

# Comparative Analysis of Government Foreign Debt and Indonesia's Economic Growth for the 2021-2023 Period

Musfiq Amrullah Raihan Haj, Yenda Aulia, Fiqh Fadhillah  
Raden Intan University of Lampung

Correspondence: Musfiq Amrullah Raihan Haj (082280159524) /  
musfiq4177rullah@gmail.com

## Abstract

*Foreign debt is a crucial financing instrument for many countries, including Indonesia, especially in facing the challenges of economic recovery after the COVID-19 pandemic. The period of 2021-2023 is a unique time frame with debt dynamics and economic growth interacting amid global uncertainty. This study aims to comparatively analyze the development of Indonesia's government foreign debt and Gross Domestic Product (GDP) during this period. Using a quantitative approach and comparative descriptive methods, this study processes annual secondary data sourced from the Central Statistics Agency (BPS) and Bank Indonesia (BI). The main results show that Indonesia's GDP experienced solid and consistent growth, while government foreign debt also increased but at a more moderate rate. A key finding of this study is the downward trend in the debt-to-GDP ratio from year to year, which indicates an improvement in fiscal health and an increase in the country's economic capacity to bear its obligations. This decline indicates that strong economic growth has been able to outpace the rate of debt accumulation during the study period.*

**Keywords :** Government Foreign Debt; Gross Domestic Product; Comparative Analysis; Indonesian Economy

## Abstract

Foreign debt is a crucial financing instrument for many countries, including Indonesia, particularly in facing the challenges of post-COVID-19 economic recovery. The 2021-2023 period presents a unique timeframe, with debt dynamics and economic growth interacting amidst global uncertainty. This study aims to comparatively analyze the development of government foreign debt and Indonesia's Gross Domestic Product (GDP) during this period. Using a quantitative approach and comparative descriptive methods, this study analyses annual secondary data sourced from the Central Statistics Agency (BPS)

and Bank Indonesia (BI). The main results indicate that Indonesia's GDP experienced solid and consistent growth, while government foreign debt also increased, albeit at a more moderate rate. A key finding of this study is the declining trend in the debt-to-GDP ratio from year to year, indicating improving fiscal health and increasing the country's economic capacity to cover its obligations. This decline indicates that strong economic growth was able to outpace the rate of debt accumulation during the study period.

**Keywords** : Government Foreign Debt; Gross Domestic Product; Comparative Analysis; Indonesian Economy

## Introduction

Economic growth is the primary goal of sustainable national development, but in practice, state spending often exceeds existing revenues, resulting in a deficit in the State Budget (APBN). To cover this deficit and ensure the sustainability of development programs, the government requires alternative financing sources, one of which is foreign debt (Atmadja, 2004). Foreign debt is a strategic instrument that not only functions to cover the budget deficit but also as a source of funding for various infrastructure development projects. According to Darmawan (2022), funding for these national strategic projects is essential to accelerate economic growth (Darmawan, 2022). Effective debt management is expected to provide a positive stimulus to the economy, especially in the context of post-COVID-19 pandemic recovery, which has placed significant pressure on the country's fiscal condition (Aeni, 2021). This situation is exacerbated by the significant national economic losses caused by the pandemic (Hadiwardoyo, 2020). Therefore, analyzing the relationship between government external debt and economic growth is crucial to understanding its impact, particularly in the 2021-2023 period when economic stability and recovery are top priorities.

The 2021-2023 period marks a crucial phase for the global and domestic economies as they attempt to recover from the impact of the COVID-19 pandemic, which has caused significant economic contractions in various countries, including Indonesia (Aeni, 2021). However, these recovery efforts face new and complex challenges. These challenges include a surge in global inflation triggered by supply chain disruptions and increased demand, to which central banks in many countries responded with tight monetary policies through interest rate hikes. This situation is exacerbated by rising geopolitical tensions, which add uncertainty to the global economy. Amid these dynamics, Indonesia, as a developing country, is striving to maintain the momentum of its economic

growth (Amdan & Sanjani, 2023) . One policy instrument often relied upon to finance development and stabilize the economy is government foreign debt (Atmadja, 2004) . Therefore, it is relevant to analyze comparatively how government foreign debt interacts with Indonesia's economic growth during this turbulent period to understand its effectiveness as a fiscal instrument amid economic uncertainty.

**Table 1**  
**GDP and Government External Debt 2021-2023**

<b>Year</b>	<b>GDP (Billion Rupiah)</b>	<b>Government External Debt (million USD)</b>
2021	11,120,059.70	200,175
2022	11,710,223.20	186,474
2023	12,301,475.10	196,636

Source: Bank Indonesia and Central Statistics Agency

Based on Table 1, the Indonesian economy demonstrated a solid and consistent growth trend from 2021 to 2023. This is reflected in the sustained increase in Gross Domestic Product (GDP), which rose from IDR 11,120 trillion in 2021 to IDR 12,301 trillion in 2023. Meanwhile, the government's external debt (ULN) exhibited a more volatile pattern. After reaching USD 200,175 million in 2021, the external debt experienced a significant decline in 2022 to USD 186,474 million. However, in 2023, the external debt position increased again to USD 196,636 million, although the value was still below the 2021 level.

Several previous studies have examined the relationship between foreign debt and economic growth in Indonesia, but with mixed findings. Research by Farida & Yuliana (2022) for the 2006-2020 period found that foreign debt had a positive and significant effect on economic growth (Farida & Yuliana, 2022) . Similar findings were also revealed by Rafikhalif & Nirmalawati (2021) in a long-term analysis of the 1980-2019 period, who concluded that government foreign debt had a positive impact on Indonesia's economic growth (Rafikhalif & Nirmalawati, 2021) . However, other studies, such as those conducted by Van Basten et al. (2021), indicate that although foreign debt does influence growth, its impact needs to be managed carefully to avoid creating new problems such as increased unemployment (Van Basten et al., 2021) .

The diversity of these findings, coupled with the absence of studies specifically focusing on the post-pandemic recovery period of 2021-2023, which has unique economic characteristics, indicates a research gap that needs to be filled. Therefore, this study aims to fill this gap by providing specific innovations. Unlike previous studies, which tend to use quantitative analysis over long timeframes, this study contributes through a comparative descriptive approach to a very short and crucial period (2021-2023). This period was chosen because it represents the turbulent phase of economic recovery amidst post-pandemic global uncertainty (Hadiwardoyo, 2020) .

The novelty of this research lies in its in-depth year-by-year analysis, which allows for a more contextual understanding of how government external debt dynamics interact with economic growth during this unique recovery phase, something that may not be captured by long-term trend analysis. Based on the novelty outlined, this study aims to conduct a comparative descriptive analysis of the dynamics of government external debt and Indonesia's economic growth in the 2021-2023 period. Specifically, this study will identify the annual trends in government external debt and GDP, compare the relationship between the two variables from year to year, and provide a comprehensive picture of the interaction of debt and economic growth in the context of post-pandemic recovery.

### **Literature review**

This study is based on several key theories in economics that are relevant to explaining the relationship between external debt and economic growth. To analyze the dynamics of government external debt and economic growth, the theoretical framework used in this study includes economic growth theory and development financing theory.

### **Economic Growth Theory**

Economic growth theory serves as the foundation for understanding the dependent variables in this study. One of the most fundamental theories is the Neoclassical Growth Theory developed by Solow (1956), which states that economic growth is a series of human-driven activities, capital accumulation, and technological progress, which are the main drivers of long-term economic growth (Solow, 1956) . Then, the theory developed by Schumpeter and Keynes (1936) became the basis of modern macroeconomics. Keynes explained that market economies do not always automatically return to full employment. High

unemployment rates can persist for long periods due to a lack of aggregate demand, necessitating government intervention (Schumpeter & Keynes, 1936)

### **Foreign Debt Theory**

Another key variable in this study is external debt (ULN). Theoretically, ULN can serve as a supplement to domestic resources to finance productive investment. According to the Keynesian perspective, in a sluggish economy, government debt can be a fiscal policy instrument to provide stimulus and boost aggregate demand (Schumpeter & Keynes, 1936) .

### **Previous Research**

Several empirical studies have examined the relationship between foreign debt and economic growth in Indonesia, but with mixed findings. The following is a review of several relevant studies used as references in this research. Research conducted by Farida & Yuliana (2022) explains the effect of foreign debt and exports on Gross Domestic Product (GDP) in Indonesia during the period 2006-2020. Using multiple linear regression analysis, the study found that foreign debt had a positive and statistically significant effect on economic growth, indicating that debt was used productively during this period. (Farida & Yuliana, 2022) .

Similar findings were also revealed by Rafikhalif & Nirmalawati (2021) in a long-term analysis covering the period 1980-2019. This study concluded that government foreign debt consistently had a positive impact on Indonesia's economic growth, especially when allocated to strategic infrastructure projects (Rafikhalif & Nirmalawati, 2021) . Meanwhile, Van Basten et al.'s (2021) perspective suggests greater caution in managing economic growth. The study demonstrated the influence of foreign debt on growth, underscoring the need for careful management. The study found side effects, where ineffective debt management has the potential to increase open unemployment, necessitating a comprehensive policy (Van Basten et al., 2021) .

Based on the above studies, it appears that external debt has the potential to drive economic growth. However, the differences in findings, particularly those highlighted by Van Basten et al. (2021), demonstrate the importance of the period context and the effectiveness of debt management (Van Basten et al.,

2021) . This diversity of results underlies this research's focus on the post-pandemic recovery period, which has unique economic characteristics.

## Research methods

This study uses a quantitative approach with a comparative descriptive approach. This approach was chosen because the data analyzed spans a relatively short three years (2021-2023), making it impossible to conduct regression analysis, which requires longer *time series data* . Therefore, the focus of this study is to describe and compare government external debt and economic growth data over time (year-on-year) within this specific period to gain a deeper contextual understanding.

The type of data used in this study is secondary data in the form of an annual *time series* covering the period 2021 to 2023. The data source for the economic growth (GDP) variable was obtained from the official publication of the Central Statistics Agency (BPS), while data on the government's foreign debt came from the Indonesian Foreign Debt Statistics released by Bank Indonesia (BI).

The data analysis technique applied in this study is descriptive analysis. The analysis process includes several steps, as follows.

### 1. Trend Analysis

This analysis calculates the annual growth rate for GDP and government foreign debt , this analysis uses the following formula.

$$\text{Pertumbuhan (\%)} = \left( \frac{\text{Nilai Tahun Sekarang} - \text{Nilai Tahun Sebelumnya}}{\text{Nilai Tahun Sebelumnya}} \right) \times 100\%$$

### 2. Ratio Analysis

This analysis calculates the Debt-to-GDP Ratio for each year. The first step in data processing is converting the government's Foreign Debt (ULN) from US Dollars (USD) to Rupiah (Rp). This is necessary to equate the currency unit with Gross Domestic Product (GDP) data so that the ratio analysis can be performed. The conversion is performed by multiplying the government's total external debt in USD for each year by the USD middle exchange rate against the Rupiah for that year, data sourced from Bank Indonesia. This analysis uses the following formula.

$$\text{Rasio Utang terhadap PDB (\%)} = \left( \frac{\text{Total Utang Pemerintah (Rp)}}{\text{PDB Nasional (Rp)}} \right) \times 100\%$$

## Results and Discussion

The following is table 2. GDP, Government External Debt, inflation rate, BI rate, USD middle exchange rate against Rupiah in Indonesia in the 2021-2022 period.

**Table 2**  
**GDP, Government External Debt, Inflation, BI Rate, Middle Exchange Rate**

Year	GDP (Billion Rupiah)	Government External Debt (Billion Rupiah)	Inflation (average)	BI Rate (average)	Middle Rate (USD to Rupiah)
2021	11,120,059	2,856,297	1.56%	3.52%	14,269
2022	11,710,223	2,933,422	4.21%	4%	15,731
2023	12,301,475	3,031,340	3.69%	5.81%	15,416

Source: Bank Indonesia and Central Statistics Agency

### Analysis of GDP Development Trends and Government Foreign Debt

The following is a line graph analyzing the trend of GDP development and Government Foreign Debt which can be seen in Figure 1 as follows.

**Figure 1**  
**Trendline Chart of GDP and Government External Debt Movements for 2021-2023**

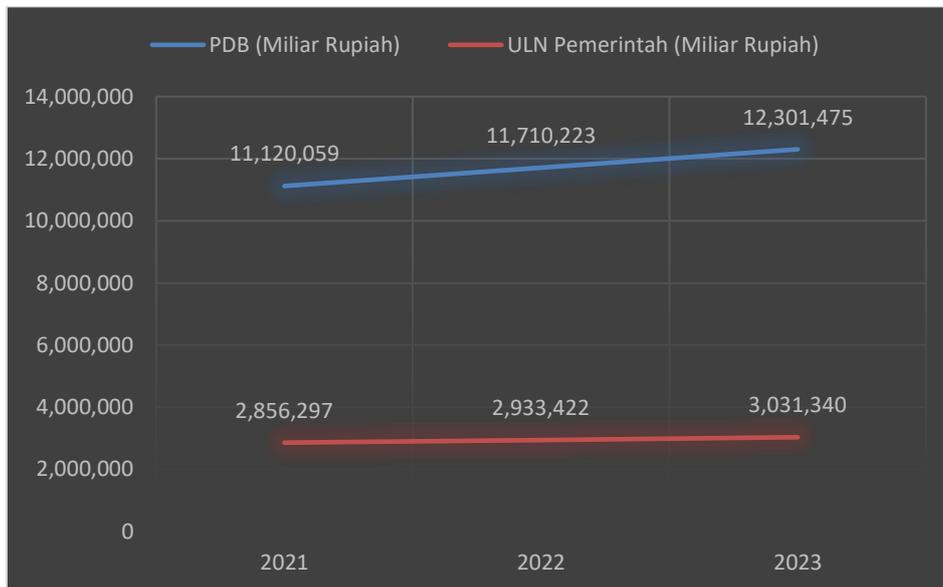


Figure 1 shows the results of trend analysis for the 2021-2023 period, showing that the government's Gross Domestic Product (GDP) and External Debt (ULN) consistently experienced positive growth. Indonesia's GDP showed solid growth, increasing by 5.31% from 2021 to 2022, and then growing again by 5.05% in 2023, indicating a continued economic recovery, albeit at a slight slowdown. Correspondingly, government external debt also recorded an increase, albeit at a more moderate rate. External debt growth was recorded at 2.70% in 2022, which then accelerated slightly to 3.34% the following year. Overall, both variables moved in the same direction (upward), but at different growth rates, with GDP growth consistently higher than external debt growth throughout the observation period.

**Debt to GDP Ratio Analysis**

The following are the results of the analysis of the ratio of Government Foreign Debt (ULN) to Gross Domestic Product (GDP) which can be seen in table 3 as follows.

**Table 3**  
**GDP, Government External Debt, Debt-to-GDP Ratio 2021-2023**

<b>Period</b>	<b>GDP (Billion Rupiah)</b>	<b>Government External Debt (Billion Rupiah)</b>	<b>Debt to GDP Ratio</b>
2021	11,120,059	2,856,297	25.69%
2022	11,710,223	2,933,422	25.05%
2023	12,301,475	3,031,340	24.64%

Table 3 shows that the debt-to-GDP ratio analysis shows a consistent downward trend during the 2021-2023 period, from 25.69% in 2021 to 24.64% in 2023. This decline is a positive indicator for Indonesia's fiscal health. This indicates that the country's economic growth (GDP) is able to outpace the growth rate of the government's foreign debt. In other words, the economy's capacity to bear the debt burden is improving, indicating sounder fiscal management and increased economic resilience amidst post-pandemic dynamics.

The results of this study demonstrate the success of Indonesia's economic policy response in maintaining fiscal health during the post-pandemic recovery period. The consistent downward trend in the debt-to-GDP ratio from 25.69% in 2021 to 24.64% in 2023 is not a coincidence, but rather the result of the interaction between strong economic growth and prudent debt management. The key to this decline is solid and sustainable GDP growth. This growth is supported by strong domestic economic fundamentals, particularly household consumption, which remains the backbone of the economy. Furthermore, strong export performance, driven by rising global commodity prices during the period, and increased investment as the business climate improves, are other driving factors.

The economy's ability to grow faster than the rate of debt accumulation is a crucial factor in increasing the country's capacity to meet its obligations. On the other hand, the fluctuating dynamics of the government's external debt (ULN) indicate active management. The decline in US dollar-denominated external debt (ULN) in 2022 (from US\$200.1 billion to US\$186.4 billion) can be attributed to the government's strategy, which includes repaying maturing debt and diversifying financing sources. However, a deeper analysis reveals exchange rate risks. Although US dollar-denominated debt decreased in 2022, the significant weakening of the rupiah exchange rate during the same year caused

the equivalent value of the debt in rupiah to increase (from Rp2,856 trillion to Rp2,933 trillion).

This phenomenon underscores the importance of exchange rate stability as part of a comprehensive debt management strategy. This combination of strong economic fundamentals and measured policies is the foundation for improving fiscal health. In 2023, the government consciously implemented fiscal consolidation following the end of the National Economic Recovery (PEN) program. This policy was reinforced by Bank Indonesia, which significantly raised its benchmark interest rate (BI Rate) to an average of 5.81% to maintain macroeconomic stability amidst the rising global interest rate trend. These measures encouraged more prudent and prudent debt management.

Although this study is descriptive in nature, its findings generally do not contradict the results of previous causal studies. The declining trend in the debt ratio amid positive economic growth indicates that, during this specific period, foreign debt was managed productively and supported economic recovery. This aligns with the conclusions of Farida & Yuliana (2022) and Rafikhalif & Nirmalawati (2021), who found a positive relationship between foreign debt and long-term economic growth. However, these findings also underscore the importance of prudence in debt management, as suggested by Van Basten et al. (2021), where success in maintaining a declining debt ratio depends heavily on a country's ability to consistently drive economic growth that exceeds the rate of debt growth.

## **Conclusion**

The conclusion of this study shows that during the 2021-2023 period, the Indonesian government's external debt (ULN) showed a moderate positive growth trend, in line with post-pandemic financing needs. At the same time, Gross Domestic Product (GDP) experienced more solid and consistent growth, indicating a strong and sustainable pace of economic recovery. A comparative analysis of these two variables reveals a key finding: the debt-to-GDP ratio consistently decreased from 25.69% in 2021 to 24.64% in 2023. This decline is an important indicator of the country's improving fiscal health. This implies that the Indonesian economy's capacity to bear its debt burden is increasing, as economic growth has outpaced the rate of foreign debt accumulation. Therefore, despite the increase in nominal government external debt, its ability to manage it sustainably shows a positive trend during this challenging period of economic recovery, reflecting prudent fiscal management .

Based on the research findings, further research is recommended to expand the analysis period to a longer time span. The use of more extensive *time series data* will enable the application of more robust analytical methods, such as regression, to statistically test the causal relationship between government external debt and economic growth. From a policy perspective, the findings regarding the decline in the debt ratio amid solid GDP growth have important implications. The government is advised to maintain the momentum of economic growth and ensure that any additional external debt is allocated to productive sectors. This policy is crucial for maintaining the positive trend in fiscal health and ensuring the sustainability of debt management in the future.

### BIBLIOGRAPHY

- Aeni, N. (2021). COVID-19 Pandemic: Health, Economic, & Social Impacts. *Jurnal Litbang: Media Informasi Penelitian, Pengembangan Dan IPTEK* , 17 (1), 17–34. <https://doi.org/10.33658/jl.v17i1.249>
- Amdan, L., & Sanjani, MR (2023). Analysis of Factors Influencing Economic Growth in Indonesia. *EKOMA : Journal of Economics, Management, Accounting* , 3 (1), 108–119. <https://doi.org/10.56799/ekoma.v3i1.2089>
- Atmadja, AS (2004). INDONESIA GOVERNMENT FOREIGN DEBT : DEVELOPMENT AND ITS IMPACT. *Journal of Accounting and Finance* , 2 (1).
- Darmawan, I. (2022). THE IMPACT OF FOREIGN DEBT ON THE INDONESIA ECONOMY. *Journal of Economic and Accounting Education* , 15 (2).
- Farida, A., & Yuliana, I. (2022). The influence of foreign debt and exports on Indonesia's economic growth (GDP) for the period 2006-2020. *Journal of Islamic Economics* , 13 (2).
- Hadiwardoyo, W. (2020). National Economic Losses Due to the Covid-19 Pandemic. *BASKARA : Journal of Business and Entrepreneurship* , 2 (2), 83–92. <https://doi.org/10.54268/baskara.v2i2.6207>
- Rafikhalif, D., & Nirmalawati, D. (2021). Analysis of the Impact of Government Foreign Debt on Indonesia's Economic Growth (1980-2019 Period). *Ecosains: Scientific Journal of Economics and Development* , 10 (1).
- Schumpeter, J. A., & Keynes, J. M. (1936). The General Theory of Employment, Interest and Money. *Journal of the American Statistical Association* , 31 (196),

791. <https://doi.org/10.2307/2278703>

Solow, R.M. (1956). A Contribution to the Theory of Economic Growth. *The Quarterly Journal of Economics* , 70 (1), 65–94.

Van Basten, E., Hudayah, S., & Gani, I. (2021). The influence of foreign debt on economic growth and its impact on open unemployment in Indonesia. *ECONOMIC FORUM: Journal of Economics, Management and Accounting* , 23 (2).