Do Macroeconomic Variables and Effective Fiscal Policies Affect Indonesian Economic Development?

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ABSTRACT

This study aims to examine the impact of demographic, poverty, fiscal policy, and investment on economic growth in 20 provinces. This study uses fixed effect techniques to estimate panel regression. The data used from 2008 to 2021 comes from the Central Bureau of Statistics and the Ministry of Finance of the Republic of Indonesia. The results of the study show that population, poverty, balanced funds, government spending, foreign capital influence on economic growth. The impact of government spending through education, health, agriculture, fisheries, and marine sectors has not been effective in encouraging regional economic growth. Other results from BPK's opinion on Regional Government Financial Reports have an impact on encouraging economic growth. These findings indicate that the government must take the necessary steps to reduce the impact of balance funds which in the short term impede economic growth, increase the effectiveness of government spending through targeting development spending and the use of the budget must be able to provide clear information, regarding the goals, objectives, results and benefits of the budget that are formulated using a performance approach that prioritizes the performance of work results from a predetermined budget or input allocation plan and continues the policy of providing opinions on Regional Government Financial Reports. If the BPK's opinion shows deviations, then it must be followed up immediately so that the regional economic development target can be achieved.

Keywords: Balance Funds, Economic Growth, Fiscal Policy, Panel Data.

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I. INTRODUCTION

Economic development before the 1970s was only measured by the growth rate of Gross Domestic Product (GDP), both overall and per capita (Meier & Rauch, 1995). The experience of third countries in the 1960s, many third world countries have succeeded in achieving high economic growth, have failed to improve the standard of living of the majority their population. Economic indicators are not only economic growth, must be seen from other factors in measuring economic development through measures such as the Human Development Index (HDI) which is seen from GDP per capita, happiness index, but also statistics such as literacy and health standards. care. To measure economic growth, economists use data on gross domestic product (GDP), which measures the total income of everyone in the economy. GDP measures the total output of goods and services as well as the total income of a country (Mankiw, 2020). To appreciate the importance of GDP, a country need only glance at international data, and compare it with other, poorer countries. Countries with high levels of GDP per capita have better welfare than countries with lower levels of GDP per capita. A large GDP does not guarantee the happiness of all a country's population, but it is probably the best recipe for happiness offered by macro economists.

The backwardness of economic development must be overcome by each country, developing countries need a bigger role of government through increasing state budgets and spending. Government spending has a theoretical basis which can be seen from the identity of the balance of national income which is the source of legitimacy for the Keynesian view of the relevance of government intervention in the economy. The national income balance identity can be analyzed that an increase or decrease in government spending will increase or decrease national income. There are many considerations that underlie government decisions in regulating spending. Gross Domestic Product fluctuates continuously, mainly because of shifts in aggregate demand and aggregate supply in the short run. One way to reduce economic fluctuations is to use fiscal policy, which is anything that involves the use of government spending to influence the aggregate demand curve. The government tries to shift aggregate demand by changing its fiscal policy position (Lipsey et al., 1987). Fiscal policy position refers to the expansionary and contractive effects on the economy. Expansive fiscal policy will increase aggregate demand and tend to increase national income.

Contractive policies will reduce aggregate demand and tend to reduce national income. The increasing expenditure and government activities concretely stated by Adoft Wagner called the Law of Ever-Increasing State Activities or the law of increasing state activities (Soetrisno, 1981).

Adolf Wagner's observations on European countries, the United States and Japan in the 19th century showed that government activity in the economy tended to increase. Wagner measures the ratio of government spending to GDP by proposing a theory regarding the development of government spending which is getting bigger as a percentage of GDP. The increase in government spending is relative or absolute by Musgrave stated as Adolf Wagner Failed to Specify. Relative means expressed as a percentage of GDP and compared to the private sector (Soetrisno, 1981). In Indonesia, the APBN as the main instrument of fiscal policy plays an important role in encouraging the achievement of predetermined development targets. This role is in line with one of the APBN's functions as a means of maintaining stability and accelerating economic performance. To that end, fiscal policy is always directed at achieving economic growth, creating jobs, reducing poverty, while maintaining environmental sustainability.

Nelson (1956) and Leibenstein (1974) outlined the main theory of their view of the direct effect of population growth on the level of welfare. Both Nelson and Leibenstein show that rapid population growth in developing countries means that the level of people's welfare does not significantly improve and in the long run reduces welfare. On the other hand, research by Doran (2012), entitled "Analysis of the interdependence of demographic factors, labor effort and economic growth in Ireland". This study analyzes the causal relationship between demographic changes in Ireland and labor effort and economic development. The results of the study concluded that increasing the dependency ratio on old age can reduce economic output. These results provide insight into how the changing demographics of Irish society may impact future economic growth.

Poverty makes the poor have no access to resources, and no investment opportunities, which will slow down economic growth per capita (Todaro, 2000; Škare & Družeta, 2016). Growth itself may not be resilient and sustainable, therefore it is important to base poverty reduction strategies on fast but sustainable economic growth. The most important challenge for policymakers is ensuring institutional pre-conditions and combining pro-growth and pro-poor policies that will enable the poor to participate in opportunities and contribute to future growth.

Government spending that is used to influence the running of a region's economy (education infrastructure, health, transportation, and others) will result in increased economic activity and stimulate economic growth (Todaro, 2000). Research on the effect of government spending on economic growth was carried out by Amusa and Oyinlola (2019) with the title "The effectiveness of government expenditure on economic growth in Botswana". His research examines the relationship between government spending and economic growth in Botswana during the period 1985-2016. The empirical findings show that aggregate expenditure has a negative effect in the short run and a positive effect in the long run-on economic growth. While the research of Dudzevičiūtė et al. (2018) with the title "Government expenditure and economic growth in the European Union countries". The results of his research provide new evidence about the impact of government spending on economic growth in European Union countries for the period 1994-2012. There is a positive relationship for some EU countries (Portugal and UK), while there is a negative relationship for other countries (Austria, Finland, Italy, and Sweden) or even insignificant (Belgium, France, Greece, Ireland, Ireland, Luxembourg, the Netherlands, and Spanish).

Foreign investment is something that can fill the existing gap between savings collected from within the country, foreign exchange reserves, government revenues and expertise on the one hand and the amount required to achieve development goals on the other (Todaro, 2000). Research on the effect of foreign investment on economic growth was conducted by Anetor (2020) with the title "Financial development threshold, private capital inflows and economic growth". This study aims to examine the relationship between private capital inflows, financial development, and economic growth in 28 sub-Saharan African (SSA) countries between the period 1995 and 2017. The results of his research concluded that foreign direct investment has a negative and significant impact on economic growth in SSA countries. Meanwhile, research by Hossain and Hossain (2012) entitled "Empirical Relationship between Foreign Direct Investment and Economic Output in South Asian Countries: A study on Bangladesh, Pakistan and India". The results of his research concluded that there is no co-integration between FDI and GDP in the long and short term in Bangladesh and India. However, there is co-integration between the two in the short and long term in Pakistan. In contrast, the GC results show that there is no causal relationship between GDP and FDI for Bangladesh and a unidirectional relationship was found for Pakistan and India, which means FDI causes economic output in Pakistan.

Based on the phenomena and several previous studies that have been described above, it is interesting to analyze the factors that determine economic growth in several provinces in Indonesia.

This research is expected to prove the role: population; the poor; general allocation funds; education spending; health spending; agricultural spending; fisheries and marine spending; as well as macro variables such as: and Foreign Direct Investment; in encouraging regional economic growth in Indonesia, to create effectiveness and harmony in regional economic development and the creation of good governance.

II. METHODOLOGY

A. Econometric Model

The regression used in this study is panel data regression (Greene, 2003, p. 283). Panel data is a combination of time series data and cross section data. In economics, panel data analysis is used to study company behavior and wages over time. Panel analysis makes it possible to study the dynamics of change with a short time series. The combination of time series and cross sections can improve the quality and quantity of data in a way that is not possible using only one of the two dimensions (Gujarati, 2003, pp. 638-640). In accordance with the technical description of data analysis, the appropriate regression equation used in this study is panel data regression.

```
Log\left(GDRPti\right) = \beta_0 + \beta_1 log(Educti) + \beta_2 log(Healthti) + \beta_3 log(Agricti) + \beta_4 log(Marineti) + \beta_4 log(Marineti) + \beta_5 log(Agricti) + \beta_5 lo
\beta_5 log(DAUti) + \beta_6 log\left(Popti\right) + \beta_7 Log(Povti) + \beta_8 log(FDIti) + \beta_9 DOPINI + \beta_{10} DSTATUS + \varepsilon_t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (1)
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Information:

GDRP: Gross Domestic Regional Product Educ: Government Expenditures on Education Health: Government Expenditures for Health Agric: Government Expenditure on Agriculture

Marine: Government Expenditures for Marine and Fisheries

DAU: General Allocation Fund

Pop: Total Population

Pov: Number of Poor Population

FDI: Foreign Investment DOPINI: BPK Opinion **DSTATUS: Regional Status**

 β (1... 2): Regression coefficient (elasticity number)

ε: Error term

t: Time

I: Region

In the regression model estimation method using panel data obtained:

The common effects model is the simplest panel data approach. This model does not pay attention to individual or time dimensions, so it is assumed that the behavior between individuals is the same over time. This model only combines time series and cross section data in the form of a pool, estimating it using the pooled least square approach (Gujarati, 2003, p. 637; Greene, 2003, p. 285). The regression equation in the common effects model can be written as in (2).

```
Log(GDRPti) = \alpha + \beta_1 log(Educti) + \beta_2 log(Healthti) + \beta_3 log(Agricti) + \beta_4 log(Marineti) +
\beta_5 log(DAUti) + \beta_6 log(Popti) + \beta_7 Log(Povti) + \beta_8 log(FDIti) + \beta_9 DOPINI + \beta_{10} DSTATUS + \varepsilon_t
```

where I show the cross section (individual) and t shows the time. Assuming the error component in ordinary least squares processing, a separate estimation process for each unit cross section can be carried out.

Fixed effects model assumes that there are different effects between individuals. The differences can be accommodated through differences in the interception. Therefore, in the fixed effects model, everyone is an unknown parameter and will be estimated using the dummy variable technique which can be written as follows (Gujarati, 2003; Greene, 2003, p. 285). The regression equation in the fixed effects model can be written as in (3).

```
Log(GDRPti) = (\alpha + \alpha it) + \beta_1 log(Educti) + \beta_2 log(Healthti) + \beta_3 log(Agricti) +
\beta_4 log(Marineti) + \beta_5 log(DAUti) + \beta_6 log(Popti) + \beta_7 Log(Povti) + \beta_8 log(FDIti) + \beta_9 DOPINI +
     \beta_{10}DSTATUS + \varepsilon_t
                                                                                                                        (3)
```

Equation (4) gives the panel data regression equation matric.

$$\begin{bmatrix} \log PRDR_1 \\ \log PDRB_2 \\ \dots \\ \log PDRB_n \end{bmatrix} = \begin{bmatrix} \alpha \\ \alpha \\ \dots \\ \alpha \end{bmatrix} + \begin{bmatrix} i & 0 & 0 \\ 0 & i & 0 \\ \dots & \dots \\ 0 & 0 & i \end{bmatrix} \begin{bmatrix} \alpha_1 \\ \alpha_2 \\ \dots \\ \alpha_n \end{bmatrix} + \begin{bmatrix} \log Educ_{11} & \log Educ_{21} & \log Educ_{p1} \\ \log Health_{12} & \log Health_{p2} & \log Health_{p2} \\ \dots & \dots & \dots \\ DStatus_{1n} & DStatus_{2n} & DStatus_{pn} \end{bmatrix} \begin{bmatrix} \beta_1 \\ \beta_2 \\ \dots \\ \beta_n \end{bmatrix} + \begin{bmatrix} \varepsilon_1 \\ \varepsilon_2 \\ \dots \\ \varepsilon_n \end{bmatrix}$$
 (4)

The analysis technique as above is called the Least Square Dummy Variable (LSDV). In addition to being applied to the effects of everyone, this LSDV can also accommodate systemic time effects. This can be done by adding a time dummy variable to the model.

In contrast to the fixed effects model, the specific effect of everyone is treated as part of the error component which is random and does not correlate with the observed explanatory variables, a model like this is called the random effects model (REM). This model is often called an error component model (ECM) (Greene, 2003: 285). The random effects model equation can be written as (5).

$$Log\left(GDRPti\right) = \alpha + \beta_1 log(Educti) + \beta_2 log(Healthti) + \beta_3 log(Agricti) + \beta_4 (Marineti) + \beta_5 log(DAUti) + \beta_6 log\left(Popti\right) + \beta_7 Log(Povti) + \beta_8 log(FDIti) + \beta_9 DOPINI + \beta_{10} DSTATUS + w_{it}$$

$$(5)$$

Even though the wt error component is homoscedastic, in fact there is a correlation between wt and wits (equicorrelation), which is like (6).

$$Corr(w_{it}, w_{i(t-1)}) = \alpha_u^2 / (\alpha^2 + \alpha_u^2)$$
(6)

Therefore, the OLS method cannot be used to obtain an efficient estimator for the random effects model. The appropriate method for estimating the random effects model is Generalized Least Squares (GLS) with homoscedastic assumptions and no cross-sectional correlation (Gujarati, 2003).

B. Stages of Panel Data Regression Analysis

The regression model estimation method using panel data can be done through three approaches, including the Common Effect Model, Fixed Effect Model, and Random Effect Model. After 3 models are formed, the best model is selected. To select the most appropriate model to use in managing panel data, there are several tests that can be carried out, namely the Chow test, Hausman test and Lagrange Multiplier test. Furthermore, the selected model is tested for Classical assumptions (Gujarati, 2003).

III. ANALYSIS AND DISCUSSION

Based on Table I, the panel data regression equation for common effect, fixed effect and random effect is obtained.

TABLE I: RESULTS OF REGRESSION CEM, FEM AND REM

Independent Variable	Notation	Dependent Variable: GDRB Coefficient		
		Education Spending	LOG(EDUC)	0.06
[6.01]***	[5.45]***			[4,92]***
Health Spending	LOG(HEALTH)	0.004	0.007	0,03
		[0.42]	[0.57]	[3,02]***
Agriculture Spending	LOG(AGRIC)	0.06	0.04	0,04
		[4.23]***	[2.06]**	[2,62]**
Marine Spending	LOG(MARINE)	0.005	0.03	0,04
		[0.40]	[2.12]**	[2,86]***
General Allocation Fund	LOG(DAU)	-0.12	-0.17	0,01
		[-4.998]***	[-7.34]***	[0.55]
Population	LOG(POP)	1,08	0,97	0,94
		[15.39]***	[13.47]***	[10.54]***
Poor People	LOG(POV)	-0.13	-0.06	-0,24
		[-2.22]**	[-0.96]	[-3.70]***
Foreign Direct Invesment	LOG(FDI)	0.05	0.06	0.01
		[8.78]***	[8.04]***	[2.08]**
BPK Opinion	DOPINI	0.04	0.06	0.01
		[4.21]***	[4.36]***	[0.78]
Regional Status	DSTATUS	0.33	0.29	0.31
		[3.86]***	[3.57]***	[2.13]**
Constant	C	16.11	16.66	14.88
		[57.271]***	[36.08]***	[57.98]***
R-squared		0.83	0.86	0.81
Chow Test		-	2.58***	-
Hausman Test		-		58.19***

Information: [] t test

^{***} significant α 1%, ** significant α 5%, * significant α 10%.

Based on (4), an equation can be drawn up for the Common Effect Model, the Fixed Effect Model, and the Random Effect Model as (7), (8), (9).

Common Effect Model (7)

```
Log(GDRP) = 16.11 *** + 0.05log(Educ) *** + 0.004log(Health) + 0.06log(Agric) ***
-0.005log(Marine) - 0.12log(DAU) *** + 1.08log(Pop) *** - 0.13log(Pov) ** + 0.05log(FDI) **
 ** - 0.04DOPINI *** + 0.33DSTATUS ***
```

Fixed Effect Model (8)

```
Log(GDRP) = 16.66 *** + 0.07log(Educ) *** + 0.007log(Health) + 0.04log(Agric) ***
-0.03log(Marine)** -0.17log(DAU)*** +0.97Log(Pop)*** -0.06Log(Pov) + 0.06log(FDI)*
 ** - 0.06DOPINI *** + 0.29DSTATUS ***
```

Random effect Model (9)

```
Log(GDRP) = 14.88 *** + 0.04log(Educ) *** + 0.03log(Health) *** + 0.04log(Agric) **
-0.04log(Marine)*** + 0.01log(DAU) + 0.94log(Pop)*** -0.24log(Pov)** + 0.01log(FDI)**
  - 0.01DOPINI + 0.31DSTATUS **
```

Information

- *** Significant pada α 1 %
- ** Significant pada α 5 %
- Significant pada α 10 %

Based on the results of the Chow test calculation, the probability value of the cross-section F statistic is below 0.05, so Ho is rejected, and the fixed effect model is more appropriate. Based on the results of the Hausman test calculation, the null hypothesis is rejected so that the Fixed Effect Model is more appropriate to use than the Common Effect Model. The following are the results of the analysis of the Fixed Effect panel model regression approach.

Local government spending on education has a positive effect on economic growth, this is indicated by the average value of the regression coefficient for education expenditure of 0.07. This coefficient indicates that an increase in the education budget by 1% will encourage economic growth by 0.07%, assuming that factors other than government spending on education are considered constant. Although the education budget has a positive effect, the effect is very small or to increase 1% growth, an additional 14% education budget is needed (obtained from 1% divided by 0.07% or 14.055%).

Local government spending on health has no effect on economic growth, this is indicated by a low t value. The culture of maintaining health in Indonesia is still low, so the number of people using hospital facilities is increasing. The increase in population using health facilities cannot yet be covered by local government budgets for health. An increase in the health budget has not been matched by a culture of maintaining health, resulting in an unhealthy lifestyle, and causing productivity to be less than optimal. The results of this study are supported by research by Gupta, et al. (2002), Alhowaish (2014) and Boussalem, et al. (2014). Research conducted by Gupta et al. (2002) on the effectiveness of government spending on education and health care in 50 developing and transitional countries concluded that the relationship between health care spending and mortality rates is very weak. This shows that the health care budget cannot improve public health if low public health has an impact on community productivity. Research by Mohapatra (2017), Alhowaish (2014) and Boussalem et al. (2014) concluded that spending on health has no effect on economic growth.

Local government spending on agriculture has a positive effect on economic growth, this is indicated by the average value of the regression coefficient for expenditure on agriculture of 0.04. This coefficient indicates that an increase in the agricultural budget of 1% will boost economic growth by 0.04%, assuming that factors other than government spending on agriculture are considered constant. Although the agricultural budget has a positive effect, but the effect is very small or to increase 1% growth, an additional 25% agricultural budget is needed (obtained from 1% divided by 0.040063% or 24.9%). The characteristic of farmers in Indonesia is that their land is small so that they grow more crops individually. The impact of farming methods which are mostly carried out individually and not in groups causes the budget for farmer assistance to be large compared to that of groups. With the absence of groups of small farmers, it is also difficult to meet the demand for their needs, and the risks they bear are enormous. Indonesia's agricultural budget is very small, only 1% (such a large budget is also used mostly to pay the salaries of civil servants) of the State Budget (Trubus News, September 26, 2017). In fact, in developed countries such as the United States, the agricultural budget is so large that it reaches 20% -40% of the state budget. With such a small budget, it is very difficult to develop the agricultural sector. As a result, the goal of creating food security in the country will be difficult to achieve.

This result is in accordance with the research of Xu et al. (2011) and Shuaib et al. (2015). They concluded that government spending on agriculture has an impact on economic growth.

Local government spending on fisheries and marine affairs has an influence on economic growth, this is indicated by the average value of the regression coefficient for government spending on fisheries and marine affairs of 0.03. This regression coefficient indicates that a 1% increase in fisheries and marine budgets will encourage economic growth of 0.03%, assuming that factors other than government spending on fisheries and marine affairs are considered constant.

Although the fisheries and marine budgets have a positive effect, the effect is very small or to increase 1% of economic growth an additional 31% agricultural budget is required (obtained from 1% / 0.03, namely 30.86%). Direct foreign investment has a positive effect on economic growth, this is indicated by the average value of the regression coefficient for foreign direct investment of 0.06.

Revenue sharing from the central government to the regions which is manifested in the form of general allocation funds used by the regions to improve services to the community in the context of implementing regional autonomy. The General Allocation Fund has a negative effect on economic growth, this is indicated by the average value of the regression coefficient for general allocation funds of -0.17.

This regression coefficient indicates that an increase in the general allocation fund by 1% will reduce economic growth by 0.17%, assuming other factors besides the General Allocation Fund are considered constant. The negative influence between the general allocation funds on economic growth can occur because of its implementation. The General Allocation Fund is absorbed in personnel spending, which is crucial in the regions. Because the urgency of spending is not in line with community development in accordance with existing needs and demands.

The provision of DAU on employee salaries is not in line with downsizing employees according to existing needs. Thus, reducing the capacity for development spending and in the end having an impact on decreasing economic growth.

The main problem in DAU is that the central government does not have the right to interfere with the use of DAU by regions/cities with the proportion of 26% of domestic revenue than 10% absorbed by the province and 90% for all districts/cities. The General Allocation Fund (DAU) according to Law No. 33 of 2004 aims to reduce or close the regional fiscal gap, so that regions can meet needs based on certain priorities and encourage the progress of a region. To overcome the ineffectiveness of general allocation funds in promoting economic growth, the government must change the budgeting from the traditional approach to the budgeting approach to performance. Performance budgeting is prepared with an output orientation. This system focuses on the management aspect so that in addition to the efficient use of funds, the work results are also examined. The benchmark for the success of this budget system is the performance or achievement of budget objectives or results by using funds efficiently. By building a budgeting system that can integrate performance planning with the annual budget, it will be seen that there is a link between the available funds and the expected results.

Total population has a positive influence on economic growth. Based on (7) the regression coefficient for the total population of 0.97 means that an increase in population by 1% will increase regional economic growth by 0.97%, assuming that factors other than population are considered constant. Population growth is one of the drivers of economic growth and this is in accordance with Classical theory (David Ricardo) that one of the drivers of economic growth is population development. The effect of population on economic growth can be seen in Table I. The results of this study are also supported by research conducted by Ibhagui (2020), Rahman et al. (2017) and Doran (2012), they conclude that additional population encourages economic growth, or population addition has a positive effect on economic growth.

The number of poor people has no effect on economic growth. Based on equation 7, the number of nonpoor people has an influence on economic growth, meaning that an increase in the number of poor people has no effect on regional economic growth. The number of poor people is one of the obstacles to economic growth. According to Škare and Družeta (2016) it is important to base poverty alleviation strategies on rapid but sustainable economic growth, when millions of people are still living in poverty, the most important challenge for policy makers is to ensure institutional pre-conditions and incorporate pro-growth and pro-poor which will enable the poor to participate in opportunities and contribute to future growth. To increase the role of the poor in playing a role in development, the central government and local governments must increase the relevance of policy directions, programs, and local government budget allocations to the need for poverty reduction interventions. Increase the consolidation of regional government budget expenditures with the central government budget, and between government budgets for poverty alleviation. Empowering the poor through empowerment programs for poor community groups by providing business capital through direct social empowerment programs to manage productive economic businesses and credit assistance for people's businesses with low loan interest.

This regression coefficient shows that an increase in foreign direct investment of 1% will encourage economic growth of 0.06%, assuming that factors other than foreign investment are considered constant.

Although foreign direct investment has a positive effect, the effect is very small or to increase 1% growth, an additional 17.5% foreign direct investment is required (17.5% is obtained from 1% divided by 0.06%). This shows that the role of foreign investment in Indonesia in job creation is very low, so that unemployment cannot be quickly resolved by foreign direct investment and ultimately the contribution to economic growth is low.

The Supreme Audit Agency's opinion on regional government financial reports has a positive effect on economic growth. This positive sign indicates that the high opinion rating of the Supreme Audit Agency (there is no misuse of the budget) will encourage economic growth. The Supreme Audit Agency's opinion has contributed to improving the transparency and accountability of government finances. Regional authorities have power over regional budget management, but the use of the budget must be used for the greatest welfare of the people. Its management must be orderly, economical, effective, transparent, and responsible with due regard for a sense of justice and appropriateness.

Opinion on regional status has a positive influence on economic growth. This positive sign shows that the richer a region (having abundant natural resources based on the Minister of Energy and Mineral Resources Decree No. 4618 K / 80 / MEM / 2016 and producing petroleum natural resources above 5 million per barrel) will encourage economic growth. The decentralization policy requires funding sources for each region, especially the province/district/city. The implementation of regional government functions in the context of autonomy will be carried out optimally if it is followed by the provision of sufficient income. Regions that have abundant natural resources have greater potential for regional revenue (Regional Original Revenue and central and regional transfer policies) compared to regions with minimal natural resources. Local governments will have the flexibility to respond to community aspirations and accommodate regional development priorities to accelerate the improvement of welfare, public services, and economic growth (Director General of Regional Finance, 2013). Allocation of expenditure properly from regional income sources is very crucial in achieving organizational goals.

IV. CONCLUSION

The use of the General Allocation Fund in terms of the term is not right on target. From an accountability perspective, the DAU allocation raises several question marks. Funds originating from the APBN must be accountable to the public. DAU fund allocations are mostly allocated for the payment of salaries and allowances for civil servants in the regions and the remainder is left to the regions for use with the approval of the DPRD. To reduce misuse of the budget, funds originating from the DAU need to be monitored for allocation by certain institutions and prioritize them for the public interest.

Health budget has no influence on regional economic growth. Law Number 36 of 2009 concerning Health, the central government is required to allocate a health budget of 5 percent in the State Budget (APBN), while local government is 10 percent in the Regional Budget (APBD). The budget allocated so far includes the allocation of salaries for employees in the health sector. In fact, the government must allocate 5% of the APBN apart from employee salaries. As a result, an increase in the budget does not increase the quality and quantity of public health services, especially in remote areas.

Through fiscal policy, the government can ensure that the state budget is allocated more maximally to overcome inequalities in obtaining opportunities in the education and health sectors. It is intended that all citizens, without being limited by socio-economic status and geographic location, can have equal opportunities in the fields of education and health services. The number of poor people must be reduced through empowerment of the agricultural sector, because most of Indonesia's workforce is still absorbed by the agricultural sector. According to BPS data, in 2017 the number of workers in the agricultural sector reached 35.93 million people. This sector is the largest employer of labor with the percentage of all workers reaching 29.69%. When juxtaposed with poverty data in the same year, as many as 26.58 million people were poor people living in villages (with the percentage reaching 61.4%) and 49.9% were farmers. So, it is proper if the government directs its budget policy to be more pro-agricultural sector. The General Allocation Fund is an obstacle to economic growth. Most of the use of the General Allocation Fund is allocated to increase the salaries of civil servants, the main objective of which is to absorb the General Allocation Fund, while the allocation of development programs is neglected. For this reason, it is hoped that the General Allocation Fund can be used effectively and efficiently to improve services to the community as the goal of decentralization, namely accelerating development, and equitable distribution of development results, while still maximizing regional potential for financing regional needs.

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CONFLICT OF INTEREST

Authors declare that they do not have any conflict of interest.

REFERENCES

Alhowaish, A. K. (2014). Healthcare Spending and Economic Growth in Saudi Arabia: A Granger causality approach. International Journal of Scientific & Engineering Research, 5(1), 1471-1476.

Amusa, K., & Oyinlola, M. A. (2019). The Effectiveness of Government Expenditure on Economic Growth in Botswana. African Journal of Economic and Management Studies. doi.org/10.1108/AJEMS-03-2018-0081.

Anetor, F. O. (2020). Financial Development Threshold, Private Capital Inflows and Economic Growth. International Journal of Development Issues. DOI: 10.1108/IJDI-06-2019-0099.

Boussalem, F., Boussalem, Z., & Taiba, A. (2014). The Relationship between Public Spending on Health and Economic Growth in Algeria: Testing for Co-integration and Causality. International journal of business and management, 2(3), 25.

Doran, J. (2012). An Analysis of the Interdependence of Demographic Factors, Labor Effort and Economic Growth in Ireland. International Journal of Social Economics. DOI: 10.1108/03068291211199387.

Dudzevičiūtė, G., Šimelytė, A., & Liučvaitienė, A. (2018). Government Expenditure and Economic Growth in the European Union Countries. International Journal of Social Economics, 45(2), 372-386. DOI: 10.1108/IJSE-12-2016-0365.

Gujarati, D.N. (2003). Basic Econometrics, McGraw-Hill. New York.

Gupta, S., Verhoeven, M., & Tiongson, E. R. (2002). The Effectiveness of Government Spending on Education and Health Care in Developing and Transition Economies. European Journal of Political Economy, 18(4), 717-737

Greene, W. H. (2003). Econometric analysis. Pearson Education India.

Hossain, A., & Hossain, M. K. (2012). Empirical Relationship between Foreign Direct Investment and Economic Output in South Asian Countries: A Study on Bangladesh, Pakistan, and India. International Business Research, 5(1), 9. DOI: 10.3390/economies4020007.

Ibhagui, O. (2020). How does foreign direct investment affect growth in sub-Saharan Africa? New evidence from threshold analysis. Journal of Economic Studies. DOI: 10.1108/JES-06-2018-0198.

Leibenstein, H. (1974). An interpretation of the economic theory of fertility: promising path or blind alley? Journal of Economic Literature, 12(2), 457-479.

Lipsey, R. G., Steiner, P. O., & Purvis, D. D. (1987). Economics: Eight Edition. New York.

Mankiw, N. G. (2020). Brief principles of macroeconomics. Cengage Learning.

Meier, G. M., & Rauch, J. E. (1995). Leading issues in economic development (Vol. 6). New York: Oxford University Press.

Mohapatra, S. (2017). Economic Growth, Public Expenditure on Health and IMR in India. International Journal of Social Economics. DOI: 10.1108/IJSE-05-2015-0121.

Nelson, R. R. (1956). A Theory of The Low-Level Equilibrium Trap in Underdeveloped Economies. The American Economic Review, 46(5), 894-908.

Rahman, M. M., Saidi, K., & Mbarek, M. B. (2017). The Effects of Population Growth, Environmental Quality and Trade Openness on Economic Growth. Journal of Economic Studies. Vol. 44 (3). DOI: 10.1108/JES-02-2016-0031

Shuaib, I.M., Igbinosun, F.E. and Ahmed, A.E. 2015. Impact of Government Agricultural Expenditure on the Growth of the Nigerian Economy. Asian Journal of Agricultural Extension, Economics and Sociology, 6(1), pp.23-33.

Škare, M., & Družeta, R.P. (2016). Poverty and Economic Growth: A Review. Technological and Economic Development of Economy, 22(1), pp.156-175. DOI: 10.3846/20294913.2015.1125965.

Soetrisno, P. H. (1981). Dasar-Dasar Ilmu Keuangan Negara. BPFE, Universitas Gadjah Mada.

Todaro, M. P. (2000). Economic Development, New York, Addition Wesley Longman.

Xu, S., Zhang, Y., Diao, X., & Chen, K. Z. (2011). Impacts of Agricultural Public Spending on Chinese Food Economy: A General Equilibrium Approach. China Agricultural Economic Review, 3(4), 518-534. DOI 10.1108/17561371111192365.



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