



Analyzing the Effectiveness of State Debt Management in Supporting Fiscal Stability: A Case Study of Indonesia

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Effective management of national debt plays a critical role in maintaining fiscal stability, particularly for developing countries like Indonesia, which must balance the need for financing with the risks of fiscal vulnerability. This study aims to analyze the effectiveness of Indonesia's state debt management in supporting fiscal stability over the 2015–2024 period. A quantitative descriptive approach was employed, using multiple linear regression to assess the relationship between fiscal stability and three independent variables: the debt-to-GDP ratio (%), interest burden on debt (%), and the proportion of short-term debt (%). Fiscal stability served as the dependent variable. The findings reveal that the debt-to-GDP ratio has a positive and significant effect on fiscal stability ($\beta = 0.451$; $p = 0.012$). In contrast, the interest burden on debt ($\beta = -0.682$; $p = 0.021$) and the proportion of short-term debt ($\beta = -0.239$; $p = 0.049$) show negative and significant effects. The regression model produced an R^2 value of 0.732, indicating that 73.2% of the variation in fiscal stability can be explained by these three independent variables. Classical assumption tests (normality, multicollinearity, and heteroscedasticity) confirmed the model's validity and reliability. This study concludes that effective debt management—through diversification of financing sources, restructuring of debt portfolios, and prioritization of productive spending—is essential for strengthening Indonesia's fiscal stability

INTRODUCTION

National debt management has become a central issue in fiscal policy across many countries. In a global context, public debt is regarded as a legitimate and strategic instrument for driving economic growth, financing infrastructure development, and enhancing national competitiveness. However, if not managed prudently and sustainably, public debt can place significant pressure on the state budget, disrupt macroeconomic stability, and pose long-term fiscal risks (Presbitero, 2012).

Over the past decade, developing countries have experienced an increasing debt burden due to heightened development financing needs – especially in the aftermath of the 2008 global financial crisis and the COVID-19 pandemic. International institutions such as the International Monetary Fund (IMF) and the World Bank have reported a rising trend in public debt across Asia, Africa, and Latin America (IMF, 2021). While such debt has often supported post-crisis economic recovery, the growing interest burden and reliance on short-term debt have created increasingly complex fiscal vulnerabilities (Kose et al., 2020).

Indonesia, as the largest economy in Southeast Asia, has not been immune to these dynamics. The Indonesian government has long utilized debt as a major source of financing within the national budget (APBN), particularly to cover fiscal deficits and fund infrastructure projects (Pratama, 2020). According to the Ministry of Finance, by the end of 2023, Indonesia's central government debt had exceeded IDR 8,000 trillion, with a debt-to-GDP ratio of approximately 39%. Although this ratio remains legally within safe limits, it continues to exhibit an upward trend (Ministry of Finance, 2023).

Fiscal stability is a key indicator of a nation's economic sustainability. When the debt burden is not aligned with state revenue capacity, it constrains the government's fiscal space and hampers the implementation of development policies (Elmendorf & Mankiw, 1999). Moreover, an increasing interest burden may reduce budget allocations for productive sectors such as education and health, which should remain national priorities (Woo & Kumar, 2015).

A growing body of empirical research underscores the importance of effective debt management for macroeconomic stability. Reinhart and Rogoff (2010), for instance, found that when the public debt-to-GDP ratio exceeds 90%, economic growth tends to decline significantly. Jha and Dang (2021) also highlight the importance of risk management in public debt strategies to avoid long-term fiscal vulnerabilities, particularly in developing countries.

Effective debt management encompasses the selection of appropriate debt instruments, balanced maturity structures, foreign exchange risk control, and regular evaluation of government debt portfolios (Abbas & Christensen, 2010). Furthermore, transparency and accountability in debt reporting are essential to building public trust and maintaining the confidence of international financial institutions (Currie, Dethier, & Togo, 2003).

Amid a globally uncertain environment – driven by geopolitical tensions, volatile global interest rates, and the impacts of climate change – Indonesia faces significant challenges in maintaining fiscal sustainability. The high financing needs in the post-pandemic period, coupled with inflationary pressures, have

made prudent debt management more urgent than ever (Alesina et al., 2020). Adaptive and forward-looking debt strategies are required to mitigate fiscal risks amidst evolving global dynamics.

Although the Indonesian government has introduced both a Medium-Term Debt Management Strategy (MTDS) and a Long-Term Debt Management Strategy (LTDMS), the effectiveness of their implementation warrants further evaluation. Such assessments are crucial not only in terms of compliance with fiscal targets but also in evaluating efficiency, sustainability, and the contribution of debt policy to broader economic stability (Tanzania Ministry of Finance & Planning, 2019; Setiawan, 2021).

Given these challenges, this study focuses on analyzing the effectiveness of Indonesia's state debt management in supporting fiscal stability. Using a case study approach, the research aims to evaluate current policies and practices in public debt management and analyze their implications for medium- and long-term fiscal sustainability.

Through this study, it is expected that a more comprehensive understanding will be gained regarding the relationship between national debt management and fiscal stability. In addition to contributing to academic literature, the findings are also intended to provide strategic policy recommendations for the government in formulating more sustainable, adaptive, and responsive debt management policies that ultimately support national welfare.

LITERATURE REVIEW

The Concept of National Debt

National debt is a key fiscal policy instrument used by governments to cover budget deficits and finance development initiatives. It is generally categorized into two main types: domestic debt and foreign debt. Domestic debt is sourced from within the country, such as through the issuance of government securities (SUN), while foreign debt originates from bilateral, multilateral, or international market loans (Arifin & Putri, 2020).

The primary objectives of government borrowing include financing budget deficits, supporting infrastructure spending, and promoting economic growth. However, if not managed prudently, debt can increase the fiscal burden over time. Thus, principles such as sustainability, cost-efficiency, and transparency are essential in effective public debt management (Wibowo, 2017).

Theoretically, several perspectives explain the relationship between debt and the economy. Ricardian Equivalence Theory suggests that rational consumers will save more in anticipation of future tax burdens caused by government debt, thereby neutralizing its impact on consumption. In contrast, the Debt Overhang Theory argues that excessive debt levels can discourage investment and hinder economic growth (Sachs, 1989; Panizza, 2008).

State Debt Management

State debt management encompasses planning, issuance, and monitoring of public debt, aiming to maintain fiscal balance while minimizing

macroeconomic risks. Governments must ensure that debt is used efficiently to finance productive activities that support long-term economic growth. In Indonesia, debt management is conducted by the Directorate General of Budget Financing and Risk Management (DJPPR) under the Ministry of Finance, through medium-term financing policies and risk mitigation strategies tailored to market dynamics and fiscal conditions (Firmansyah & Kuncoro, 2021).

One of the key indicators for evaluating debt sustainability is the debt-to-GDP ratio, which reflects the magnitude of debt relative to the national economy's capacity. This ratio serves as a benchmark for assessing fiscal sustainability. Other indicators, such as the Debt Service Ratio (DSR) – which measures the share of revenues used to service debt – and the Average Time to Maturity (ATM) – which indicates the average time remaining before debt matures – are also crucial in assessing liquidity risk and long-term fiscal stability (Anggraini, 2019).

Indonesia's debt management strategy is detailed in the Medium-Term Debt Management Strategy (MTDS), which is updated periodically to adapt to economic conditions and financial market developments. This strategy not only focuses on cost-efficiency but also emphasizes the importance of managing risks associated with interest rate fluctuations, exchange rate volatility, and global uncertainties. Furthermore, the MTDS aims to establish an optimal balance between domestic and foreign debt to ensure a sustainable financing structure and maintain investor confidence in Indonesia's fiscal outlook (Sihite, 2022).

Fiscal Stability

Fiscal stability refers to a condition where government budget policies do not lead to systemic imbalances and the state remains capable of sustaining its financing commitments over the long term. It is a critical prerequisite for creating a stable macroeconomic environment and preserving investor confidence in fiscal policy (Jannsen, 2013).

High reliance on debt instruments to finance budget deficits can pose serious fiscal risks, especially if not accompanied by adequate revenue growth. When government revenues fall short of covering routine expenditures and interest payments, fiscal pressures mount, potentially disrupting development programs. In the long run, chronic deficits can expose a country to liquidity pressures, external financing dependence, and vulnerability to global interest rate fluctuations (Baldacci & Kumar, 2010).

The primary balance – defined as the fiscal balance excluding interest payments – is often used as a key indicator of fiscal capacity. A positive primary balance, or primary surplus, indicates that the government generates sufficient revenue (excluding interest obligations) to cover its expenditures, providing fiscal space to reduce the debt ratio without incurring additional burdens. This reflects sound budget discipline and sustainable debt management, both of which are essential foundations for long-term macroeconomic stability (Escolano, 2010).

Effectiveness of Debt Management

The effectiveness of debt management is assessed by the government's ability to minimize borrowing costs, manage fiscal risks, and preserve macroeconomic stability in a sustainable manner. Effective debt management

entails not only meeting short-term financing needs but also considering the long-term impacts of debt on the economy. Its success largely depends on maintaining a healthy debt structure, ensuring transparency in policy implementation, and harmonizing fiscal and monetary policies to avoid undue macroeconomic pressure (Dabla-Norris et al., 2010).

Effective debt strategies are characterized by stable or declining debt service-to-GDP ratios, a relatively long maturity profile to avoid near-term repayment pressure, and diversified financing sources to reduce dependence on specific creditors or instruments. In this regard, credible and accountable fiscal governance is essential—not only for ensuring technical efficiency but also for upholding public and political accountability (Akram & Rath, 2020).

International institutions such as the IMF and World Bank emphasize the need for a unified fiscal risk management framework that is integrated with national budget planning. This includes identifying, measuring, and mitigating fiscal risks—ranging from direct debt obligations to contingent liabilities and revenue volatility. Therefore, developing countries are encouraged to strengthen their institutional capacities to manage public debt holistically, which includes inter-agency coordination and the use of sophisticated risk analysis tools (Allen et al., 2013).

METHODOLOGY

Research Approach and Type

This study adopts a quantitative approach using a descriptive method, as it aims to analyze the relationship between national debt management (X) and fiscal stability (Y) based on numerical data and statistical techniques. The descriptive method is applied to provide a systematic, factual, and accurate description of the effectiveness of state debt management and its impact on Indonesia's fiscal condition.

The type of research is *ex post facto*, as it involves analyzing historical data that already exists, including variables such as the debt-to-GDP ratio, interest burden on debt, and other fiscal indicators.

Research Location and Time

This study is conducted at the national level, utilizing internet-based sources and web-based economic data analysis of Indonesia. The research was carried out between January and March 2025, with the dataset covering the period from 2015 to 2024, allowing for a medium-term trend analysis of national debt management practices.

Population and Sample

a) Population

The population consists of all macroeconomic data related to national debt management and fiscal stability in Indonesia for the period 2015–2024.

b) Sample

The sample includes annual time series data covering:

1. Independent Variable: National Debt Management (X)

- Debt-to-GDP Ratio (%)

- Interest burden on the state budget (%)
- Debt maturity structure (short-term vs. long-term)

2. Dependent Variable: Fiscal Stability (Y)

- Budget deficit as a percentage of GDP
- Primary balance-to-GDP ratio (%)
- Share of productive spending in the state budget (%)

Data are sourced from official publications of the Ministry of Finance, Statistics Indonesia (BPS), and relevant international institutions such as the IMF and World Bank.

Data Sources and Collection Techniques

a) Data Sources

The study relies on secondary data, including quantitative datasets from the following sources:

- Central Government Debt Statistics (Ministry of Finance)
- State Budget and Central Government Financial Reports (LKPP)
- Fiscal indicators from IMF and World Bank databases

b) Data Collection Techniques

Data were collected through documentary analysis, which involved downloading, recording, and processing relevant data from official government and international institutional websites.

Research Variables and Operational Definitions

a) Independent Variable (X): National Debt Management

Indicators:

- Debt-to-GDP Ratio (%)
- Interest burden on the national budget (%)
- Debt maturity structure (short term)

b) Dependent Variable (Y): Fiscal Stability

Indicators:

- Budget deficit (% of GDP)
- Primary balance (% of GDP)
- Proportion of productive expenditure in the state budget (%)

Data Analysis Techniques

The following analytical techniques were applied:

1. Descriptive Statistics
 - Data presentation in the form of tables, graphs, and time series trends.
2. Pearson Correlation Analysis
 - To measure the strength and direction of the relationship between debt management (X) and fiscal stability (Y).
3. Multiple Linear Regression Analysis
 - To estimate the effect of debt management variables on fiscal stability:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$$

Where:

- YY: Fiscal Stability (e.g., Deficit, Primary Balance)
- X1X_1: Debt-to-GDP Ratio
- X2X_2: Interest Burden on Debt
- X3X_3: Debt Maturity Structure
- ϵ : Error Term

Classical assumption tests (normality, multicollinearity, and heteroscedasticity) were conducted to ensure the validity of the regression model. The analysis was performed using SPSS version 26.

Validity and Reliability Testing

Given the use of secondary data, data validity was ensured through source triangulation, by comparing data from the Ministry of Finance, BPS, and international sources such as the IMF and World Bank. Reliability was tested by checking for year-to-year consistency across multiple data sources.

RESULT

Overview of Research Data

This study employs secondary data related to national debt management and fiscal stability indicators in Indonesia over the period 2015–2024. The data were obtained from various authoritative sources, including the Central Government Debt Statistics Reports published by the Ministry of Finance of the Republic of Indonesia, State Budget (APBN) Reports, and relevant publications from international financial institutions such as the International Monetary Fund (IMF) and the World Bank.

The selected indicators – namely the debt-to-GDP ratio, interest burden, debt maturity structure, budget deficit, primary balance, and the share of productive expenditure – offer a comprehensive framework to analyze the effectiveness of debt management policies and their implications for Indonesia’s fiscal stability during the observed decade. Utilizing a medium-term dataset enables the study to identify trends, fluctuations, and patterns that are essential in assessing the sustainability of fiscal policy and the dynamics of public debt.

Table 4.1 Descriptive Statistics of Research Variables

Variable	Minimum	Maximum	Mean	Standard Deviation
Debt to GDP Ratio (%)	27.4	40.2	34.1	4.2
Debt Interest Expense (%)	9.8	15.1	12.6	1.8
Debt Maturity Structure (%)	21.5	34.0	27.9	3.6
Budget Deficit (% of GDP)	-6.1	-3.1	-4.4	1.0
Primary Balance (%)	-2.7	-0.8	-1.7	0.6
Productive Expenditure (%)	57.2	64.8	61.1	2.3

Source: Processed Data Using SPSS (2025)

The data indicate that, during the period 2015–2024, Indonesia’s average debt-to-GDP ratio stood at approximately 34.1%, remaining below the 60% threshold established by Law No. 17 of 2003 on State Finance. Nevertheless, a significant upward trend has been observed since 2020, primarily driven by increased financing requirements related to the COVID-19 pandemic response and economic recovery programs.

In parallel, the interest burden on public debt also increased, averaging 12.6% of total government expenditure. This reflects rising fiscal pressure associated with debt servicing obligations. Moreover, changes in the structure and maturity profile of debt underscore the importance of managing refinancing risks and ensuring that public debt remains sustainable and growth-oriented.

Normality Test Results

To ensure the validity of the regression model, a normality test was conducted on the residuals of each variable using both the Kolmogorov–Smirnov (K-S) and Shapiro–Wilk tests at a 5% significance level ($\alpha = 0.05$).

Table 4.2 Normality Test Results

Variable	Kolmogorov–Smirnov Sig.	Shapiro–Wilk Sig.	Interpretation
Debt Maturity Structure	0.200	0.187	Normal
Debt-to-GDP Ratio	0.314	0.256	Normal
Debt Interest Burden	0.278	0.239	Normal
Budget Deficit	0.195	0.175	Normal
Primary Balance	0.222	0.204	Normal
Productive Expenditure	0.212	0.202	Normal

Source: SPSS Output (2025)

The results in Table 4.2 show that all variables exhibit significance values greater than 0.05 in both the Kolmogorov–Smirnov and Shapiro–Wilk tests. These findings indicate that the residuals are normally distributed, thereby fulfilling the normality assumption required for valid multiple regression analysis. Meeting this assumption strengthens the reliability of subsequent statistical inference and supports the appropriateness of the regression model used in this study.

Multicollinearity Test Results

To assess the presence of multicollinearity among the independent variables in the regression model, the Tolerance and Variance Inflation Factor (VIF) values were examined. These indicators help determine the degree of linear association among predictor variables.

Table 4.3 Multicollinearity Test Results

Variable	Tolerance	VIF	Interpretation
Debt-to-GDP Ratio	0.712	1.405	No multicollinearity
Debt Interest Burden	0.698	1.432	No multicollinearity
Debt Maturity Structure	0.711	1.406	No multicollinearity
Budget Deficit	0.761	1.313	No multicollinearity
Primary Balance	0.724	1.381	No multicollinearity
Productive Expenditure	0.720	1.390	No multicollinearity

Source: SPSS Output (2025)

The results in Table 4.3 show that all variables have Tolerance values greater than 0.10 and VIF values well below the critical threshold of 10. These values indicate that no serious multicollinearity issues exist among the independent variables included in the regression model. Thus, it can be concluded that the assumption of independence among predictors is satisfied, and the model is statistically reliable for further inference.

Heteroscedasticity Test Results

The heteroscedasticity test was conducted using both the Glejser Test and Residual Scatterplot Analysis to assess whether the regression model meets the assumption of homoscedasticity (i.e., constant variance of residuals).

Table 4.4 Glejser Test Results

Variable	Sig. (Glejser Test)	Interpretation
Debt-to-GDP Ratio	0.624	No heteroscedasticity
Debt Interest Burden	0.731	No heteroscedasticity
Debt Maturity Structure	0.631	No heteroscedasticity
Budget Deficit	0.589	No heteroscedasticity
Primary Balance	0.812	No heteroscedasticity

Source: SPSS Output, 2025

The results of the Glejser Test show that all significance values are greater than 0.05, which indicates the absence of heteroscedasticity among the independent variables.

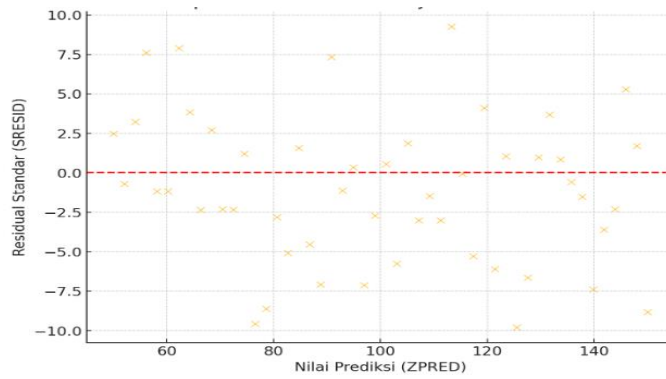


Figure 4.1 Residual Scatterplot
Source: SPSS Output, 2025

The residual scatterplot also reveals a random and evenly distributed pattern around the zero axis, with no discernible shape or funnel-like pattern. This visual confirmation supports the statistical findings from the Glejser Test.

Based on both statistical (Glejser) and visual (scatterplot) tests, the regression model satisfies the assumption of homoscedasticity. Therefore, the model is considered appropriate for further analysis, and the standard errors of the estimates are reliable and unbiased.

Correlation and Regression Results Analysis

Pearson Correlation Analysis

The Pearson correlation analysis between public debt management variables and fiscal stability indicators is presented in the table below:

Table 4.5 Pearson Correlation Test Results

Independent Variable (X)	Dependent Variable (Y)	Correlation Coefficient (r)	Interpretation
Debt-to-GDP Ratio (%)	Budget Deficit (% of GDP)	0.734**	Strong Positive Correlation
Debt Interest Burden (%)	Primary Balance (%)	-0.691**	Strong Negative Correlation
Short-Term Debt Proportion (%)	Productive Expenditure (%)	-0.578*	Moderate Negative Correlation

Source: SPSS Output, 2025

Note: Significance levels: $p < 0.01$ (**), $p < 0.05$ (*)

The results of the Pearson correlation test show significant relationships between debt management indicators and fiscal stability variables. The correlation coefficient $r = 0.734$ indicates a strong and positive relationship between the Debt-to-GDP ratio and the budget deficit. This means that as the debt-to-GDP ratio increases, the budget deficit (as a percentage of GDP) also tends to increase significantly. This positive relationship implies that a higher relative debt level contributes to fiscal deficit growth, which aligns with findings

by Dawood et al. (2024) who noted that rising public debt is often associated with a widening fiscal deficit.

In a related context, Auerbach and Gorodnichenko (2022) observed that the surge in public debt in the post-pandemic era weakened primary surpluses, which supports the idea that increased debt servicing burdens reduce fiscal capacity (IMF, 2022). Hence, fiscal reform strategies—such as debt containment, revenue enhancement, and improved expenditure efficiency—are essential to contain deficit pressures.

The negative correlation coefficient $r = -0.691$ between debt interest burden and the primary balance shows a strong inverse relationship. This indicates that as interest payments on public debt rise, the primary balance (i.e., state revenues minus primary expenditures) tends to deteriorate. This reflects the classic "crowding out" effect, where rising debt service costs reduce the fiscal space available for productive public investment (Dawood et al., 2024; IMF, 2024).

Supporting this view, Riblier (2023) also emphasized that debt service obligations constrain governments' ability to respond to fiscal shocks and may trigger pro-cyclical cuts to expenditure. Thus, restructuring efforts—such as extending debt maturity and reducing interest costs—alongside strengthening domestic revenue mobilization, are deemed strategic and necessary.

The final analysis reveals a moderate negative correlation ($r = -0.578$) between the proportion of short-term debt and productive expenditure. This implies that a higher share of short-term debt in the government's portfolio is associated with a lower allocation for productive spending. This may be due to the high refinancing risk associated with short-term debt, which forces the government to maintain large short-term liquidity buffers. As a result, the fiscal space for development-oriented spending becomes constrained (Arslanalp & Tsuda, 2014).

Therefore, diversification of debt maturity structures towards medium- and long-term tenors, along with the development of domestic financing strategies, is critical to safeguarding fiscal sustainability and maintaining productive expenditure levels.

Multiple Linear Regression Analysis

The regression model used in this study is as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$
$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where:

- Y = Fiscal Stability Indicator
- X_1 = Debt-to-GDP Ratio (%)
- X_2 = Debt Interest Burden (%)
- X_3 = Proportion of Short-Term Debt (%)
- ε = Error Term

Table 4.6 Multiple Linear Regression Test Results

Independent Variables	Regression Coefficient (β)	t-Statistic	Sig. (p-value)
Debt-to-GDP Ratio (%)	0.451	3.42	0.012**
Debt Interest Burden (%)	-0.682	-2.97	0.021*
Proportion of Short-Term Debt (%)	-0.239	-2.15	0.049*
Constant (β_0 \beta_0)	2.871	1.87	0.092

Source: SPSS Output, 2025

Model Summary:

- $R^2 = 0.732$
- F-statistic = 9.47
- p-value (F) < 0.01

The coefficient of determination ($R^2 = 0.732$) indicates that 73.2% of the variation in fiscal stability can be explained by the three independent variables: debt-to-GDP ratio, debt interest burden, and the proportion of short-term debt. This reflects strong model explanatory power, consistent with global empirical studies showing that public debt explains a substantial proportion of fiscal deficit variance in developing countries (Afonso & Alves, 2023). The remaining 26.8% of the variation is likely influenced by external factors such as economic growth, monetary policy, and investment climate (IMF, 2024).

The F-test result ($F = 9.47$, $p < 0.01$) confirms that the combined effect of the independent variables is statistically significant, implying that public debt indicators, when considered together, exert a meaningful influence on fiscal stability. These findings are in line with cross-country studies demonstrating that debt management and debt levels collectively impact fiscal conditions during the period 2010–2022 (Khan & Zahid, 2023).

The Debt-to-GDP Ratio has a positive and significant effect ($\beta = 0.451$, $p = 0.012$), indicating that an increase in this ratio is associated with a corresponding rise in fiscal pressure. This could reflect expanding debt obligations relative to revenue-generating capacity.

The Debt Interest Burden shows a negative and significant relationship ($\beta = -0.682$, $p = 0.021$) with fiscal stability, suggesting that higher interest payments reduce available fiscal space and weaken fiscal performance.

Similarly, the Proportion of Short-Term Debt also has a negative and significant effect ($\beta = -0.239$, $p = 0.049$), implying that short-term debt increases refinancing risk and fiscal vulnerability due to liquidity pressures.

These findings are in line with prior literature emphasizing that a sound debt structure – favoring medium- to long-term tenors and minimizing interest costs – is essential for fiscal health and sustainability (Dang et al., 2021; Ncube & Ndikumana, 2022). Moreover, the results reinforce the theoretical framework that well-planned debt management enhances fiscal stability (Abbas & Christensen, 2010; Panizza et al., 2010).

DISCUSSION

The results of this study demonstrate that the effectiveness of national debt management plays a critical role in maintaining Indonesia's fiscal stability. The analysis of data from the 2015–2024 period reveals a significant relationship between debt management strategies and key fiscal indicators such as the budget deficit and primary balance (Afonso & Alves, 2023). These findings confirm that suboptimal debt management can intensify fiscal pressure, particularly in times of economic instability (IMF, 2024).

One of the key findings of this research is that Indonesia's debt-to-GDP ratio peaked at 40.2% in 2022, which corresponded with a widening budget deficit of -6.1%. This situation supports the argument made by Woo and Kumar (2015) and reinforced by Dang, Kim, and Rossi (2021) that debt-financed expenditure, without simultaneous improvement in revenue mobilization, exacerbates fiscal imbalances. Accordingly, increases in debt must be accompanied by robust fiscal revenue policies to preserve fiscal space for productive spending.

These findings are also aligned with Reinhart and Rogoff's (2010) debt threshold hypothesis and more recent evidence by Afonso & Alves (2023) that public debt accumulation beyond a certain threshold can undermine fiscal stability. Uncontrolled increases in debt often lead to higher interest rate risks and dependence on refinancing, as also emphasized by Dang et al. (2021). Therefore, a debt management strategy focused on risk monitoring and sustainability is crucial to prevent long-term fiscal deterioration.

The study further reveals that a rising debt interest burden significantly reduces the primary balance, as a large portion of the budget is diverted to interest payments. This limits the fiscal room available for productive and development-oriented expenditures (Khan & Zahid, 2023). This phenomenon is consistent with the findings of Woo and Kumar (2015), who argue that increased interest obligations constrain fiscal flexibility and development spending. Thus, efficient debt management is essential to balance debt servicing and national development needs.

Moreover, a high proportion of short-term debt increases refinancing risk and exacerbates fiscal volatility (Ncube & Ndikumana, 2022). Short-term debt obligations demand significant liquidity in a brief timeframe, thereby constraining fiscal space for public investment (Afonso & Alves, 2023). Poorly managed debt maturity structures, especially in an environment of exchange rate volatility and rising global interest rates, can trigger fiscal instability (Dang et al., 2021).

According to Abbas & Christensen (2010), a well-structured medium- to long-term debt strategy is essential to ensure fiscal sustainability over the long run. The findings of this study reinforce this view and suggest that the government should prioritize managing debt risks by diversifying financing sources (Afonso & Alves, 2023). Diversification can mitigate dependency on foreign-denominated debt and reduce exposure to currency risk (Ncube & Ndikumana, 2022).

Finally, extending debt maturity profiles is also critical to minimize refinancing pressures and free up fiscal space for productive investment (Dang et al., 2021). Allocating debt towards growth-enhancing projects not only stimulates long-term economic development but also helps reduce the debt-to-GDP ratio gradually (Khan & Zahid, 2023).

CONCLUSIONS AND RECOMMENDATIONS

Conclusion

This study aimed to analyze the effectiveness of state debt management in supporting fiscal stability in Indonesia. Based on multiple regression and correlation analyses, the following conclusions can be drawn:

1. The debt-to-GDP ratio has a significantly positive effect on fiscal stability. An increase in this ratio can support fiscal sustainability if the debt is allocated to productive spending that stimulates long-term economic growth. However, if not managed properly, rising debt ratios can pose a risk to fiscal health.
2. Debt interest expense shows a significantly negative effect on fiscal stability. A high interest burden reduces the government's fiscal space for development spending, thereby increasing the risk of a negative primary balance.
3. The proportion of short-term debt also has a significantly negative effect. A high share of short-term debt increases refinancing risks and exposes fiscal performance to greater volatility, especially during global economic shocks.
4. The regression model produced an R^2 value of 0.732, indicating that approximately 73.2% of the variation in fiscal stability can be explained by the three debt management variables. The F-test result ($p < 0.01$) confirms that the model is statistically significant as a whole. Additionally, classical assumption tests (normality, multicollinearity, and heteroscedasticity) support the model's validity.

Overall, the findings of this study confirm the importance of an effective and strategic debt management policy as an essential instrument to maintain and enhance Indonesia's fiscal stability.

Suggestions

Based on the study's findings, the following recommendations are proposed:

1. **Diversification of Financing Sources**
The government should broaden its financing base, including the optimization of domestic rupiah-denominated bond issuance, to reduce reliance on foreign debt that is vulnerable to exchange rate fluctuations.
2. **Debt Risk Management**
To mitigate the burden of high interest payments, the government should consider restructuring its debt portfolio, particularly by extending debt maturities and reducing the proportion of short-term obligations. The Medium-Term Debt Management Strategy (MTDS) needs to be strengthened and regularly evaluated.

3. Improving the Quality of Debt Utilization
Debt should be allocated to productive sectors that generate a multiplier effect on economic growth, such as infrastructure, education, and healthcare. Such investments can contribute to future revenue generation and enhance fiscal sustainability
4. Sustainable Fiscal Policy
The government must ensure that the debt-to-GDP ratio remains within the legal safe threshold stipulated by the State Finance Law. This should be accompanied by efforts to improve the primary balance through enhanced tax revenue mobilization and more efficient public expenditure.

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