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ANALYSIS OF ASYMMETRIC FISCAL CONSOLIDATION POLICY TO ENCOURAGE ECONOMIC ACCELERATION

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ABSTRACT

The impact of handling the COVID-19 pandemic has drastically increased the realization of the 2020 state budget deficit to 6.13%, which exceeds the normal limit. This has caused a slowdown in the Indonesian economy. The government needs to mitigate risks through fiscal consolidation policies. Therefore, this research aims to find a fiscal consolidation policy that significantly impacts the acceleration of national economic growth. The analytical method employs multiple linear regression, and observation period between 1997 and 2021. The variables that used in this research are the changes in GDP for the current year (d_pdbt), the changes in Government Expenditure for the current year (d_goext), the changes in tax revenue for the current year (d_taxt), the changes in Trade Balance for the current year (d_tbt), Unemployment changes for the current year (d_umt), government expenditure in the current year (goext), Tax Revenue in the current year (taxi), and the difference in changes in tax revenue in the current year minus government expenditure in the current year (d_taxt - d_goext). Data analysis results show that two variables have a significantly positive impact on the current year's GDP changes, namely (i) d_taxt, and (ii) goext. Meanwhile, three variables exhibit significantly negative impacts: (i) d_goext, (ii) d_umt, and (iii) d_tax_d_goex)t. Additionally, two variables show insignificant impacts on economic change, namely: (i) d_tbt, and (ii) taxt.

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1. INTRODUCTION

The impact of handling the COVID-19 pandemic through increased spending has increased the state budget deficit. In 2020, the realization of the APBN deficit reached 6.13%, although this has been protected by legal rules, with the issuance of Perpu No.1 of 2020 which is further stipulated through Law No.2 of 2020. Facing 2023, high fiscal discipline is required so that the budget deficit can be restored to a maximum of 3% of GDP. This is very important because the budget deficit has the impact to debt risk and fiscal credibility which is the foundation of the national economy. In response to this, the government needs to mitigate risks through fiscal consolidation policies to reduce budget deficits and debt accumulation by increasing state revenues and cutting state expenditures.

Reference [1] found that fiscal consolidation policies have a significant correlation with rapid economic growth, especially when implemented through measured public spending, compared to raising taxes. However, another study [2] found that fiscal consolidation policies based on spending cuts are slightly more costly than by raising taxes. Reference [3] said that government spending savings are more likely to be used after government spending cuts and higher tax increases in weak economic growth condition. However, it does not rule out the possibility that spending savings after spending cuts and tax increases could potentially have an adverse impact.

In Indonesia, based on the Macroeconomic Framework and Fiscal Policy Principles (KEM-PPKF 2022), fiscal consolidation can be done with two approaches. *First*, spending cuts such as operational spending or postponement of various projects. *Second*, increasing tax revenue. The focus of the government's fiscal consolidation policy is directed at 3 things, namely (i) increasing revenue, (ii) strengthening the quality of spending, and (iii) financing.

To increase the revenue, one of the steps that can be taken is to broaden the tax base. For example, by optimizing tax revenue from the e-commerce sector and increasing the value-added tax (VAT) rate. The digital economy is supporting the Indonesian economy during the COVID-19 pandemic. Based on BPS data, the information and communication (Infocomm) sector recorded the highest growth in the second

quarter of 2020. The growth of the Infocomm sector is estimated at 10.88% in the second quarter of 2020 because, during the COVID-19 pandemic. Based on data from Bank Indonesia, in 2020 there was a nominal increase in e-commerce transactions of 29.6% from Rp205.5 trillion in 2019 to Rp266.3 trillion in 2020.

In terms of spending, the government can implement zero-based budgeting by making efficient spending on basic needs, which focuses only on priority programs, is results-oriented, and has durability. In 2016-2020, mandatory spending increased by 80 percent, from Rp927 trillion to Rp1,159 trillion, or an average of 48 percent of the state budget each year. Government consumption only grew 3.74 percent in the first quarter of 2020. This realization slowed down compared to the first quarter of 2019 which amounted to 5.22 percent. This slowdown occurred due to efficiency and budget reallocation to handle COVID-19.

In terms of financing, the government can use debt managed carefully and sustainably to ensure the availability of the state budget, however, the health and sustainability of state finances can still be maintained. Therefore, the government needs to stipulate changes to the posture and details of the state budget for Fiscal Year 2020. These changes then were stipulated in Presidential Regulation Number 54 of 2020.

The 2020 state revenue budget which was estimated at Rp2,233 trillion in reality changed to Rp1,760 trillion, consisting of tax revenue of Rp1,462 trillion, non-tax state revenue of Rp297.75 trillion, and grant revenue of Rp498.74 billion. Meanwhile, the State Expenditure Budget which was originally estimated at Rp2,540.422 trillion in reality increased to Rp2,613.8 trillion, consisting of the Central Government Expenditure Budget (ABPP) of Rp1,851.10 trillion (including additional expenditure for handling the COVID-19 pandemic of Rp255.110 trillion), and the Budget for Transfers to Regions and Village Funds (TKDD) of Rp762.718 trillion.

Based on the calculation of the State Budget, it is estimated that there will be a deficit of Rp852.935 trillion or 5.07% of GDP. Therefore, the Budget Financing which was originally estimated at Rp307.225 trillion has changed to Rp852.935 trillion. To support state financial policies and make efforts to save the national economy, the government is running the National Economic Recovery Program (PEN). This program aims to provide protection, defense and increase the economic capacity of business actors in the real sector and the financial sector to run their businesses.

The labor sector as the backbone of business actors in the real sector and the financial sector is also affected by the COVID-19 pandemic, and impacts the decline in the economic capacity of business actors. The Minister of Labor at the Occupational Employment Outlook 2020 and Indonesia Occupational Task and Skills 2020 event, in August 2020, reported that there were approximately 29 million people of working age affected by COVID-19, which is estimated to contribute to the unemployment rate in Indonesia of 7.07 percent of the total 138.22 million workforces in Indonesia. This is due to the large number of companies that have closed, which causes unemployment is the lack of aggregate expenditure. Entrepreneurs produce goods and services to make a profit if the entrepreneurs can sell their products.

Indonesia's trade balance during COVID-19 experienced a deficit of US$ 344.7 million as of April 2020, even though in the previous month it was a surplus of US$ 715.7 million. The Trade Balance Deficit in April 2020, consisted of a non-oil and gas trade balance deficit of US$ 100.9 million in April 2020, which decreased compared to the previous month's achievement of a surplus of US$ 1.67 billion. Despite the deficit, Indonesia's overall trade balance in January-April 2020 remained at a surplus of USD 2.25 billion. This was influenced by world demand which experienced a slowdown, which had an impact on the global supply chain.

The 2020 budget allocation for the National Economic Recovery (PEN) program reaches Rp.695.20 trillion. The PEN program is directed at three main clusters, namely: health rescue, social safety net, and economic security net. The three clusters are reduced to six fields, namely health, social protection, sectoral ministries or institutions and local governments, Micro Small and Medium Enterprises (MSME) support, business incentives, and corporate financing.

In 2021, PEN received a budget allocation of Rp699.4 trillion, which is greater than in 2020. This increase is due to the national vaccination program which received a budget of Rp58.2 trillion. When viewed from the allocation of the amount per sector, the 2021 health allocation received an allocation of Rp.176.3 trillion, exceeding that of 2020 which amounted to Rp.63.5 trillion. Another significant budget allocation is in the field of MSME and corporate support, which reached a budget of Rp184.8 trillion, an increase compared to 2020 which amounted to Rp.173.2 trillion. Furthermore, the social protection budget has decreased from the previous budget of Rp.157.4 trillion, down to Rp.220.4 trillion in 2020.

PEN still has weaknesses, both in the structure of budget allocations and allocation schemes, so PEN needs continuous improvements, including redesigning the program if there are obstacles in the field or not on target. In Law No. 2/2020, the government has set a target of handling the COVID-19 pandemic until 2023, to restore various fiscal modalities (APBN deficit, expenditure allocations, and state revenues) to their initial conditions.

From the description above, the research problem can be raised, how is the fiscal consolidation management policy that has a significant impact on the acceleration of national economic growth? The research objective is to find a fiscal consolidation policy that has a significant impact on accelerating national economic growth.

Literature Review

The role of government fiscal policy on economic growth

Although it is difficult to find an explanation of the role of fiscal policy on economic growth in neoclassical models, [5] and [6] said that fiscal policy still has room to influence stable economic growth. [5] divides the effects of government spending into productive and unproductive effects. Reference [5] says that productive government spending has a positive impact on growth and savings, but unproductive government spending can hurt economic growth, then an increase in non-productive spending leads to lower economic growth because unproductive government spending has no direct effect on private productivity. Therefore, the incentive to invest becomes less attractive or even non-existent, so the economy tends to grow more slowly due to the lack of investment. The decision to reduce government consumption spending to investment spending will encourage production growth from the investment side, which in turn will have an impact on economic growth.

The role of government tax revenue for economic growth

Reference [7] stated that national taxation has a large influence on economic growth, in a two-sector endogenous growth model. These public policies can affect economic growth because they affect private incentives to accumulate physical and human capital. Their model shows that public policy has a significant effect, especially in small open economies with free capital mobility as well as countries with miracle growth experiences. In these countries, taxes cause the economy to fall into a "development trap" where countries stagnate for long periods.

Another study on the relationship between tax revenue and the economic growth rate for Greece, as in [8] found that a low ratio of direct taxes to indirect taxes would lead to higher economic growth. Reference [9] conducted a study by looking at the impact of tax structure and economic growth in European countries and found that taxes on consumer goods, income taxes, and property taxes support the economic growth of a country. Reference [10] in their research found that tax revenue from the international trade sector has a positive effect on economic growth, but tax revenue from other sectors has no significant impact. Likewise, reference [11] found that VAT tax revenue has a positive impact on a country's economic growth.

The impact of unemployment on economic growth

Reference [12] found that unemployment and gross domestic product have a negative correlation, similar to that predicted by Okun's law theory, reference [12] found that the Romanian government made optimal policies related to the relationship between unemployment and real GDP growth. Reference [13] also found a significant negative relationship between unemployment and GDP in Malaysia during the period 1981-2010. Likewise reference [14] found a weak relationship between unemployment and GDP in Jordan during the period 1980-2011. This is supported by [15] who found no relationship between unemployment and GDP or vice versa, in India during the period 1990-2020.

Contribution of the current account balance to economic growth

In Keynes' theory, there are four factors that positively affect GDP, namely Consumption (C), investment (I), Government (G), and Net Exports (NX). Net Export itself is the final value of the trade balance. A positive net export value means that the country's trade balance is in surplus, otherwise, if the net export value is negative then the country's trade balance is in deficit, in other words, imports more than exports. Based on Keynes' theory, it appears that the trade balance is one of the components that form GDP. In line with that, reference [16] study of Bangladesh's trade balance over 26 years, found that in the long run, there is a stable relationship between GDP and Bangladesh's trade balance. The export component is positively related to GDP while the import component is negatively related to GDP. While research on Bangladesh's trade balance deficit in [17], found that GDP affects the trade balance in Bangladesh.

Research Hypothesis

H1 = The Change in government spending for the current year has a positive significant effect on the change in Gross Domestic Product for the current year

H2 = The Change in tax revenue for the current year has a positive significant effect on the change in Gross Domestic Product for the current year

H3 = The Change in Trade Balance for the current year has a positive significant effect on the change in Gross Domestic Product for the current year

H4 = The Change in Unemployment for the current year has a positive significant effect on the change in Gross Domestic Product for the current year

H5 = The government expenditure for the current year has a positive significant effect on the change in Gross Domestic Product for the current year;

H6 = The tax revenue for the current year has a positive significant effect on the change in Gross Domestic Product for the current year

H7 = The difference of change in current year tax revenue minus current year government expenditure has a positive significant effect on the change in Gross Domestic Product for the current year

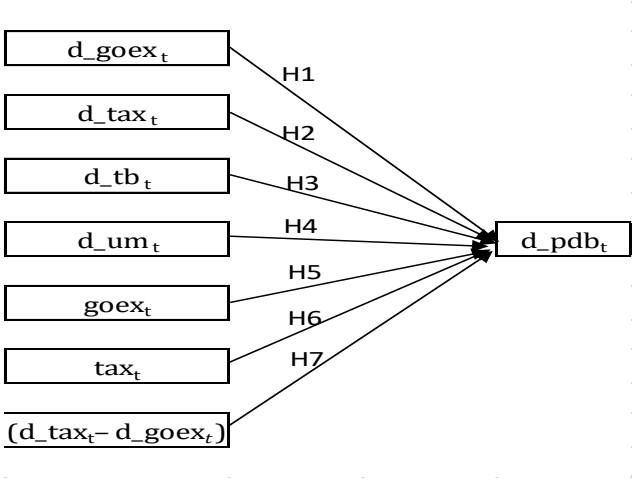

Figure.1. Research Framework

2. METHOD

Data and Data Sources

The data used in this study uses 7 (seven) macroeconomic variables, namely the changes in GDP in the current year (d_pdbt), the changes in government expenditure (d_goex), the changes in tax revenue for the current year (d_taxt), the changes in trade balance for the current year (d_tbt) and the changes in unemployment for the current year(d_umt), the government expenditure for the current year (goext), tax revenue for the current year (taxi), and the difference in changes in tax revenue for the current year minus government expenditure for the current year. (d_taxt - d_goext). The observation period is from 1997 to 2021. The data sources used come from data publications by the Central Bureau of Statistics (BPS), the Bank of Indonesia, and the Ministry of Finance.

Analysis Method

The analytical method used is the multiple linear regression method that adopts the research model of [4] which focuses on the impact of the growth of each independent variable in the previous year on changes in GDP in the current year:

$d\_pdb_t = \beta_o + \beta_1\, d\_goex_t + \beta_2\, d\_tax_t + \beta_3\, d\_tb_t + \beta_4\, d\_um_t + \beta_4\, goex_t + \beta_4\, tax_t + \beta_5\, (d\_tax_t - d\_goex_t) + e_t$ (1)

Where:

d_pdb_t = Change in Gross Domestic Product for the current year (Rp. Billion)

d_goex_t = Change in government spending for the current year (Rp. Billion);

d_tax_t = Change in tax revenue for the current year (Rp. Billion);

d_tb_t = Change in Trade Balance for the current year (Rp. Billion);

d_um_t = Change in Unemployment for the current year (%)

$goex_t$ = Government expenditure for the current year (Rp. Billion);

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tax_t = Tax revenue for the current year (Rp. Billion);
$(d\_tax_t - d\_goex_t)$ = Difference of change in current year tax revenue minus current year government expenditure (Rp. Billion);

3. RESULT AND DISCUSSION

Data processing results

From the results of data processing, the following processing results are obtained:

Tabel.1 Model Summary

Model	R	R Square	Adjusted R Square	Std Error of The Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	0.962	0.925	0.894	152092.3406	0.925	29.788	7	17	0.000

a. Predictors: (Constant), d_tax_d_goex, goex, d_um, d_tb, d_tax, d_goex, tax

The coefficient of determination *(adjusted R square)* shows a value of 0.894 is significant, meaning that the model can explain the dependent variable by 89.4% significantly, the rest is explained by other independent variables.

Tabel.2 Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig
		B	Std. Error	Beta		
1	(Constant)	111553	64895.07		1.719	0.104
	d_goex_t	-1.542	0.515	-0.29	-2.991	0.008
	d_tax_t	4.706	0.554	0.837	8.501	0
	d_tb_t	3343.53	3805.47	0.088	0.879	0.392
	d_um_t	-117282	41099.64	-0.204	-2.854	0.011
	$goex_t$	0.553	0.25	0.984	2.213	0.041
	tax_t	-0.264	0.392	-0.291	-0.674	0.509
	$d\_tax_t\_d\_goex_t$	-2325.18	1138.789	-0.16	-2.042	0.057

a. Dependent Variable: d_pdb_t

From the results of data processing, the equation coefficient is as follows:

$d\_pdb_t = 111552.991 - 1.542*d\_goex_t + 4.706*d\_tax_t + 3343.53*d\_tb_t - 117281.752*d\_um_t + 0.553*goex_t - 0.264*tax_t - 0.264*(d\_tax_t - d\_goex_t) + e_t$(2)

Variables that have a significant positive impact on increasing current-year GDP are:

- Variable of the change in tax revenue for the current year (d_tax_t), this is because GDP growth also requires financing to drive the economy, and for this purpose, a source of government revenue is needed that can stimulate private sector investment interest.
- Government spending for the current year ($goex_t$), where to drive the economy requires government spending and accuracy in government spending programs.

Variables that have a significant negative impact on reducing the current year's GDP are:

- The change in government spending for the current year (d_goex_t), this is because if the quality of government spending becomes less productive, it will have an impact on the lack of interest in private investment to drive the economy so that GDP growth in the current year will tend to decreases.
- The change in unemployment in the current year (d_um_t), is in line with Okun's law, which found an empirical effect of unemployment on business cycle output. The results of his empirical study found that the addition of 1 (one) point of unemployment will reduce GDP by 2 percent. Likewise, the research shows that there is a decrease in GDP when the number of unemployed increases.
- The difference between the change in tax revenue and the change in government expenditure for the current year (d_tax_d_goex), shows that the surplus will lead to not maximizing government spending which causes many government budgets that cannot be realized so that the economy cannot move optimally.

Variables that do not have a significant impact on current year GDP are:

- The change in the current account for the current year (d_tbt), shows that the trade balance is the largest component in a balance of payments. If the value of export transactions is more than imports, then the trade balance will be a surplus, and vice versa will be a deficit. Export activities

will boost a country's economic growth, which can be seen in the growth of real GDP over time. Increased exports will increase demand for domestic products, thus encouraging companies to increase production, which in turn will increase the national GDP.

- The increase in tax revenue for the current year (tax_t) has no significant effect on the increase in GDP in the current year. Tax revenue in the current year will have more impact in the following year. Therefore, this indicator can also be an indicator of the success of economic recovery in the following years.

Discussion

The results of data processing shows that the biggest impact of the decline in GDP for the current year is caused by the increase in unemployment in Indonesia. Therefore, to accelerate national economic recovery, the government can make priority programs, as follows:

1) Current year GDP increase program:

To promote economic recovery, the Government need to increase the current year's GDP. The variable that drives the economic recovery of the current year's GDP is the variable of additional tax revenue in the current year (d_tax_t). It can be understood because to increase the current year's GDP requires financial support, especially from the previous year's tax revenue. This is in line with the research of [8] who found that national taxation has a great influence on economic growth. Some countries in the world also get the same thing even with some tax adjustments, such as countries Greece where [9] shows that a low ratio of direct taxes to indirect taxes will encourage higher economic growth.

European countries also show the same thing, especially when viewed from the tax structure. This is proven by [10] who found that taxes on consumer goods, income taxes, and property taxes support a country's economic growth. Therefore, the Indonesian government needs to take advantage of this condition by prioritizing the acceleration of economic recovery through programs that have a major impact on increasing GDP in the current year.

The increase in government spending for the current year (goext) is a variable that has a significant influence on changing GDP in the current year (d_pdb_t). However[5] reminds that the effect of government spending can be a productive and unproductive influence. Productive government spending has a positive impact on growth and savings. However, unproductive government spending hurts economic growth, because any additional unproductive spending will lead to lower economic growth. This finding requires the government to direct spending to productive matters through the selection of strategic sectors that produce higher or highest productivity.

2) Programs that cause a decrease in GDP for the current year:

The fact in Indonesia at this moment shows that the changes in government spending for the current year (d_goext), still had a significantly negative effect on reducing national GDP growth in the current year. This means that spending on productive programs every year tends to decrease or misallocation spending. Government spending is dominated by unproductive programs and still oriented short-term, not yet geared towards the long-term, especially to attract private investment that can accelerate economic recovery.

The next factor that caused the decline of PDB was the increase in unemployment for the current year (d_um) which has a significant negative effect on reducing GDP. This is in line with Okun's law, which found an empirical effect of unemployment on business cycle output, where every additional 1 (one) point of unemployment will reduce GDP by 2 percent. The facts in Indonesia show that an increase in unemployment by 1% of the labor force will have a significant negative effect on reducing GDP by Rp. 117, 28 trillion. Therefore, the government needs to improve the business environment that can push economic growth and create new economic sectors as well as improve existing economic sectors to stimulate economic growth through the involvement of the private sector which can increase production and employment.

3) International trade sector empowerment program:

The results of data processing show that Indonesia's trade balance in the previous year still has not significantly influenced the addition of GDP in the current year. To maximize the impact of the international trade sector, the innovation of programs to increase the power of Indonesian products outside must continue to be improved to produce various breakthroughs that can increase product competitiveness related to various trade facilities, industrial infrastructure, and technology, as well as increasing the competence of industrial human resources.

4. CONCLUSION

Variables that have a significant positive impact on increasing current year GDP are (i) variable the change in tax revenue compared to the current year (d_tax_t), this is because GDP growth also requires financing to drive the economy, and for this purpose, a source of government revenue is needed that can stimulate private sector investment interest; and (ii) government spending in the current year (goex), where to drive the economy requires government spending and accuracy in government spending. Variables that have a significant negative impact on reducing current year GDP are (i) the change in government spending compared to the current year (d_goex_t), this is because if the quality of government spending becomes less productive, it will have an impact on the lack of interest in private investment to drive the economy so that GDP growth in the current year decreases; (ii) the change in Unemployment compared to the previous year (d_um_{t-1}), this is in line with Okun's law, which found an empirical effect of unemployment on business cycle output. The results of his empirical study found that the addition of 1 (one) point of unemployment will reduce GDP by 2 percent. Likewise, the research shows that there is a decrease in GDP when the number of unemployed increases. The variable of difference between the change in tax revenue and the change in government expenditure in the current year $(d\_tax\_d\_goex)_t$, if it is surplus, it will lead to not maximizing government spending which causes many government budgets that cannot be realized so that the economy cannot move optimally. Variables that do not have a significant impact on current year GDP are: (i) The change in current account in the current year (d_tb_t), where the trade balance is the largest component in a balance of payments because it is an indicator to measure all international transactions. If transactions are more exports than imports, then the condition of the trade balance will be a surplus, and vice versa will be a deficit. Export activities will boost a country's economic growth. This is measured by the growth of real GDP over time. With increased exports, it will increase demand for domestic products, thus encouraging companies to increase production, which in turn will increase national GDP. The increase in tax revenue in the current year (tax) has no significant effect on the increase in GDP in the current year. Tax revenue in the current year will have more impact in the following year. Therefore, this indicator can also be an indicator of the success of economic recovery in the following years.

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