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# Expansionary Fiscal Impact on Macroeconomic Conditions; Computable General Equlibrium (Cge) Model Approach

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ARTICLEINFO

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ABSTRACT

The Computable General Equilibrium model is used to build a general balance in the Indonesian economic model, to see the effectiveness of the impact of expansionary fiscal policy implemented by the Government on economic growth, household group income and sectoral employment during the 2019-2021 pandemic period . The PEP -1-1 model is used with static version 2.0 on GAMS 23.5 software with two variables that are simulated as shocks for the model that has been built, both independently and simultaneously. Using expansionary fiscal policy variables, namely social protection and infrastructure development. The results of the expansionary fiscal simulation carried out by the government increased economic growth by 0.03 percent, increasing sectoral labor absorption in 24 economic sectors in Indonesia. The banking sector and other service sectors experienced the highest increase in labor absorption by 8 percent and the air transportation, trade and fisheries sectors. The impact of the decline occurred in the restaurant and air transportation sectors by 9 percent. The income level indicator also saw an increase in the hhk6, hhk3 and hhd 2 groups reaching 0.52-0.21 percent. Meanwhile, the hhk1 household group was the only household group that experienced a decline in household income of 0.01 percent.



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## 1. INTRODUCTION

The Covid-19 pandemic has become a shock and has infected and shaken all lines of life, starting from the health, economic and social sectors in all countries of the world. Millions of people died, lost their jobs and savings and increased unemployment rates. After falling into the brink of recession, many countries are trying to get up and expand in order to achieve economic growth and get out of the valley of recession. Romer 2021 analyzed and stated that 30 OCDC (thirty advanced economies) countries had carried out a more aggressive fiscal response during the pandemic crisis compared to the financial crisis to avoid entering a deeper crisis, even though it resulted in an increase in the debt to GDP ratio as a result of the aggressive fiscal measures taken. Romer stated that aggressive fiscal expansion and extensive private saving will allow for rapid growth in the next few years.

In the midst of the long struggle to control the spread of Covid-19 and its variants in Indonesia, Indonesia's macroeconomic conditions continue to grow and rise to be able to create economic growth, control inflation, create jobs and macroeconomic stability. Economic growth continues to rise to 5.31 percent in 2022, while the highest inflation rate in 2022 is 5.51 percent with the largest contribution from volatile food (VF) inflation coming from cayenne pepper, cooking oil, purebred chicken eggs, purebred chicken meat and red chili, as seen in table below:

**Table 1. Macroeconomic Indicator Data for 2020-2022**

| Year | Economic growth | Inflation | Protection Social | Infrastructure development |
|---|---|---|---|---|
| 2020 | 2.07% | 1.68% (yoy) | Rp. 123.51 T | Rp. 307.3 T |
| 2021 | 3.69% | 1.87% (yoy) | Rp. 110 T | Rp. 417.4 T |
| 2022 | 5.31% | 5.51% (yoy) | Rp. 461.6 T | Rp. 365.8 T |

*Collected from several sources, BPS, BI, Ministry of Finance, Ministry of Social Affairs.*

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After fighting for more than two years against the Covid 19 pandemic, there have been terminations of employment (PHK), as many as 2.9 million employees were laid off (as of May 2020), according to the Ministry of Manpower report, while KADIN (Indonesian Chamber of Commerce and Industry) was actually higher, reported that 6.4 million employees had been laid off.

In the midst of tough economic conditions due to the impact of Covid-19, social protection is present as a form of realization of the responsibilities of the central and regional governments, as well as as part of the safety net, social protection data distributed by the Ministry of Social Affairs during the Covid-19 pandemic as seen in table 1.1. The government continues to increase social protection assistance, by 2022 amounting to 461 trillion. Realization of distributing social protection in the form of the Family Hope Program, Regular Basic Food Cards/BPNT, Basic Food Cards/BPNT PPKM (Implementation of Community Activity Restrictions) or Regional Proposed Social Assistance, Cash Social Assistance (BST) and Extreme Poverty Basic Food Assistance, pre-employment cards and internet quota subsidies for pupils, students, teachers and lecturers for 6 months as well as subsidies for 450 volt and 900 volt household electricity.

The extraordinary conditions that have been established do not necessarily weaken economic movements. The expansionary fiscal policy that has been implemented for almost the last 10 years with infrastructure development was hampered by its continuation. Increasing infrastructure development is expected to be able to move the economy by creating jobs and encouraging increased investment, which will accelerate the process of sustainable economic growth. In the midst of the serious economic conditions in Indonesia due to the ongoing Covid-19 pandemic and the expansionary fiscal policy implemented by the Government in handling Covid and infrastructure development, this research was written to look at the effectiveness of Fiscal policy, namely social and infrastructure spending on economic growth, household group income and Sectoral employment absorption in Indonesia.

## 2. METHOD

### 2.1 Research methods

Aggregate Supply and Demand Balance

The IS – LM (Investment Saving-liquidity of money) model is designed to explain the economy in the short term because the price level is fixed and looks at how changes in the price level affect balance in the IS-LM model (Mankiw, 2007). For the economy in the long run, IS–LM explains when the price level is adjusted to ensure that the economy produces at the natural rate. Aggregate supply is derived from the sticky price model, the sticky wage model and the imperfect information model and the labor market equilibrium model. The balance of aggregate supply and demand is derived from the derivation of aggregate supply and demand:

AS=AD……(1.2)

$P= P^e+ (1/\alpha)(Y\bar{Y})+ vAS$……(1.3)

P= M/(L [ r,C(YT)I(r,Y)+ G+NX(e)]) AD…(1.4)

We substitute the AS equation for the AD equation

$P^e+ (1/\alpha)(Y\bar{Y})+ v= M/(L [ r,C(YT)I(r,Y)+ G+NX(e)])$…(1.5)

〖M=P〗 $^e+ (1/\alpha)(Y\bar{Y})+ v= L[r,C(YT)I(r,Y)+GNX(e)]$….(1.6)

$P^e=M-(1/\alpha)(Y\bar{Y})+v=L[r,C(YT)I(r,Y)+G+NX(e)]$…(1.7)

Then the function of the price level in the balance of aggregate supply and demand is:

P=f ( M,u,$\bar{Y}$,v,,G,T,r,e )

Where P price level, u unemployment, $\bar{Y}$ gross domestic product, v supply shocks, M money supply, r interest rate, G Government spending, T tax, e exchange rate.

Empirical evidence examining the impact of fiscal policy during the Covid-19 pandemic to reduce the effects of the crisis that occurred has become a very interesting topic of discussion and is being discussed further. This is because the varied findings are explained by various factors ranging from differences in fiscal policies chosen and implemented. each country during the pandemic, the impact on macroeconomics and the methodological choices adopted by researchers in their studies as written below.

**Literature Review**

Romer D Christina 2021, researching the impact of Covid in OCDC countries, explaining the determinants of the fiscal policy response to the pandemic in OCDC countries. Different from the fiscal policy response during the financial crisis, fiscal space is a determinant of the aggressiveness of the fiscal package during

the pandemic. The implications for US fiscal policy, namely social and health insurance, unemployment insurance, vaccine spending are very appropriate, while stimulus measures are externally based. Aggressive fiscal expansion, along with extensive private savings during the pandemic, will likely result in rapid growth over the next few years. The increase in the debt to GDP ratio was caused by the response to these two policies and the pandemic recession itself.

Badri G et al 2021, examined the application of the CGE model in the economic sector to ensure that fiscal policy, namely wage subsidies, small business loans and financial guarantee schemes, has had an impact at the economic and sectoral level for countries in Oceania. Together with the IMF World economic outlook projections and a combination of fiscal stimulus for fight against the effects of a pandemic recession. The results of this research confirm that the worst impacts of Covid are protected by fiscal stimulus to avoid unemployment and job losses in the tourism and education services sector.

Marcus R. et al. 2020, estimates the impact of COVID-19 on the UK economy, including direct disease effects, preventive public actions and related policies. By using the CGE Model, incorporating sectoral macroeconomic models and the entire economy with policies to suppress the pandemic through home quarantine, school closures, social distancing and business closures. The results of the analysis show Covid-19 has the potential to impose an unprecedented economic cost on the UK economy, and while public action is needed to minimize deaths, the duration of school and business closures. The initial economic support package promised by the UK government may be commensurate with the costs of Covid-19 mitigation, but without alternative measures to reduce the scale and duration of school and business closures, economic support may not be enough to compensate for the longer term of the pandemic resulting in a deeper health crisis. big and big recession.

Eldeep City et al. 2022, examines the impact of the COVID-19 shock on the Egyptian economy using a general balance (CGE) model with 2014/2015 Egyptian matrix social accounting data. The results show the effects of changes in supply and demand on the Egyptian economy. With dynamic models, examining the impact of the pandemic in both the short and long term. found that the fiscal policy response had a heterogeneous impact on different economic agents and sectors, and included the formal workforce which was greatly affected by the pandemic. Find out the extent to which the Egyptian economy is vulnerable to the world economy and the decline in the value of the currency.

**Research Roadmap**

The aim of this research is how fiscal expansion in social protection and infrastructure development has an impact on economic growth, sectoral employment and income of household groups during the pandemic, both independently and together. The road model for this research starts from building a data base of Indonesia's macroeconomic conditions based on the 2008 SNSE table published by BPS. The stages of building a data base are shown in the image below:

The method in this research uses the Computable General Equilibrium Model (CGE model) which has been widely used in various countries, including Indonesia. The CGE model can see and analyze the impact of a policy implemented by the government using the analytical approach of general balance theory. In the general balance model, the market as a system consists of the goods market, money market, labor market and capital market which are interconnected, so that The balance that occurs in one market will be related to the balance in other markets and reflects the equilibrium price and quantity that occurs simultaneously in various markets (Kusumanto, 1990).

Walras, known as Walras' law, proves the existence of a general balance point using formal mathematics, where total access demand and total access supply occur for all types of goods or commodities produced (Nicholson, 1995). If the value of all commodities offered in the market is the same as the value of the commodities demanded in the market, while the prices (relative prices) are known, then at that time the market is in equilibrium. This formula is written in the equation

$$\sum_{i=1}^{n} P_i ED_i(P) = 0 \ldots\ldots\ldots\ldots\ldots\ldots (1.8)$$

Where 〖ED〗_i (P)= excess demandP_i=price for goods

Markets are interrelated in the economy, so changes that occur in one market will affect other markets. General equilibrium will be achieved if supply and demand in each market are in balance.

The General Equilibrium Model describes an economy where all markets are in equilibrium. There is a set of demand and supply functions that cover commodity markets and production factors (Horizon, 1997), there is also a set of equations that determine the income flow of each actor in the economy.
Dervis et al. (1982) stated that the CGE model shows a basic general equilibrium relationship between the structure of production, the income of various groups and their demand patterns. The advantage of the general balance model compared to the partial balance model is that the CGE model includes all transactions between economic actors as a whole, both in production markets and commodity markets. So that the impact of a policy can be analyzed quantitatively for its influence on economic performance both macro and sectorally (Horisin, 1997). The general balance model includes the possibility of substitution between production factors, so that if there is a change in the relative price of a production factor, the producer changes the composition of use. production factors towards those whose prices are relatively cheaper.
Data from the Indonesian National Socio-Economic System (SNSE) or Social Accounting Matrix (SAM) published by BPS in 2008, is a data framework system presented in the form of a matrix and data framework that summarizes various economic and social variables of a country at a certain time in a comprehensive, consistent, integrated and unified. SNSE is able to describe the economic and social conditions of society and the relationship between economic and social variables. the relationship between economic growth, employment and income distribution. As a comprehensive and integrated data framework system, SNSE covers various economic and social data consistently because it guarantees the balance of transactions in each balance sheet contained therein.
Building basic CGE model data begins with determining the production sector, domestic commodities, imported commodities, and the household sector. Because there are differences between the Indonesian SNSE structure and the SAM structure used in the CGE PEP 1-1 version 2.0 model which has been developed by Decaluwe et.al (2012), the initial stage that will be carried out is to modify the structure of the 2008 105 sector matrix Indonesian SNSE table. ,adapted to the SAM structure based on the CGE PEP 1-1 version 2.0 model. All parts of the data in this research are captured in the 2008 SNSE Indonesia data matrix of 105 sectors, consolidated into four main balance sheets, namely: (a) production factor balance; (b) institutional balance sheet; (c) production sector balance and (d) other balances. SNSE Indonesia's 105 sector matrix in 2008 consists of 24 production sectors and 8 household groups.

## 3. RESULTS AND DISCUSSION

### 3.1 Validation of Model Computation Results

Validation of the computational model results is a requirement that must be met before carrying out simulations on the CGE model. Validation of results in the CGE model must fulfill 4 computational aspects, namely: (1) the formation of initial SAM values through equations in the CGE model which are called SAM calibration results. (2) the number of iterations to produce a calibration SAM (before-optimality SAM) must be equal to zero. (3) a solution must be found (signified by the appearance of "EXIT-Solution Found" when the program is run) for the use of the initial SAM value by all equations in the CGE model; and (4) the values resulting from the solution form the SAM resulting from the equation (post-optimaly SAM) and the values must be exactly the same as the original SAM and must meet the balance requirements.

**Formation of Initial SAM Values**

The initial SAM value is formed through an equation in the CGE model which is called the calibration result SAM. The initial step is to convert the 2008 Indonesian SNSE data to the basic SAM data version of the PEP 1.1 model, or build the initial SAM value and process the calibration results by entering it into the GAMS program and change xl file to gdx:
Input file: C:\User\User\Documents\SAM BALANCE Stage1\SAM-V2.xls
*Output file : C:\User\User\Documents\SAM BALANCE Phase1\SAM-V2.gdx*

**Number of iterations to produce calibration SAM (before-optimality SAM)**

The number of iterations to produce a Calibration SAM whose final value is equal to zero is at the 27th iteration count limit with a feasible solution to a square system.

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**Normal Complation Condition**

The discovery of a solution is indicated by the appearance of "EXIT-Solution Found" or "Normal Completion" when the program is run. The Normal Completion or EXIT-Solution Found condition is the condition when the SAM model data is in accordance with the model being developed.

**Formation of SAM Eq.**

The values resulting from this solution form the SAM resulting from the equation (post-optimaly SAM) and the values must be exactly the same as the original SAM and must meet the balance requirements. Based on the operating results of the CGE model program, the four indicators above have met the requirements so it can be concluded that the development of the CGE model in this study has met the validity of the model computing results with the emergence of SOLVAR or Solution Variable.

Policy Simulation Design and Justification for Determining Variables

Alternative scenarios for expansionary fiscal policy conditions implemented in the developed model. Increase in government social assistance 42%, increase in government spending (G) 93%. After the data development process for the SAM PEP Model version 1.1, the steps taken were selecting the variables that were used as shocks in the model, and then selecting the Solvar variables for the simulation results. The justification for determining variables can be seen in the table below:

**Table 2. Justification of Shock and Determination of Outcome Variables.**

| No | Justification of Shock | Formulas in Models |
|---|---|---|
| 1. | The variable increase in government social assistance is 42 percent, the variable increase in government spending on infrastructure is 93.4 percent in the simulation. | Decrease of subsidies<br>* ttic.fx(i) =ttico(i)*1.42;<br>Increase of public expenditure<br>* G.fx = GO*1.93; |
| 2 | Economic Growth | GDP_BP GDP at basic price<br>Economic Growth = $\frac{DGP\ BP\ setelah\ simulasi\ 1 - GDP\ BP\ \ sebelum\ simulasi}{GDP\ BP\ sebelum\ simulasi}$ |
| 3 | Employment | Labor absorption after simulation 1<br>---- VAR LDC ptanam1ustry j demand for composite labor |
| 4 | Household Group Income | ---- VAR YH Total income of type h households after simulation<br>---- VAR YH Total income of type h households before simulation<br>The delta change in total income after the simulation is….<br>$Total\ Income = \frac{l\ income\ setelah\ simulasi\ 1}{l\ income\ sebelum\ simulasi} X\ 100\ \%$<br>---- VAR YH Total income of type h households<br>1. Total hdd1<br>$\Delta Total\ Income = \frac{perubahan\ total\ income\ setelah\ simulasi\ 1}{perubahan\ total\ income\ sebelum\ simulasi} X\ 100\ \%$ |

*Source: CGE Model, 2023 data*

**Economic Performance Due to Changes in Expansive Fiscal Policy.**

The results of the shock simulation analysis of two variables, namely expansionary fiscal policy (social assistance and infrastructure development), the impact on economic conditions is presented in table 3 below.

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**Table 3. Changes in Economic Conditions Impact of Simulation**

| No | Economic Indicators | | Before Simulation | Delta Changes to SIM 3 |
|---|---|---|---|---|
| **1** | Economic growth | | 5.16 percent | up 0.13% |
| **2** | Energy Absorption Sectoral work | Economic sector | Before simulation 3 | After simulation 3 |
| | 1 | Food | 3.56E+05 | up 2.58% |
| | 2 | plant1 | 1.06E+05 | down 9.80% |
| | 3 | Ternakh | 91494.808 | up 3.44% |
| | 4 | Forest | 15275.031 | down 1.81% |
| | 5 | Fish | 49457.058 | down 5.58% |
| | 6 | Mine | 60074.86 | down 3.4% |
| | 7 | Tdigger | 46746.213 | down 6.3% |
| | 8 | Imakanl | 1.20E+05 | up 2.14% |
| | 9 | Itextiles | 45828.696 | up 2.23% |
| | 10 | Ikayu | 35860.028 | down 1.63% |
| | 11 | immesinl | 1.79E+05 | down 5.19% |
| | 12 | ichem | 1.67E+05 | up 1.30% |
| | 13 | Elecgas | 16370.867 | up 1.83% |
| | 14 | Construct | 2.01E+05 | down 3.19% |
| | 15 | Trader | 4.41E+05 | down 1.17% |
| | 16 | Resto | 1.04E+05 | up 1.83% |
| | 17 | Hotel | 9278.8 | down 6.92% |
| | 18 | Agdarat | 87257.51 | up 2.5% |
| | 19 | Agudair | 68099.975 | down 2.78% |
| | 20 | Agpengud | 20444.664 | up 3.27% |
| | 21 | Bank | 53145.725 | down 4.18% |
| | 22 | Restart | 45543.003 | down 4.13% |
| | 23 | Pmrt | 2.86E+05 | up 5.25% |
| | 24 | Jslain | 86104.233 | up 1% |
| **3** | Household | | Before simulation 3 | after simulation 3 |
| | 1 | hhd1 | 1.73E+05 | up 0.04% |
| | 2 | hhd2 | 7.20E+05 | up 0.21% |
| | 3 | hhk1 | 4.85E+05 | down 0.01% |
| | 4 | hhk2 | 1.70E+05 | up 0.04% |
| | 5 | hhk3 | 4.55E+05 | up 0.25% |
| | 6 | hhk4 | 6.92E+05 | up 0.04% |
| | 7 | hhk5 | 2.38E+05 | up 0.07% |
| | 8 | hhk6 | 8.09E+05 | up 0.52% |

Source: CGE Model, data processed 2023

**Table 4. Summary of Changes in Economic Sector and Household Sector Variables**

| | No. | Economic sector | results after simulation 3 | Household | results after simulation 3 |
|---|---|---|---|---|---|
| **Which has increased** | 1 | Pmrt | up 5.25% | hhk6 | up 0.52% |
| | 2 | Ternakh | up 3.44% | hhk3 | up 0.25% |
| | 3 | Agpengud | up 3.27% | hhd2 | up 0.21% |
| | 4 | Food | up 2.58% | | |
| | 5 | Agdarat | up 2.5% | | |

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| | | | | | |
|---|---|---|---|---|---|
| **Which has decreased** | 1 | plant1 | down 9.80% | hhk1 | down 0.01% |
| | 2 | Hotel | down 6.92% | | |
| | 3 | Tdigger | down 6.3% | | |
| | 4 | Bank | down 4.18% | | |
| | 5 | Restart | down 4.13% | | |

Source: CGE Model, data processed 2023

The results of the simulation analysis had an impact on economic indicators for economic growth which increased by 0.13 percent or contributed to an increase in economic growth of 0.13 percent. Expansionary fiscal policy injects or puts large amounts of money into the economy, this situation will certainly have a very large impact on multiplayer to encourage increased economic growth and move the economy.

Expansionary fiscal policy has encouraged the economy to become more vibrant, this condition will have an effect on sectoral employment absorption in 24 economic sectors in Indonesia. The PMRT, Ternakh, and air transportation, Ppangan, Agdarat sectors experienced an increase in labor absorption of 4-2 percent. Meanwhile, the agricultural1 sector fell 9.0 percent, hotels, mining fell 6 percent and the banking and real estate sectors fell by 4 percent. Indicators of household group income levels, the increase in government spending on social assistance and infrastructure was able to increase the income of the hhk6, hhk3 and hhd 2 groups by 0.52-0.21 percent. Meanwhile, the hhk1 household group was the only household group that experienced a decline in household income of 0.01 percent.

This condition is in accordance with research by Ndari Surjaningsih (2012), there is a cointegration relationship between government spending and taxes on output in the long term. In the long term, taxation has a positive impact on economic growth. Short-term adjustments, the shock of an increase in government spending has a positive impact on output and the shock of a tax increase has a negative impact. The more dominant influence of government spending on output in the short term compared to taxes shows that this policy is still quite effective in stimulating economic growth, especially during a recession. An increase in government spending causes a decrease in inflation, while an increase in taxes causes an increase in inflation. This study also shows that there is no fiscal policy discretion carried out by the government. Furthermore, research by Wisynu Wardhana, Djoni Hartono (2012) Fiscal stimulus policy is able to provide encouragement to economic growth, employment opportunities and household income, but on the other hand it is estimated that it has the potential to cause an increase in prices.

**Discussion**

**Expansive Fiscal Policy Mechanism Impacts on the Economy.**

The simulation results of expansionary fiscal policy (Government Expentiture) explain macroeconomic conditions which have an impact on increasing economic growth, significant increases in sectoral labor absorption, and increases in household income. Expansionary fiscal policy has had the effect of absorbing labor and increasing the income of people working on infrastructure development projects, as well as increasing the income level of household groups. However, it must still be remembered that expansionary fiscal policy in theory also has a negative impact on economic conditions, one of the impacts being the creation of crowding out conditions in the economy.

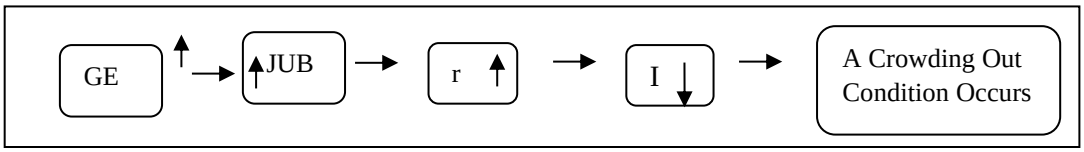


Figure 1. Government Expenditure Mechanism and Crowding Out Conditions

Expansionary fiscal policy in Government Expenditure has an impact on the increase in the JUB money supply, which will then be responded to by Bank Indonesia with a policy of increasing interest rates (r) to control inflation. This condition will have an impact on reducing investment levels and will ultimately create crowding out conditions. . In the long term, the condition of a decline in domestic interest rates will

still be weakened by the possibility of capital outflow, the effect of lower domestic interest rates compared to foreign interest rates. This condition will also result in a decline in investment. If this decline in investment continues continuously and in the long term, it will have an impact on increasing unemployment and decreasing economic growth.

**Budget deficit and crowding out conditions created.**

The handling of Covid-19 and its impact on the economy is not over yet, forcing the government to continue making efforts to handle and provide assistance to the community in accordance with the mandate of the Law, for this reason social assistance is a form of government presence and the public's role in handling and recovering from the impact of Covid-19. Apart from that , as a country that continues to grow and develop, the Indonesian Government is aware of the importance of improving the state of infrastructure so that the investment and business climate becomes more attractive. Currently there are still limited roads, ports, airports and bridges and the quality of existing infrastructure is still being added to but is inadequate. This condition is a tough task for the Government in the development and development of both hard and soft infrastructure.

The archipelago, with its island-dominated geography, is complex and expensive in efforts to increase connectivity between islands and regions and this is compounded by the need to focus on maritime infrastructure. The condition of the islands creates a heavy burden and relatively large funds when planning and infrastructure development programs are to be executed. However, there is no other choice, that physical development must continue to be carried out for the sake of equitable development and economy between islands and between regions.

When the government carries out a massive infrastructure development process, and all the development costs cannot be financed by the expenditure budget in the APBN, this causes the APBN to experience a deficit. A deficit requires the government to use variable debt, both domestic and foreign debt, to cover excess spending on development because it is not commensurate with state revenues. When expansionary fiscal policy increases Government Expenditure (GE) while APBN revenues are low, a deficit occurs in the APBN budget and the Government covers or finances development using variable debt.

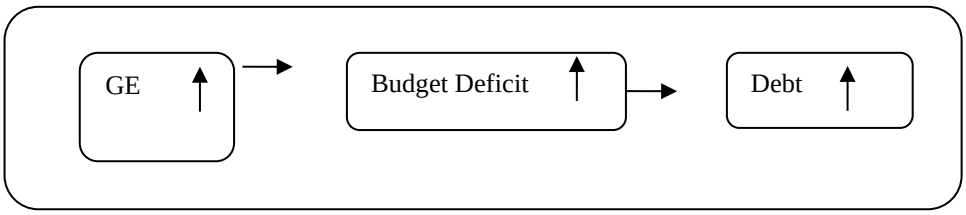


Figure 2. Mechanism of Expansive Fiscal Policy and the Emergence of Debt

Something that must be given special attention when the government decides to carry out an expansionary fiscal policy is the source of the funds that will finance it. Because this development has a domino effect on crowding out conditions, and also on budget deficit conditions as well as wise choices when using debt instruments which also have a domino effect on the sustainable development process.

## 4. CONCLUSION

The findings in this research are that expansionary fiscal policy in Government Expenditure has an impact on the APBN deficit which ultimately increases the debt variable. The deficit condition is a heavy burden for the APBN and the Government will cover this using debt assistance instruments, both domestic debt and foreign debt, in fact the government debt is recorded to reach 396 M USD or around IDR 7,805T in 2023.

in 2023.

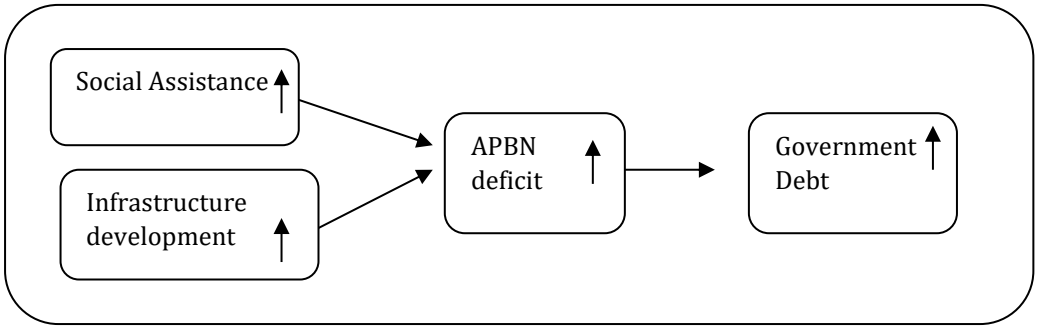


Figure 3. Mechanism of 3 shock variables impacting government debt

The Government had to take this tough step after the completion of handling the Covid-19 crisis and for the sake of equitable development with the infrastructure needs that are increasingly urgent and needed by the community. Every policy has positive and negative impacts as well as large consequences that must be borne by the government and the country's economy. The importance of infrastructure and the impact of debt that finances development has been explained in the third simulation.

The aim of infrastructure development is to accelerate economic development not only to be enjoyed in the present, but also to be felt in the long term, so that for sustainable development the availability of adequate infrastructure is very necessary. The steps taken by the Government to build infrastructure are an effort to bring about fair economic equality for all Indonesian people. The high government debt burden is compensation for efforts to accelerate development in order to realize market efficiency in preparation for economic globalization competition.

Limited infrastructure is the main obstacle faced by the economy and results in economic activities being inefficient, while many countries are currently trying to continuously improve efficiency in order to be able to compete in the era of globalization. With future infrastructure development, it is hoped that the Indonesian economy can grow more efficiently and become initial capital in winning competition in the global market. Infrastructure development is the Government's effort to win competition in the global market, where Indonesia has a lot of homework to do, namely creating and getting out of conditions (a) Conditions of efficiency as an Absolute Requirement in Competition in the Global Era, (b) Middle Trap Income Trap, (c) Strategies to win the competition in the global market and the era of industrial revolution 4.0

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