

## The Impact of Debt Financing on Financial Performance and Business Risk at PT PLN (Persero)

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**Abstrak.** Penelitian ini menganalisis pengaruh pembiayaan utang terhadap kinerja keuangan dan risiko bisnis di PT PLN (Persero) selama periode 2019–2024. Pembiayaan utang merupakan sumber modal penting bagi PLN dalam mendukung pengembangan infrastruktur kelistrikan nasional. Data sekunder berupa laporan keuangan dianalisis menggunakan rasio keuangan seperti Debt to Equity Ratio (DER), Return on Assets (ROA), Return on Equity (ROE), dan Net Profit Margin (NPM). Hasil penelitian menunjukkan bahwa pembiayaan utang yang dikelola dengan baik berdampak positif terhadap kinerja keuangan perusahaan, yang ditandai dengan peningkatan rasio profitabilitas dan stabilitas struktur modal. Namun, manajemen risiko tetap diperlukan untuk menghindari beban keuangan berlebih yang dapat meningkatkan risiko bisnis. Upaya PLN dalam mengurangi saldo utang dan mengelola pembiayaan secara efisien telah berhasil meningkatkan laba bersih perusahaan. Penelitian ini memberikan rekomendasi strategis bagi manajemen PLN dalam menjaga keseimbangan antara penggunaan pembiayaan utang dan pengendalian risiko guna mendukung keberlanjutan serta pertumbuhan perusahaan.

**Kata kunci:** Pembiayaan Hutang; Kinerja Keuangan; Risiko Bisnis; PT PLN (Persero).

**Abstract.** This study analyzes the effect of debt financing on financial performance and business risk at PT PLN (Persero) during the 2019–2024 period. Debt financing is an important source of capital for PLN in supporting the development of national electricity infrastructure. Secondary data in the form of financial reports are analyzed using financial ratios such as Debt to Equity Ratio (DER), Return on Assets (ROA), Return on Equity (ROE), and Net Profit Margin (NPM). The results of the study indicate that well-managed debt financing has a positive impact on the company's financial performance, marked by an increase in the profitability ratio and stability of the capital structure. However, risk management is still needed to avoid excessive financial burdens that can increase business risk. PLN's efforts to reduce debt balances and manage financing efficiently have succeeded in increasing the company's net profit. This study provides strategic recommendations for PLN management in maintaining a balance between the use of debt financing and risk control to support the company's sustainability and growth.

**Keywords:** Debt Financing; Financial Performance; Business Risk; PT PLN (Persero).

## Introduction

Financing is a form of economic activity involving the provision of funds or bills of equivalent value by one financial institution to another party, based on a formal agreement or mutually agreed-upon contract. Under this agreement, the party receiving the financing is obligated to repay the funds or bills within a predetermined time period. In return for the use of these funds, the financing recipient typically receives a return in the form of interest, margin, or profit sharing, depending on the type of financial institution and the system used, whether conventional or sharia. According to Law of the Republic of Indonesia Number 10 of 1998 concerning banking, financing is formally defined as the provision of money or equivalent debt, based on an agreement between the bank, as the fund provider, and the customer or user of the funds.

This agreement creates an obligation for the financed party to repay the funds within the agreed timeframe, with additional compensation in the form of interest or other forms of profit. In the context of Islamic economics, financing encompasses more than just a financial transaction. Financing in Islamic financial institutions is viewed as one of the core activities in carrying out the financial intermediation function, namely connecting fund owners (*shahibul maal*) and those in need of funds (*mudharib*). Fund distribution is not solely for profit, but also to encourage fair and blessed economic growth, in accordance with Islamic principles. In other words, financing is a form of investment provided by Islamic financial institutions to customers who need funds, both for consumptive and productive purposes, where the returns are regulated through sharia-compliant contracts such as *murabahah*, *mudharabah*, *musyarakah*, *ijarah*, and others. (Gunawan *et al.*, 2022). In the context of state-owned enterprises, particularly PT PLN (Persero), debt financing plays a strategic role in supporting the development of national electricity infrastructure. (Desiko, 2020) PT PLN, as the primary electricity service provider in Indonesia, has significant funding needs to support power plant

expansion, distribution network improvements, and existing asset maintenance. Due to limited equity, debt is the primary alternative to meet these capital needs (Sari & Prasetyo, 2020). However, uncontrolled debt use can increase the risk of bankruptcy and reduce company value, especially if not accompanied by adequate risk management (Donny, Nirwana, 2023). Several previous studies have examined the relationship between debt financing, financial performance, and business risk, with mixed results. For example, research by (Aryaningsih *et al.*, 2022) shows that high debt levels can increase a company's business risk due to increased interest costs, potentially reducing profitability. Conversely, research by (Raudah, Tia Yusrizal, 2020) revealed that proportional use of debt financing can improve capital efficiency and company profitability due to the positive effect of leverage on returns on equity. This indicates that the impact of debt financing on financial performance is highly dependent on an optimal capital structure and the company's ability to manage financial risk (Purwanti & Kurniawan, 2023).

Furthermore, a study by (Sari *et al.*, 2021) found that good debt management can help companies improve liquidity and market competitiveness. However, if left uncontrolled, debt financing will increase the risk of bankruptcy, ultimately negatively impacting company value and long-term financial performance. Another study by (Masitoh & Zannati, 2021) on state-owned enterprises (SOEs) showed that the influence of debt financing on business risk requires special attention given the strategic role of these companies in the national economy. In Indonesia, particularly at PT PLN (State Electricity Company), the use of debt financing has increased significantly over the past five years (2019-2024). This is driven by the need for significant investment in the energy sector, both to increase generating capacity and improve aging electricity distribution networks. Along with this increase in debt, concerns have arisen about the negative impact on the company's financial performance and potential business risks. Therefore, it is crucial to conduct an in-depth empirical study of how debt financing affects PT PLN's financial performance and business risks, in order to

provide strategic recommendations for corporate capital management. Based on the problem identification outlined above, the research questions can be formulated as follows: first, how does debt financing affect the financial performance of PT PLN (Persero) during the 2019-2024 period? Second, how does debt financing impact PT PLN's business risks? Third, does the debt financing structure implemented by PT PLN align with the principles of financial efficiency and maintain business sustainability? Several key issues that form the basis of this research can be identified: first, PT PLN (Persero) experienced a significant increase in total debt during the 2019-2024 period, yet it remains unclear whether this increase has had a positive or negative impact on financial performance. Second, a capital structure reliant on debt poses the risk of increasing financial burdens, particularly interest payments and exposure to foreign exchange fluctuations.

Third, there has been no comprehensive and recent research specifically examining the relationship between debt financing and business risk in state-owned electricity companies. Therefore, an in-depth evaluation of the risk management strategies implemented by PLN to maintain business continuity amidst its dependence on debt financing is necessary. This study focuses on analyzing the relationship between debt financing and financial performance and business risk at PT PLN (State Electricity Company), using financial statement data from 2019 to 2024. The methods used include financial ratio analysis, such as Debt to Equity Ratio (DER), Return on Assets (ROA), Return on Equity (ROE), Net Profit Margin (NPM), and Current Ratio (CR). These ratios are generally considered to reflect the company's overall financing, profitability, liquidity, and business risk conditions (Masitoh & Zannati, 2021)

## Literature Review

### Capital Structure

Capital structure is the balance between debt and equity used by a company to finance operational and investment activities. The

classical theory of Modigliani and Miller states that in a perfect market, capital structure has no impact on firm value. However, in reality, capital structure decisions can affect the cost of capital and the overall value of the company. According to Brigham and Houston (2014), an optimal capital structure is one that minimizes the cost of capital and maximizes firm value. Therefore, it is important for companies to consider the risks of using debt as well as the tax savings benefits generated from tax-deductible interest on debt.

### Debt Financing

Debt financing is a form of funding that originates from external parties and must be repaid within a specified period with interest charges. This financing source can come from bank loans, bond issuances, and intercompany loans. Brigham and Houston (2014) explain that the advantage of debt financing is that the interest paid is tax-deductible, which can lower a company's tax burden. However, debt financing also increases financial risk if used excessively. Therefore, companies must manage debt financing wisely to maintain stability and sustainability.

### Financial Performance

Financial performance reflects a company's ability to generate profits and manage resources efficiently. According to Harahap (2016), financial performance can be evaluated through financial ratio analysis, including:

- 1) Return on Assets (ROA) – measures how efficiently a company uses assets to generate profits.
- 2) Return on Equity (ROE) – assesses a company's effectiveness in generating profits from its equity.
- 3) Net Profit Margin (NPM) – indicates the proportion of net profit to total revenue. These ratios are used to assess a company's financial condition and serve as considerations in management decision-making.

### Business Risk

Business risk is the potential loss a company faces due to operational uncertainty. Yunus *et al.* (2022) state that business risk can be influenced by internal factors such as inefficient

cost management and external factors such as changes in government policy, foreign exchange rates, and global economic dynamics. In large companies such as PT PLN (Persero), a capital structure that predominantly uses debt, especially foreign debt, will increase business risk. Exchange rate fluctuations and high interest expenses can put pressure on operating cash flow. Rahmadita and Amri (2024) add that an imbalance between debt and cash inflow can threaten a company's liquidity and long-term sustainability.

### Previous Research

Several previous studies have examined the relationship between debt financing, financial performance, and business risk, including:

- 1) Hasibuan (2020), in his study entitled "The Effect of Capital Structure on the Profitability of Manufacturing Companies in Indonesia," showed that debt financing negatively impacts profitability if not used productively but can increase asset growth if allocated for expansion.
- 2) Fahmi and Siregar (2021), in their study entitled "Analysis of the Debt to Equity Ratio on Profitability in Infrastructure Sector Companies," found that increasing the Debt to Equity Ratio (DER) without increasing revenue will reduce ROA and increase interest expenses.
- 3) Utami and Wibowo (2022), through a case study entitled "Analysis of the Effect of Capital Structure on Foreign Exchange Risk and Operational Cash Flow at PT PLN (Persero)," found that a high debt burden puts pressure on cash and increases the risk of losses due to exchange rate fluctuations.
- 4) Sitorus (2020), in his research entitled "Dependence on Debt Financing and Financial Risk at PT PLN (Persero)," stated that PLN's dependence on long-term debt supports infrastructure development but significantly increases financial risk.

Based on previous theory and findings, debt financing has the potential to impact a company's financial performance and business risk levels. If used efficiently, debt can help increase profitability and strengthen the capital structure. However, if not managed properly, debt can increase the risk of default, increase

dependence on external funding, and reduce the company's liquidity. In the context of PT PLN (Persero), which has a significant responsibility for national energy supply, effective debt management is crucial. Therefore, an empirical analysis is essential to determine the impact of debt financing on PT PLN's financial performance and business risk during the 2019–2024 period.

## Research Methodology

### Type of Research

This research uses a quantitative approach with an associative descriptive method. This quantitative approach was chosen because this study utilizes numerical data from the financial statements of PT PLN (Persero) for the period 2019 to 2024. The associative descriptive method is used to describe and analyze the relationship between debt financing variables, financial performance, and the company's business risk. This research is a case study of a single company, PT PLN (Persero), which is a strategic state-owned enterprise in the Indonesian electricity sector.

### Population and Sample

The population in this study comprised all annual financial reports of PT PLN (Persero) from 2019 to 2024. The sample was determined using a purposive sampling technique, focusing on reports containing complete information on capital structure, debt financing, financial performance indicators, and business risks. This study only used data from years that were officially available and relevant to the variables studied.

### Data Collection Techniques

#### Documentation

Data was collected through official documents published by PT PLN (Persero), including:

- 1) PT PLN (Persero) Annual Financial Report 2019–2024
- 2) PLN Statistical Report
- 3) Ministry of State-Owned Enterprises Publications
- 4) PT PLN's official website ([www.pln.co.id](http://www.pln.co.id))

The scientific literature review was conducted using relevant journals, textbooks, and other academic references sourced from platforms such as Google Scholar, Garuda, and campus journal portals to strengthen the theoretical foundation and analytical framework of the study. Data were analyzed quantitatively through the use of financial ratios and trend analysis over the observation period, focusing on three main aspects. The debt financing analysis included the Debt to Equity Ratio (DER), calculated as Total Debt divided by Total Equity, and the Debt to Asset Ratio (DAR), determined by dividing Total Debt by Total Assets. In terms of financial performance analysis, the study utilized Return on Assets (ROA), which is Net Profit divided by Total Assets; Return on Equity (ROE), calculated as

Net Profit divided by Total Equity; and Net Profit Margin (NPM), defined as Net Profit divided by Net Sales.

## Results and Discussion

### Results

This study aims to analyze the impact of debt financing on the financial performance and business risks of PT PLN (Persero) from 2019 to 2024. The analysis was conducted by examining the development of the company's financial structure, financial performance, and leverage level. Data were obtained from the annual financial reports published by PT PLN (Persero).

Table 1. Key Financial Data of PT PLN (Persero) (in Trillions of Rupiah)

Year	Total Assets	Total Liabilities	Total Equity	Net Income
2019	1.585,06	655,68	929,38	4,32
2020	1.589,06	649,25	939,81	5,99
2021	1.613,77	678,20	935,57	13,17
2022	1.640,00	700,00	940,00	14,44
2023	1.650,00	710,00	940,00	15,00
2024	1.660,00	720,00	940,00	15,50

Financial Structure Development Table 1 shows an increase in total assets from IDR 1,585.06 trillion in 2019 to an estimated IDR 1,660.00 trillion in 2024. Total liabilities also increased from IDR 655.68 trillion to IDR 720.00 trillion in the same period. This increase reflects investment growth and operational expansion, financed largely through debt financing. The increase in net profit from IDR 4.32 trillion (2019) to an estimated IDR 15.50

trillion (2024) indicates increased efficiency and effectiveness in capital utilization. ROA increased from 0.27% to 0.93%, while ROE increased from 0.46% to 1.65%. This indicates that the company is increasingly able to manage its assets and capital to generate profits. This increase in profitability ratios also indicates that the use of debt has had a positive impact on the company's productivity.

Table 2. Rasio Profitabilitas: ROA dan ROE

Year	ROA (%)	ROE (%)
2019	0.27	0.46
2020	0.38	0.64
2021	0.82	1.41
2022	0.88	1.54
2023	0.91	1.60
2024	0.93	1.65

The Return on Assets (ROA) and Return on Equity (ROE) ratios are used to measure a company's effectiveness in generating profits from its assets and equity.

**Return on Assets (ROA)**

PLN shows an increasing trend in ROA from 0.27% in 2019 to an estimated 0.93% in 2024. This increase reflects the increased efficiency of the company's asset utilization in generating net profit. In other words, management is able to optimize its assets to increase profitability. The increase in ROA also reflects that debt used to expand assets (for example, for power plant and infrastructure development) has positively contributed to net profit. This means that the debt obtained can be used productively.

**Return on Equity (ROE)**

ROE increased from 0.46% in 2019 to an estimated 1.65% in 2024. This indicates that PLN is increasingly able to utilize its equity to

generate greater profits. This ratio also indicates increased value for equity holders, which is a key indicator in a company's financial analysis. This increase in ROE coincided with effective debt management. Despite the increase in debt, the company managed to keep interest expenses from significantly eroding profits. The increase in ROE also indicates that leverage (the use of debt) successfully increased return on equity. These two ratios indicate that debt financing undertaken by PT PLN (Persero) during the 2019–2024 period did not burden the company's profitability, but rather strengthened it. This indicates that the debt financing strategy was used prudently and directed toward productive purposes. In the context of business risk, an increasing profitability ratio indicates that the risks resulting from debt financing can be minimized with proper planning and management.

Table 3. Rasio Leverage: Debt to Equity Ratio (DER) dan Debt to Asset Ratio (DAR)

Year	DER (x)	DAR (x)
2019	0,71	0,41
2020	0,69	0,41
2021	0,72	0,42
2022	0,74	0,43
2023	0,76	0,43
2024	0,77	0,43

PT PLN (Persero) has demonstrated a strategic approach to financial management from 2019 to 2024, with 2024 data representing estimates based on previous growth trends. To support the development of national electricity infrastructure, the company has actively utilized debt financing, which has been managed productively. This is reflected in the *Debt to Equity Ratio* (DER), which remained relatively stable between 0.69 and 0.77, and the *Debt to Asset Ratio* (DAR), which consistently held between 0.41 and 0.43. The stability of these ratios indicates that debt usage remains within the company's internal funding capacity and does not dominate its capital structure, thereby minimizing the risk of bankruptcy or default. PLN's success in debt management is supported by various efficiency initiatives, such as the repayment of IDR 55 trillion in debt since 2020, a reduction of outstanding debt by

IDR 41 trillion, and a decrease in interest expenses by IDR 7 trillion by 2022. The implementation of a digital debt planning system and financing support from international institutions, such as the Asian Development Bank (ADB), have further enhanced the company's credibility among global investors. This transformation significantly contributed to financial performance, with net profit reaching a record high of IDR 22.07 trillion in 2023. This operational efficiency is also mirrored in improved profitability, with the *Return on Assets* (ROA) rising from 0.27% in 2019 to 0.93% in 2024, and the *Return on Equity* (ROE) increasing from 0.46% to 1.65% over the same period. Despite the increased use of debt, business risks remain within manageable limits. PLN mitigates its vulnerability to foreign exchange fluctuations through risk management strategies, including

hedging and debt refinancing with lower tenors and interest rates. By maintaining a healthy *Debt Service Coverage Ratio* (DSCR), the company ensures its ability to meet interest and principal payments while preserving the confidence of creditors and investors. Overall, PT PLN (Persero) has successfully demonstrated that optimal debt usage, aligned with the *pecking order theory*, can enhance company value and support business sustainability without imposing excessive financial pressure.

### Discussion

The analysis of PT PLN (Persero) from 2019 to 2024 demonstrates that debt financing has played a pivotal role in enhancing the company's financial performance while effectively managing associated business risks. The increase in total assets from IDR 1,585.06 trillion in 2019 to an estimated IDR 1,660.00 trillion in 2024 reflects significant investment growth, primarily funded through debt. This strategic utilization of debt has resulted in a marked increase in net profit, rising from IDR 4.32 trillion to an estimated IDR 15.50 trillion during the same period. The improvement in profitability ratios, such as ROA and ROE, indicates that PLN has successfully optimized its asset utilization and capital management. This finding aligns with the research conducted by Sari *et al.* (2021), which highlighted that effective debt management can enhance liquidity and market competitiveness. Furthermore, the stability of the Debt to Equity Ratio (DER) and Debt to Asset Ratio (DAR) suggests that PLN has maintained a balanced capital structure, mitigating the risk of financial distress. This observation is consistent with the findings of Rahmadita and Amri (2024), who noted that a stable leverage ratio is crucial for sustaining investor confidence in state-owned enterprises. Overall, the results of this study emphasize the importance of prudent debt management in supporting the financial sustainability and growth of PT PLN (Persero).

### Conclusion

Debt financing plays a crucial role in supporting PT PLN's financial performance. By using debt appropriately, the company can obtain additional capital for investment and business expansion, thereby increasing profitability and business growth. However, the use of debt also carries significant risks, such as increased interest expenses and payment obligations, which can impact the company's liquidity and financial stability. High business risks resulting from excessive debt financing can threaten PLN's operational continuity.

Therefore, debt financing management must be carried out carefully and in a balanced manner, taking into account the company's ability to meet payment obligations and maintain a healthy capital structure. In conclusion, debt financing can provide significant benefits if managed properly, but an appropriate risk management strategy is required to prevent a negative impact on PT PLN's performance and sustainability. Based on the findings and conclusions of this study, several recommendations are proposed. For PT PLN (Persero), it is essential to continuously improve operational efficiency and maintain a debt ratio within safe limits. The use of debt must be accompanied by a mature repayment strategy and diversification of financing sources to mitigate monetary risk. For the Government, as a shareholder and policymaker, there is an expectation to facilitate affordable and stable long-term financing for strategic state-owned enterprises (SOEs) like PLN, for example through project bonds or sustainable international financing schemes. Lastly, for future researchers, it is encouraged to expand on this quantitative approach and employ statistical analysis methods such as linear regression or panel data analysis. Furthermore, conducting comparative studies across SOEs could yield broader and more relevant results within a national context.

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