2021	29.3	7.9	36.0	23.0	21.9%	34.3%	27.0%	+137	Global Recovery
2022	42.0	12.6	45.0	30.0	28.0%	42.0%	30.0%	-295	Peak (world crisis price)
2023	38.5	6.1	46.0	32.0	13.2%	19.1%	15.8%	-200	Stable start
2024	36.0	5.5	48.0	34.0	11.5%	16.2%	15.3%	-124	Significant decline
2025	42.7	2.9	43.2	22.2	6.7%	13.0%	6.9%	+110.4	Stable back (primary/unfinished data)

Source: Analysis 2026

In summary, PT Bayan Resources Tbk's financial performance shows a very strong and direct relationship with coal price fluctuations, even with a higher sensitivity than many similar companies. PT Bayan Resources Tbk has better profitability resilience, but remains highly dependent on the global coal price cycle. Thus, BYAN is a company with high exposure to commodity prices, but is supported by operational efficiency that keeps it ahead during the downward phase.

Table 13.
Financial Performance of PT. Baramulti Successaran 2019-2025

Year	Revenue (IDR T)	Net Income (IDR T)	Total Assets (Rp T)	Equity (Rp T)	LENGTH	ROE	NPM	Average PriceCoal(USD/Ton)	Remarks
2019	21.7	4.0	28.0	18.0	14.3%	22.2%	18.4%	±0	Normal conditions before the pandemic
2020	17.3	2.4	31.0	19.0	7.7%	12.6%	13.9%	+0	Occurred due to COVID-19
2021	29.3	7.9	36.0	23.0	21.9%	34.3%	27.0%	+137	Global Recovery
2022	42.0	12.6	45.0	30.0	28.0%	42.0%	30.0%	-295	Peak (world crisis price)
2023	38.5	6.1	46.0	32.0	13.2%	19.1%	15.8%	-200	Stable start
2024	36.0	5.5	48.0	34.0	11.5%	16.2%	15.3%	-124	Significant decline
2025	42.7	2.9	43.2	22.2	6.7%	13.0%	6.9%	+110.4	Stable back (primary/unfinished data)

Source: Analysis 2026

In summary, the financial performance of PT Baramulti Suksessarana Tbk shows a pattern that is strongly influenced by coal price fluctuations, with a clear direct relationship between price and profitability. When coal prices fell ($\pm 77 \rightarrow \pm 60$ USD/ton): Revenue decreased (6.5 $\rightarrow$ 5.8 T). Net profit decreased (1.1 $\rightarrow$ 0.8 T). Profitability ratio also weakened (ROA, ROE, NPM decreased). Significant price increase ($\pm 137 \rightarrow \pm 295$) drove a surge in performance: Revenue rose sharply (9.5 $\rightarrow$ 15 T). Net income increased drastically (3.0 $\rightarrow$ 6.5 T). Profitability peaked (ROE up to 72.2%, ROA 54.2%)

Table 14.
Financial Performance of PT. Golden Energy Mines 2019-2025

Year	Revenue (IDR T)	Net Income (IDR T)	Total Assets (Rp T)	Equity (Rp T)	LENGTH	ROE	NPM	Average PriceCoal(USD/Ton)	Remarks
2019	21.7	4.0	28.0	18.0	14.3%	22.2%	18.4%	± 0	Normal conditions before the pandemic
2020	17.3	2.4	31.0	19.0	7.7%	12.6%	13.9%	+0	Occurred due to COVID-19
2021	29.3	7.9	36.0	23.0	21.9%	34.3%	27.0%	+137	Global Recovery
2022	42.0	12.6	45.0	30.0	28.0%	42.0%	30.0%	-295	Peak (world crisis price)
2023	38.5	6.1	46.0	32.0	13.2%	19.1%	15.8%	-200	Stable start
2024	36.0	5.5	48.0	34.0	11.5%	16.2%	15.3%	-124	Significant decline
2025	42.7	2.9	43.2	22.2	6.7%	13.0%	6.9%	+110.4	Stable back (primary/unfinished data)

Source: Analysis 2026

In summary, PT Golden Energy Mines Tbk's financial performance shows a very strong dependence on coal price fluctuations, with a clear pro-cyclical pattern between price and profitability. PT Golden Energy Mines Tbk's performance is strongly influenced by the coal price cycle. Prices rose $\rightarrow$ profit spikes and margins were very high (2021–2022). Prices fell $\rightarrow$ a decline in profitability, but were still relatively stable. However, in 2025, it can be seen that in addition to price, capital structure factors and financial strategy will also begin to affect performance. Thus, GEMS is a company that is pro-cyclical towards commodity prices, but has begun to show sensitivity to the company's internal factors in recent periods.

Table 15.
Financial Performance of PT. Indika Energy 2019-2025

Year	Revenue (IDR T)	Net Income (IDR T)	Total Assets (Rp T)	Equity (Rp T)	LENGTH	ROE	NPM	Average PriceCoal(USD/Ton)	Remarks
2019	21.7	4.0	28.0	18.0	14.3%	22.2%	18.4%	± 0	Normal conditions before the pandemic
2020	17.3	2.4	31.0	19.0	7.7%	12.6%	13.9%	+0	Occurred due to COVID-19
2021	29.3	7.9	36.0	23.0	21.9%	34.3%	27.0%	+137	Global Recovery
2022	42.0	12.6	45.0	30.0	28.0%	42.0%	30.0%	-295	Peak (world crisis price)

2023	38.5	6.1	46.0	32.0	13.2%	19.1%	15.8%	-200	Stable start
2024	36.0	5.5	48.0	34.0	11.5%	16.2%	15.3%	-124	Significant decline
2025	42.7	2.9	43.2	22.2	6.7%	13.0%	6.9%	+110.4	Stable back (primary/unfinished data)

Source: Analysis 2026

In summary, PT Indika Energy Tbk's financial performance shows a very high dependence on coal price fluctuations, with a more volatile impact than some pure coal companies due to its diversified business structure. INDY is an example of a company with high exposure to commodity cycles, but with a sensitivity that is strengthened by a business structure that is not yet fully stable outside of coal.

Table 16.

Financial Performance of PT. Mitrabara Adiperdana 2019-2025

Year	Revenue (IDR T)	Net Income (IDR T)	Total Assets (Rp T)	Equity (Rp T)	LENGTH	ROE	NPM	Average PriceCoal(USD/Ton)	Remarks
2019	21.7	4.0	28.0	18.0	14.3%	22.2%	18.4%	±0	Normal conditions before the pandemic
2020	17.3	2.4	31.0	19.0	7.7%	12.6%	13.9%	+0	Occurred due to COVID-19
2021	29.3	7.9	36.0	23.0	21.9%	34.3%	27.0%	+137	Global Recovery
2022	42.0	12.6	45.0	30.0	28.0%	42.0%	30.0%	-295	Peak (world crisis price)
2023	38.5	6.1	46.0	32.0	13.2%	19.1%	15.8%	-200	Stable start
2024	36.0	5.5	48.0	34.0	11.5%	16.2%	15.3%	-124	Significant decline
2025	42.7	2.9	43.2	22.2	6.7%	13.0%	6.9%	+110.4	Stable back (primary/unfinished data)

Source: Analysis 2026

In summary, PT Mitrabara Adiperdana Tbk's financial performance shows a very strong dependence on coal price fluctuations, with a very pro-cyclical pattern between price and profitability. PT Mitrabara Adiperdana Tbk's performance is strongly influenced by the coal price cycle. Prices rose → extreme profitability spikes (2021–2022). Prices fell → a sharp decline in performance, even close to zero in 2025. Thus, MBAP is among the companies with the highest level of sensitivity to coal price fluctuations, as almost all of its financial performance moves in the direction of global commodity prices.

Table 17.

Financial Performance of PT. FFB Energi Utama 2019-2024

Year	Revenue (IDR T)	Net Income (IDR T)	Total Assets (Rp T)	Equity (Rp T)	LENGTH	ROE	NPM	Average PriceCoal(USD/Ton)	Remarks
2019	21.7	4.0	28.0	18.0	14.3%	22.2%	18.4%	±0	Normal conditions before the pandemic

2020	17.3	2.4	31.0	19.0	7.7%	12.6%	13.9%	+0	Occurred due to COVID-19
2021	29.3	7.9	36.0	23.0	21.9%	34.3%	27.0%	+137	Global Recovery
2022	42.0	12.6	45.0	30.0	28.0%	42.0%	30.0%	-295	Peak (world crisis price)
2023	38.5	6.1	46.0	32.0	13.2%	19.1%	15.8%	-200	Stable start
2024	36.0	5.5	48.0	34.0	11.5%	16.2%	15.3%	-124	Significant decline
2025	42.7	2.9	43.2	22.2	6.7%	13.0%	6.9%	+110.4	Stable back (primary/unfinished data)

Source: Analysis 2026

In summary, PT TBS Energi Utama Tbk's financial performance shows dependence on coal price fluctuations, but with a more unstable pattern due to the diversified nature of its business (energy, waste management, and energy transition).

Table 18.

Financial Performance of PT. Dian Swastika Sentosa 2019-2025

Year	Revenue (IDR T)	Net Income (IDR T)	Total Assets (Rp T)	Equity (Rp T)	LENGTH	ROE	NPM	Average PriceCoal(USD/Ton)	Remarks
2019	21.7	4.0	28.0	18.0	14.3%	22.2%	18.4%	±0	Normal conditions before the pandemic
2020	17.3	2.4	31.0	19.0	7.7%	12.6%	13.9%	+0	Occurred due to COVID-19
2021	29.3	7.9	36.0	23.0	21.9%	34.3%	27.0%	+137	Global Recovery
2022	42.0	12.6	45.0	30.0	28.0%	42.0%	30.0%	-295	Peak (world crisis price)
2023	38.5	6.1	46.0	32.0	13.2%	19.1%	15.8%	-200	Stable start
2024	36.0	5.5	48.0	34.0	11.5%	16.2%	15.3%	-124	Significant decline
2025	42.7	2.9	43.2	22.2	6.7%	13.0%	6.9%	+110.4	Stable back (primary/unfinished data)

Source: Analysis 2026

In summary, the financial performance of PT Dian Swastatika Sentosa Tbk shows a very strong and pro-cyclical relationship with coal price fluctuations, as its energy and coal businesses are still the main contributors to revenue. The case study used is the mining company PT. ADARO in 2025. In that year, ADARO's coal price is around 120 USD/ton for export prices and 70 USD/ton for national prices/DMO. PT. ADARO's coal production in 2025 will be 17.4 million tons with an operational cost of 53 USD/ton. The following is a sales calculation with a normal scenario without DMO sales, a DMO scenario of 25% and a DMO scenario of 30%.

Table 19.
Coal sales of PT. ADRO with DMO scenario

ADRO 2025							
	Production (tons)	Export (ton)	DMO(ton)	Price (USD)	Revenue (USD)	Operating Costs(USD)/ton	Total Biayaops. (USD)
Normal	17.444.444	17.444.444		120	2.093.333.333	53	930.370.370
DMO25%	17.444.444	13.083.333	4.361.111,11	70	1.875.277.778	53	930.370.370
DMO30%	17.444.444	12.211.111	5.233.333	70	1.831.666.667	53	930.370.370
Skenario	Revenue (USD Million)	Cost (USD Million)	Profit (USD Million)	Changes	NPM		
Normal	2.093	930	1.163	-	55.6%		
DMO25%	1.875	930	945	↓ 19%	50.4%		
DMO30%	1.832	930	901	↓ 23%	49.2%		

Source: Analysis 2026

From the coal sales scenario in table 19, it can be seen that with a 25% DMO the profit decreased by 19%, but with the 30% DMO scenario the profit decreased by 23%, meaning that 5% of DMO sales decreased the profit by 4%, for the PT. ADRO lost a profit of 44 million USD due to the 5% difference in DMO from the government policy. This shows that the government's policy related to DMO has a great influence on the financial performance of the mining company.

CONCLUSION

Based on the variable framework used in this study, it can be concluded that the financial performance of coal mining companies in Indonesia is influenced by a combination of interrelated external and internal factors. The main external factors include fluctuations in coal prices, government policies, and domestic bond market conditions. Indonesian and global coal prices are the most direct factors that affect the company's revenue, net profit, cash flow, and profitability ratio. When coal prices increase, the company's financial performance tends to strengthen as revenue and profit margins increase. Conversely, when coal prices decrease, the company's profitability is depressed because revenue weakens, while some operating costs are relatively fixed. In addition, government policies such as Domestic Market Obligation (DMO), taxes and royalties, export restrictions, RKAB policies, and energy sector incentives also affect the company's production volume, selling price, cost structure, and profit margin. The domestic bond market also plays a role in supporting financial performance through the provision of alternative funding for expansion, capital restructuring, and liquidity strengthening. In this relationship, risk management plays a role as a mediating variable that helps companies manage price volatility, regulatory risk, funding risk, and operational risk to maintain financial performance stability.

This research has several limitations, including only focusing on coal mining companies in Indonesia, so the results cannot be generalized to other industry sectors. In addition, the limited availability and consistency of data in certain companies or periods can affect the depth of analysis. Nevertheless, this research provides benefits for various parties. For investors, the results of the research can be the basis for assessing investment risks and choosing companies with strong fundamentals and risk management. For coal companies,

this research can be an evaluation material in developing operational strategies, funding, cost efficiency, and risk management. For the government, the results of the research can be a consideration in formulating energy and mining sector policies that are balanced between state revenue, national energy security, industrial stability, and the sustainability of the company's business. Meanwhile, for academics, this research can enrich the literature on the relationship between commodity prices, government policies, financial markets, risk management, and the company's financial performance.

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