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Endogenous Growth Theory: The Influence of Health Budget Allocation and Financial Sector Growth on the Indonesian Economy

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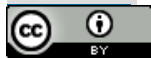
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ABSTRACT

This study delves into the application of Endogenous Growth Theory to the Indonesian context, focusing on the interplay between health budget allocation and the growth of the financial sector in shaping the country's economy. Endogenous Growth Theory posits that economic growth can be internally driven by factors such as human capital accumulation, technological progress, and institutional development. Through empirical analysis, this research examines how the allocation of resources to the health sector and the expansion of the financial industry impact Indonesia's economic performance. By employing quantitative methods and econometric models, the study elucidates the extent to which these factors contribute to economic growth and development. The findings shed light on the importance of targeted budgetary allocations and financial sector policies in fostering sustained and inclusive economic progress in Indonesia

INTRODUCTION

The year 2019 was a challenging year not only in Indonesia but worldwide. The emergence of the COVID-19 virus not only caused individual immunity to decline but also affected national immunity. Both the healthcare sector and other sectors experienced "illness" due to this virus originating from Wuhan, China. The significant reallocation of budgets towards the healthcare sector will undoubtedly have repercussions on the economy as well as the growth of the financial sector.

The long-term handling of COVID-19 can also be observed in Government Regulation in Lieu of Law (Perppu) Number 1 of 2020. In this Perppu, the target deficit of the 2020 State Budget against Gross Domestic Product (GDP) was raised to 5.07% to provide space for additional expenditure or financing related to addressing the impacts of COVID-19 on society and the business world. This figure is expected to be gradually controlled until returning to the 3% level by 2023.

Figure 1. Fiscal and Monetary Policy Mix



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Source : pen.kemenkeu.go.id

From the above figure, it can be seen that the impact of COVID-19 has led to a swelling of the budget stimulus to Rp. 405.1 trillion for financial policy stimulus to support economic recovery and various financial sector policies.

To address budget imbalances due to excessive focus on healthcare spending, an analysis related to economic growth is needed to ensure stability and prevent excessive deviation. Efforts are also made to ensure that the financial sector can continue to function smoothly through substantial deregulation,

which has had a very impressive impact on financial intermediation institutions.

The prolonged Covid-19 pandemic has resulted in restrictions on human mobility, which has impacted corporate conditions and could pose risks to the resilience of financial sector growth.

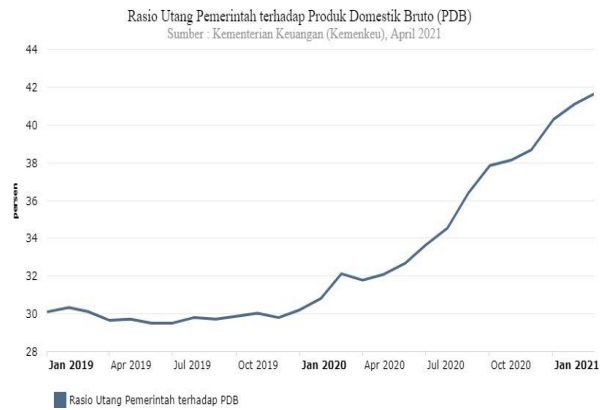


Figure 2. Government Debt-to-GDP Ratio

Source : Katadata

The level of leverage has increased since the onset of the Covid-19 pandemic. Moreover, it sharply increased from January 2021 to January 2022. Certainly, this needs to be continuously monitored, considering the risk of negative impacts on the overall financial system stability by observing the patterns of money circulation, both M1 and M2, and their impacts on GDP to determine the right policy direction in handling economic recovery across various sectors.

Potential sector belonging to regions, particularly those with high growth and high income criteria, having with base sector and high growth and high competitiveness against the province is still dominated with agricultural and services sectors. Local government expenditure in education, health, and social sectors affects the growth positively and significantly, while local government expenditure in agricultural and transportations sectors does not affect economic growth significantly, and local government expenditure in housing sector affects economic growth of NARs negatively and significant increased. (Innes, 2022)

In 2015 onward, economic growth improved while ICOR generally improved. The achievement of economic growth and development is highly dependent on increasing forms of capital, both physical, natural and human capital. Human resources play an important role and are the key to economic growth and increased productivity. The higher quality of human resources will certainly result in higher economic growth and a lower ICOR value (Hendarmin & Kartika, 2019).

With the above focus in mind, a comprehensive analysis is required concerning the allocation of health budgets to strengthen the state budget (APBN) and the effectiveness of the distribution of financial sector growth to ensure that Indonesia's economy aligns with the theme of the 77th Indonesian Independence Day: "recover faster, rise stronger."

METHODS

To find appropriate solutions reflecting the optimistic spirit of a dynamic, synergistic, firm, and straightforward nation in facing global challenges, an econometric approach using regression analysis and tools like Orange is necessary to determine the extent of the influence of health budget allocation and financial sector growth on the Indonesian economy. The analysis includes:

1. Correlation between health budget and GDP growth as one of the economic growth indicators.
2. Financial sector growth with an analysis of the distribution of money, both M1 and M2. In this study, financial sector growth is proxied by the ratio of the broad money supply (M2) to GDP. M2 in this study includes currency in circulation, demand deposits, time deposits, and savings. The data on the money supply (M2) in billion Rupiah is obtained from the Indonesian Economic and Financial Statistics from Bank Indonesia. According to Kar and Pentecost in 2000, this variable indicates the real depth of the financial sector in an economy experiencing growth, where the financial sector provides services for

transactions and accepts savings from the public.

3. Estimation of economic growth, specifically GDP, through health budget allocation and financial sector growth.

Data Type:

The data used are secondary data analyzed from 2010 to 2021, including health budget allocations obtained from data-apbn.kemenkeu.go.id, money supply distribution (M1 and M2) from bps.go.id, and Indonesia's GDP from data.worldbank.org.

Research Model:

The research model uses multiple linear regression without considering control variables. Due to consistent estimation results, the analysis is conducted with the following model:

$$Y = a + \beta X_1 + \beta X_2 + \beta X_3$$

RESULTS AND DISCUSSION

Data Analysis Results:

The regression results from the data are as follows:

$$PE = 8.28 - 8.25HBA + 1.48M1 - 3.01M2$$

From the above regression results, the following assumptions can be drawn:

1. The correlation coefficient between health budget and GDP is negative, indicating that an increase in health budget by one unit will decrease economic growth by 8.25.
2. The coefficient of M1, consisting of currency in circulation and demand deposits, shows that an increase of one unit will increase economic growth by 1.48.
3. The coefficient of M2, consisting of quasi-money and securities other than shares, shows a negative correlation of -3.01. This means that an increase of one unit in M2 will decrease economic growth by -3.01.

Endogenous Growth Theory (EGT) posits that economic growth is primarily driven by internal factors such as human capital accumulation, technological innovation, and institutional development, rather than external factors like capital

accumulation or technological progress alone. This theory suggests that policies focusing on improving these internal factors can lead to sustained economic growth. (Todaro, 2003)

The discussion on the influence of health budget allocation and financial sector growth on the Indonesian economy likely delves into how these two factors contribute to or hinder economic growth within the framework of EGT.

Health Budget Allocation: The allocation of budget towards healthcare has significant implications for economic growth. A healthier population is generally more productive, as it leads to reduced absenteeism, lower healthcare costs, and increased labor force participation. Investments in healthcare infrastructure, preventive care, and access to essential medicines can lead to better health outcomes, which in turn can contribute to higher productivity and economic growth.

Financial Sector Growth: A well-functioning financial sector plays a crucial role in facilitating economic growth by channeling savings into productive investments, allocating capital efficiently, and providing financial services to businesses and individuals.

A growing financial sector can enhance resource mobilization, promote entrepreneurship, facilitate technological innovation, and improve overall economic efficiency. Additionally, access to credit and financial services enables businesses to expand operations, invest in new technologies, and undertake riskier but potentially more rewarding ventures.

In the context of the Indonesian economy, the discussion would likely assess how the allocation of resources to healthcare and the growth of the financial sector impact key indicators of economic performance such as GDP growth, productivity, employment, and poverty reduction. It would also explore the potential synergies or trade-offs between these two factors and other policy objectives, such as fiscal sustainability, social welfare, and macroeconomic stability.

For instance, policymakers might need to strike a balance between allocating resources to healthcare

to improve human capital and productivity and investing in the financial sector to foster capital formation and economic dynamism.

Moreover, they may need to consider the quality of healthcare services, the effectiveness of financial regulations, the inclusiveness of financial services, and the distributional consequences of these policies to ensure that economic growth is not only robust but also sustainable and equitable.

CONCLUSION

Regarding the findings from the analysis, it is found that a large allocation of health budgets can lead to a decrease in economic growth due to the disproportionate distribution of budget allocations.

This is consistent with a study by Azka (2021), which proves that healthcare spending has an impact on the economy, although negatively correlated. Moreover, financing using BPJS funds, which cannot be directly used by healthcare facilities, is significant. It can be seen that most BPJS participants are PBI.

This implies that government contributions to healthcare costs are essential for the majority of the population covered by the National Health Insurance program to access healthcare. In December 2020, the number of PBI participants reached 96.5 million out of a quota of 98.6 million.

This is a positive development as the government always strives to improve public health. Essentially, the government aims to eradicate and prevent diseases so that every citizen can utilize their capabilities for activities. Ultimately, these activities have economic value, thereby enhancing the economy.

The use of currency in circulation and demand deposits is still suitable as parameters for economic growth. This aligns with Mishkin's theory (2011) that the circulation of money can temporarily reduce interest rates and increase consumer purchasing power, although it must be accompanied by caution, as massive money circulation may lead to inflationary pressures.

If the public tends to invest heavily in M2 money circulation, it will inevitably decrease their purchasing power, resulting in a decline in economic growth. This can be mitigated by maintaining relatively low interest rates and diversifying investments into other sectors, such as state-owned enterprise stocks or other liquid assets, to ensure continuous economic growth.

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