

## REVIEWING THE POTENTIAL AND RISKS OF ADRO SHARES AS AN INVESTMENT ON THE INDONESIA STOCK EXCHANGE

**Riska Intan Pramitaningtyas**

Universitas 17 Agustus 1945 Surabaya

**Virgi Ainun Iqbal**

Universitas 17 Agustus 1945 Surabaya

**Achmad Reza**

Universitas 17 Agustus 1945 Surabaya

**Alvine Wijaya Un**

Universitas 17 Agustus 1945 Surabaya

**I Made Suparta**

Universitas 17 Agustus 1945 Surabaya

### Alamat :

Universitas 17 Agustus 1945 Surabaya

Jl. Semolowaru No. 45, Pumpungan, Kec. Sukolilo, Surabaya. Jawa Timur 60118

Korespondensi penulis: [riskaintan2003@gmail.com](mailto:riskaintan2003@gmail.com)1, [virgiiqbal123@gmail.com](mailto:virgiiqbal123@gmail.com)2, [ahmadendro55@gmail.com](mailto:ahmadendro55@gmail.com)3, [alvineun16@gmail.com](mailto:alvineun16@gmail.com)4, [madesuparta@untag-sby-ac.id](mailto:madesuparta@untag-sby-ac.id)5

**Abstract.** *The coal mining industry plays a vital role in the Indonesian economy, providing energy for power plants and raw materials for the cement, steel and chemical industries. The financial performance of coal companies is important to investors, creditors and the government, who require accurate assessments for decision-making. This study aims to examine the potential and risk of PT Adaro Energy Indonesia Tbk (ADRO) shares as an alternative investment on the Indonesia Stock Exchange (IDX). ADRO is an integrated energy company engaged in the coal mining sector and has a significant contribution in providing national energy and exports. The method used in this study is descriptive qualitative with a literature study approach and secondary data analysis obtained from the company's financial statements, stock price movements, and coal commodity market trends. Investors need to consider fundamental, technical, and external dynamics aspects before making investment decisions on ADRO shares.*

**Keywords:** *ADRO Stocks, Investment Analysis, Indonesia Stock Exchange, Risk*

## LATARBELAKANG

PT Adaro Energy Indonesia Tbk (ADRO) is one of the largest vertically integrated coal mining companies in Indonesia, with business activities ranging from exploration, mining, transportation, processing, to coal marketing. The company was founded in 2004 and began trading on the Indonesia Stock Exchange (IDX) in 2008. ADRO is known as a producer of medium to high quality thermal coal, which is widely used for steam power plants (PLTU), both domestically and abroad such as India, China, Japan, and countries in Southeast Asia.

The company's vision is to become a leading Indonesian mining and energy group. Adaro's corporate mission is to engage in mining and energy to satisfy customer needs, develop employees, build partnerships with suppliers, support community and national development, prioritize safety and environmental sustainability, and maximize shareholder value.

Despite the challenges of the global trend towards green energy transition and pressure on carbon emissions, ADRO continues to record solid performance, especially during the period of high global coal prices. This makes ADRO shares one of the attractive investment options on the Indonesia Stock Exchange, both for the short and long term. Therefore, it is important to analyze the position, advantages, and potential risks of ADRO shares as part of an investment portfolio in the Indonesian capital market.

In the context of investment, analysis of ADRO stock risk and return is important because it concerns two main aspects that influence investor decisions. Returns or profit levels from ADRO stocks tend to be influenced by the company's financial performance, world coal prices, and regular dividend distributions. ADRO is known to have strong fundamentals with high profitability and business expansion into the renewable energy and mining services sectors.

However, the potential risks cannot be ignored. Fluctuations in global coal prices, dependence on exports, government regulatory risks related to fossil fuels, as well as geopolitical dynamics and changes in global energy trends are external factors that can affect ADRO's stock performance. In addition, stock market volatility and changes in environmental policies are also sources of risk that should be taken into account.

PT Adaro Energy Tbk is a leading mining company in Indonesia, so that

financial data can be used as information by interested parties to analyze financial report ratios. The results of the financial report ratio analysis are expected to provide important financial information that shows current strengths and weaknesses. Comprehensive updates on deficiencies can make management better prepared to assess and correct errors that cause deficiencies.

PT Adaro Energy Indonesia Tbk recorded net revenue of USD 4.04 billion in 2023, focusing on thermal coal for domestic and international markets. The company faces risks such as changes in coal prices, government regulations, and exchange rate fluctuations, but also offers the potential for large returns through increased stock prices and dividends. In terms of dividends, ADRO is known as an issuer that diligently distributes cash dividends. In 2023, ADRO distributed dividends of Rp750 per share, reflecting the company's policy of protecting the interests of long-term investors through consistent profit sharing.

However, the decision to invest in stocks, including ADRO stocks, requires careful consideration of potential returns and risks. ADRO stock prices are greatly influenced by fluctuations in international coal prices, government regulations, global market conditions, and environmental dynamics. Therefore, an analysis of ADRO stocks as an investment instrument on the IDX is important to understand how this company can be a profitable investment option, as well as assess the various risks that investors may face.

ADRO shares are classified as liquid and are included in the LQ45 and IDX30 indices, which shows market confidence in this issuer. Therefore, with the potential for long-term profits and consistent dividend distribution, ADRO is considered one of the potential stocks for investment in the energy sector in the Indonesian capital market.

## LITERATURE REVIEW

## **1. Financial Management and Capital Structure**

Financial management involves strategic activities aimed at planning, organizing, controlling, and monitoring financial resources to achieve both short-term and long-term corporate objectives (Gitman & Zutter, 2015). One of the most crucial elements of financial management is capital structure, which refers to the mix of debt and equity used to finance a company's assets. According to Keown et al. (2010), an optimal capital structure maximizes firm value and minimizes the overall cost of capital.

Wardani and Dewi (2015) demonstrated that capital structure has a significantly negative effect on profitability and a significantly positive effect on operational activities in primary sector companies listed on the LQ45 index. In the case of PT Adaro Energy Indonesia Tbk (ADRO), which operates in the coal mining industry, capital structure is dominated by debt financing, as evidenced by its Debt to Asset Ratio of 56% and Debt to Equity Ratio of 1.25. This reflects a capital-intensive structure that is typical for industries requiring substantial funding with fluctuating revenue cycles.

## **2. Capital Markets and the Role of Equities in Investment**

Capital markets serve as intermediaries between parties in need of funds (issuers) and those with excess capital (investors), facilitating the trading of long-term financial instruments such as stocks and bonds (Hartono, 2013). Equity investment represents ownership in a company and offers the potential for both income and capital gains, though accompanied by varying degrees of risk depending on market conditions and company performance.

PT Adaro Energy Indonesia Tbk (ADRO), as a constituent of both the LQ45 and IDX30 indices, is considered a highly liquid and actively traded stock on the Indonesia Stock Exchange. Its price movements often reflect the broader dynamics of the energy sector in Indonesia. Understanding ADRO's characteristics is essential for making informed, risk-adjusted investment decisions.

### 3. Investment Returns and Expected Return

Return is defined as the gain received from an investment over a certain period and is used as a measure of performance (Tandelilin, 2010). According to Arifah and Fitria (2023), return can be classified into two categories: **expected return**, which reflects projected future gains based on historical performance and market expectations, and **actual return**, which reflects realized outcomes.

Pracanda and Abundanti (2017) found that ADRO's expected return was approximately 5.36%, making it relatively attractive among IDX30-listed stocks. This high expected return appeals to growth-oriented investors. However, it must be interpreted in conjunction with the inherent risk of the asset.

### 4. Investment Risk and Volatility

Investment risk refers to the probability of deviation between actual return and expected return (Zubir, 2011). Risk arises from market volatility, interest rate fluctuations, inflation, and internal corporate factors. Standard deviation is commonly used to measure the degree of such variability.

According to Pracanda and Abundanti (2017), ADRO has a standard deviation of 10.996%, indicating a relatively high level of price volatility. Investors must consider their individual risk tolerance before investing in such assets. As Tandelilin (2010) notes, risk is inseparable from return in investment decisions, encapsulated in the principle of "high risk, high return."

## 5. Portfolio Theory and Risk Diversification

One of the primary methods to reduce investment risk is through diversification. Markowitz's Modern Portfolio Theory (1952) suggests that combining assets with low or negative correlations can reduce overall portfolio risk (Hartono, 2014). A portfolio is considered optimal when it offers the maximum expected return for a given level of risk or the lowest risk for a given level of return.

Pracanda and Abundanti (2017) applied the Markowitz model to IDX30 constituents and identified ADRO as one of the stocks included in the optimal portfolio. This indicates that ADRO, despite its volatility, contributes positively to a diversified portfolio. Proper diversification can enhance the portfolio's risk-adjusted return and minimize losses due to asset-specific risks.

## 6. Financial Performance and Fundamental Factors

In addition to risk and return, the financial performance of issuers is also a major consideration in investment decisions. According to Kasmir (2010), financial ratios such as ROA, ROE, CR, DER, and PER offer insight into a company's profitability, liquidity, and solvency. ADRO demonstrates financial characteristics typical of the mining sector: a fluctuating profit margin, a high DER, and a relatively low ROE (Wardani & Dewi, 2015). This suggests that while ADRO may offer high returns, investors must also consider long-term sustainability and financial stability.

## RESEARCH METHODOLOGY

This study employs a **descriptive qualitative approach** aimed at providing a systematic and factual overview of the potential and risks of investing in shares of PT Adaro Energy Indonesia Tbk (ADRO) on the Indonesia Stock Exchange (IDX). This method not only describes the observed phenomena but also analyzes both internal and external

dynamics that influence the stock performance of ADRO from various investment perspectives.

### 1. Type and Approach of Research

This study is classified as **descriptive qualitative research** using a **literature study approach**. The research does not involve primary data but is based entirely on **secondary data** obtained from credible sources.

### 2. Data Sources and Collection Techniques

The data used in this research are secondary and were collected from:

- **Official financial statements of PT Adaro Energy Indonesia Tbk (ADRO)**, particularly from the fiscal year 2023,
- **ADRO stock price movements** sourced from the Indonesia Stock Exchange (IDX),
- **Global coal commodity price trends**,
- **Academic literature and journals**, such as those by Gitman & Zutter (2015), Hartono (2013), Tandelilin (2010), and others,
- Relevant stock indices such as **LQ45 and IDX30**, which include ADRO as a constituent.

Data were obtained through document analysis from official websites, annual reports, and academic publications from both national and international reputable journals.

### 3. Data Analysis Techniques

The collected data were analyzed using the following methods:

- **Fundamental Analysis:**

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This includes an assessment of financial ratios such as Return on Assets (ROA), Return on Equity (ROE), Debt to Equity Ratio (DER), Current Ratio (CR), and Price to Earnings Ratio (PER), based on the framework by Kasmir (2010). The analysis aims to identify ADRO's internal strengths and weaknesses.

- **Risk and Return Analysis:**

The study adopts concepts from Tandelilin (2010) and Zubir (2011), along with empirical findings from Pracanda & Abundanti (2017), which report that ADRO's expected return is approximately 5.36% with a standard deviation of 10.996%. This reflects the level of investment uncertainty and volatility.

- **Portfolio Analysis (Markowitz Theory):**

ADRO shares are analyzed within the context of an optimal investment portfolio. According to Markowitz (1952), diversification can reduce total portfolio risk. ADRO is identified as one of the optimal stocks within the IDX30 portfolio based on this theory.

- **Assessment of External and Regulatory Factors:**

The study considers the impact of global coal price fluctuations, export dependency, geopolitical risks, as well as government regulations related to fossil fuels and green energy transition, all of which affect the long-term performance of ADRO shares.



#### **4. Data Validity and Reliability**

To ensure data validity, only audited corporate reports, official IDX indices, and accredited academic literature (e.g., SINTA-indexed or internationally peer-reviewed journals) were used. This selective approach strengthens the credibility and reliability of the research findings.

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## **RESULTS AND DISCUSSION**

### **1. ADRO Stock Return Analysis**

Based on historical data on ADRO stock trading throughout 2023, this stock shows quite high volatility but also provides attractive profit opportunities for investors. ADRO's stock price peaked when world coal prices were at their highest level, along with geopolitical tensions and increasing global energy demand. ADRO's expected return of 5.36% shows that this stock has quite potential in terms of returns, although it still contains the risk of price fluctuations that investors need to pay attention to.

### **2. ADRO Stock Risk Analysis**

The main risks of ADRO shares come from two sources: external and internal. From the external side, fluctuations in global coal prices greatly affect the company's financial performance and stock price. The standard deviation of 10.996% obtained from previous research indicates high volatility, indicating that this stock is suitable for investors with high risk tolerance. In addition, government regulations related to reducing carbon emissions and transitioning to green energy can also be strategic obstacles for ADRO in the long term.

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### 3. ADRO's Financial Performance

The 2023 financial report showed a net profit of USD 4.04 billion, driven by high coal demand and operational efficiency. With a Debt to Asset Ratio of 56% and a Debt to Equity Ratio of 1.25, it is clear that the company still relies on debt financing to support its business expansion. However, high revenue and profit margins provide sufficient cushion against liquidity and solvency risks.

### 4. Dividend Distribution and Stock Liquidity

ADRO consistently distributes cash dividends to shareholders, with a value of IDR750 per share in 2023. This policy strengthens long-term investor confidence and makes ADRO shares attractive to income-oriented investors. In addition, ADRO's status as included in the LQ45 and IDX30 indices shows that these shares have a high level of liquidity and are in great demand by institutional and retail investors.

### 5. Investment Portfolio Formation

Based on the Markowitz portfolio theory approach, ADRO shares can be included in the optimal portfolio because they offer a combination of competitive returns and correlations that can reduce overall portfolio risk. Therefore, diversification through the inclusion of ADRO shares together with shares from other sectors can be an effective strategy in managing investment risk.

The following are two graphic or table data that show the potential and risk of investing in **PT Adaro Energy Tbk (ADRO)** shares on the Indonesia Stock Exchange.

### 1. ADRO Financial Performance Chart ( 2018–2022 )

Year	Net Income (million USD)	Net Profit (million USD)	EBITDA (million USD)	Dividen
2018	3.620	478	1.408	56
2019	3.457	435	1.207	44
2020	2.535	159	883	66
2021	3.993	1.020	2.104	141
2022	8.102	2.831	5.030	251

- Potential: Financial performance improved significantly in 2021–2022, especially net income and dividend per share—indicating positive prospects and attractiveness for long-term investors.
- Risk: Significant fluctuations in revenue and net income in 2020 indicate potential external risks such as global coal prices and global economic conditions.

### ADRO Financial Performance Analysis (2018–2022)

Based on the financial performance data of PT Adaro Energy Indonesia Tbk (ADRO), it shows significant dynamics during the period 2018 to 2022. The company's net income fluctuated, starting from USD 3,620 million in 2018, dropping to USD 2,535 million in 2020 due to global external pressures, before jumping drastically to USD 8,102 million in 2022. Net profit also reflects a similar pattern: it fell from USD 478 million in 2018 to only USD 159 million in 2020, but rose sharply again to USD 2,831 million in 2022. EBITDA as an operational indicator also showed an extraordinary recovery, from USD 883 million (2020) to USD 5,030 million (2022).

The sharp increase in net income and EBITDA since 2021 demonstrates the company's operational efficiency and strategic response to the recovery of global coal prices post-pandemic. This is also reflected in the dividend per share distributed to shareholders, which increased significantly from 66 in 2020 to 251 in 2022. This increase indicates management's commitment to providing returns to investors, making ADRO shares attractive for long-term investment. However, behind this potential, there are risks that cannot be ignored. The drastic decline in revenue and net income in 2020 reflects ADRO's sensitivity to external volatility, such as fluctuations in global coal prices, global energy policies, and economic disruptions due to the pandemic. Dependence on the fossil energy commodity sector makes ADRO's financial performance very vulnerable to global changes that cannot be controlled by internal management. Therefore, although the outlook is positive, investors still need to consider the potential medium and long-term risks.

## 2. ADRO Financial Ratio Table (2018–2022)

Ratio	Average value	Standar Industri	Evaluasi
<b>Current Ratio (CR)</b>	188.84%	200%	Not good
<b>Debt to Equity (DER)</b>	144.46%	< 80%	Not good
<b>Return on Assets (ROA)</b>	11.94%	> Industri	Good
<b>Net Profit Margin (NPM)</b>	14%	20%	Not good
<b>Return on Equity (ROE)</b>	12%	40%	Not good

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- Potential: Higher ROA than the industry average indicates efficient use of assets in generating profits.
  - Risk: High DER and low NPM indicate a relatively large debt burden and suboptimal profit margins.

### **ADRO Financial Ratio Analysis (2018–2022)**

Based on the financial ratio analysis of PT Adaro Energy Indonesia Tbk (ADRO) during the period 2018–2022, the company's financial performance shows various dynamics that need to be considered. ADRO's current ratio (CR) averaged 188.84%, which although showing quite good short-term capabilities, is still below the industry standard of 200%. This indicates that the company's liquidity is relatively poor, because ADRO's ability to meet short-term obligations is slightly below the industry average.

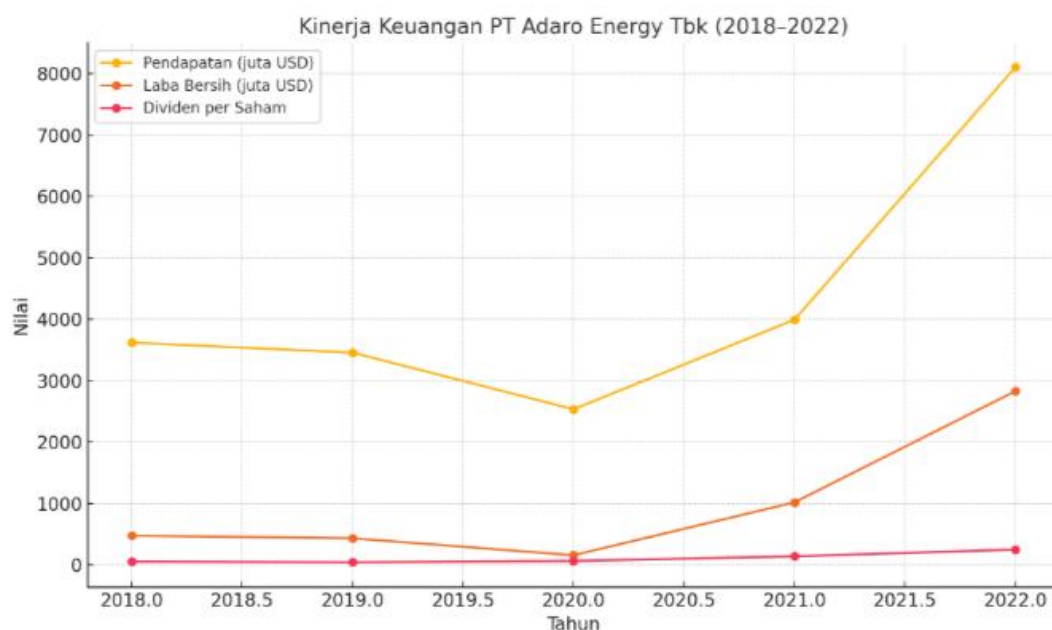
In terms of capital structure, ADRO's debt to equity ratio (DER) was recorded at 144.46%, far exceeding the ideal industry standard of below 80%. This shows that the company is highly dependent on debt-based financing, which indicates quite high financial risk. This high DER can increase interest expenses and liquidity risk, especially in uncertain market conditions.

However, in terms of profitability, ADRO shows quite good potential. The Return on Assets (ROA) ratio reached 11.94%, which is higher than the industry average. This indicates that the company is able to manage its assets efficiently in generating profits, becoming one of the indicators of ADRO's operational strength. However, ADRO's Net Profit Margin (NPM) which only reached 14% is still below the industry standard of 20%,

indicating a less than optimal profit margin. This means that even though the income is quite large, some of it is still absorbed by operational costs, taxes, and other expenses.

In addition, the Return on Equity (ROE) ratio which only reached 12% is also still far below the industry standard of 40%, reflecting that the rate of return on shareholder investment is not yet optimal, so it could have an impact on long-term investor interest.

Overall, ADRO's main potential lies in the high efficiency of asset use, as reflected in its superior ROA. However, the main risks to watch out for are the high DER and low NPM, which reflect an aggressive funding structure and suboptimal net profit efficiency. To maintain long-term performance, ADRO needs to focus on cost efficiency and debt management in order to improve margins and investment attractiveness.



The following is a line chart showing the financial performance of PT Adaro Energy Tbk (ADRO) from 2018 to 2022, including:

- Revenue
- Net Profit

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➤ Dividends per Share

### **Analysis of PT Adaro Energy Tbk (ADRO) Financial Performance Chart from 2018 to 2022**

The line chart showing PT Adaro Energy Tbk (ADRO) financial performance from 2018 to 2022 shows interesting developments in three main aspects: revenue, net profit, and dividends per share. In general, ADRO's financial trend shows strong growth, especially in the 2021–2022 period. The company's revenue had decreased in 2020 due to global pressure from the COVID-19 pandemic, which had an impact on demand and prices for coal commodities as ADRO's main product. However, starting in 2021, the chart shows a significant spike in both revenue and net profit, indicating a recovery and improvement in the company's operational performance. Net profit has accelerated sharply, reflecting operational efficiency and improving coal prices in the global market. Along with the increase in profit, dividends per share have also increased, demonstrating the company's commitment to providing more value to shareholders. However, this graph also shows that ADRO's financial performance is quite sensitive to global dynamics, as seen in the sharp fluctuations in 2020. This indicates that although the company has strong growth potential, investors still need to consider global market risks that could affect future performance.

## **CONCLUSION**

PT Adaro Energy Indonesia Tbk (ADRO) presents an attractive investment potential on the Indonesia Stock Exchange, supported by its position as a large, vertically integrated coal mining company and its contribution to national energy and exports. Its financial performance is solid, especially during periods of high global coal prices, with a net profit of USD 4.04 billion in 2023. ADRO is also known for consistently distributing cash dividends,

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reaching IDR 750 per share in 2023, which is appealing to income-oriented investors. Its shares have high liquidity as they are included in the LQ45 and IDX30 indices, demonstrating strong market confidence. Based on Markowitz's portfolio theory, ADRO can be included in an optimal portfolio for risk diversification.

Nevertheless, investing in ADRO shares carries significant risks. Fluctuations in global coal prices, export dependence, government regulations related to fossil fuels, geopolitical dynamics, and changes in global energy trends are external factors that can affect its stock performance. The stock price volatility of ADRO is also high, indicated by a standard deviation of 10.996%. From a fundamental perspective, although ADRO's Return on Assets (ROA) is higher than the industry average (11.94%), indicating efficient asset management, its high Debt to Equity Ratio (DER) of 144.46% and low Net Profit Margin (NPM) of 14% and Return on Equity (ROE) of 12% suggest a reliance on debt financing, suboptimal profit margins, and less than ideal returns on shareholder investment compared to industry standards. The sharp decline in revenue and net profit in 2020 also highlights ADRO's sensitivity to global market uncertainties. Therefore, investors need to consider their individual risk tolerance and diversification strategies to manage these risks.



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