Government Expenditure, Poverty And Income Inequality In Indonesia: New Evidence From Village Funds

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Abstract: This research measures the impact of the contribution of government policy to the paradigm of 'developing Indonesia from the periphery', namely village fund contributions, economic growth and the Human Development Index for poverty alleviation and village income inequality in Indonesia. In addition, it sought the effectiveness of government policies in channeling village funds to alleviate poverty and income inequality in the village. Third, look for a policy response to the contribution of village funds to reducing poverty and income inequality in the village. This study uses the estimated Least Square Panel (PLS) with quarterly panel data from 2015Q1 to 2017Q4. The results of the analysis found that the contribution of village fund policies had a significant impact on poverty and village income inequality. Economic growth has a significant impact on alleviating poverty and income inequality in the village. And the human development index alleviates poverty and income inequality in the village.

Index Terms: Village Funds, Village Poverty, Village Income Inequality, Economic Growth and Human Development Index

1 Introduction

The Government's fiscal policy in the allocation of functions is reflected through government expenditures needed to implement poverty alleviation as well as overcome inequality between regions. Government in Indonesia applies the paradigm of "Building Indonesia from the Fringe" by strengthening regions and villages within the framework of a unitary state. Village development is carried out with the aim of improving the welfare and quality of life of rural communities and poverty alleviation. The Indonesian government policy in enhancing development and economy through the Village Fund is stated in Law No. 6 of 2014. Village funds are funds sourced from the State Revenue and Expenditure Budget intended for villages that are used to improve village development, empower rural communities who later can increase income, reduce the number of poor people and increase economic growth. The village has been placed as a driving force for development, and empowering rural communities to improve community welfare. Villages are given adequate authority and funding resources to be able to manage their potential to improve the economy and the welfare of the community. The function of government in this case is to reduce the number of poor people and improve the lives or welfare of the people (Ministry of Finance, 2017 and Nadir, 2013; Ansari, 2017). Poverty and inequality are enemies of the main objectives of regional autonomy and become a crucial problem in Indonesia.

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In line with journal opinions (Shenggen Fan., Et al., 2008; Zhuang, 2015) which explain, poverty is one aspect that describes the quality of human life, which is a decent standard of living. Poverty and income inequality are problems that are still difficult to solve in each country. However, in Indonesia, it is considered quite successful in dealing with the level of poverty and income inequality in the policy changes of government expenditure (Government Expenditure) managed optimally in each region. Government spending in reducing poverty and inequality is one way to distribute regional finance evenly. The distribution is evenly carried out in allocating government expenditures to sectors that can provide efforts to reduce poverty, namely the expenditure of village funds. In addition to reducing poverty these sectors can increase economic growth and reduce income inequality through the formation of human capital. Agree with the research (Jirawan Boonperm. Et al., 2007; Chandoevwit and Ashakul, 2008; Paavola, 2012) that village funds are funds originating from the state budget intended for villages, the funds are transferred through the district budget. The Village Fund is used to finance village administration, village development, village community development, and village community empowerment. The purpose of village funds is to improve public services in the village, alleviate poverty and overcome the development gap between villages. Various current fiscal policy strategies adopted by the government to optimize the government's role in accelerating economic recovery by directing government spending on increasing rural development. Development through villages can be done by accelerating the development of quality human capital and infrastructure in the village. Increasing spending on quality of human capital is basically a productive expenditure in the long run. In line with opinion (Hasnul, 2015; Maitra, Biswajit and Mukhopadhyay, 2012) which states that the distribution of government spending in productive sectors will later be an investment in increasing economic growth. Increased government spending on health and education is expected to spur an increase in the Human Development Index (HDI) and improvement in human living standards in the long run. Various literature (Eicher and Garcia, 1999; Changyong, 2012) shows that economic growth is positively correlated with reducing poverty, decreasing income inequality if the benefits of growth can be enjoyed equally by all income levels and job creation which in turn contributes to the decline in numbers poverty. In terms of fiscal policy, the Government of Indonesia has always pursued expansionary policies with the aim of creating momentum for economic growth. By placing priority budget management of village funds as a driving force for the economy, the Government allocates expenditures that are considered not only to encourage growth, but also aimed at creating multiplier effects that can affect poverty, income inequality and increase economic growth. There is still potential for the Government of Indonesia through fiscal policy on the expenditure side to further optimize the impact of the intended fiscal policy on economic growth and other multiplier effects

2. Literature Review

2.1 Empirical Review

Based on research (Ter-Minassian and Nankan, 2002)) which conducts research on "Actions to Strengthen the Tracking of Poverty-Reducing Public Spending in Heavily Indebted Poor Countries". In this study, it is explained that the accumulation of resources, such as education, determines the level of inequality growth. But it is not the case with credit or politics which does not affect inequality growth. Agree with the research of Jong-Wha and Honal Lee, (2009) entitled "Human Capital and Income Inequality" which shows that human capital is measured by the achievement of the education sector. Increasing public spending in the education sector is an important role in improving education distribution and income distribution. With this, evenly distributed education will have effect significant. This study uses the period from 1980-2015 Runsinarith (2009) research entitled "Infrastructure Development and Poverty reduction: Evidence from Cambodia's Border Provinces " explaining that an increase in economic development occurs because of the infrastructure sector that is evenly distributed, especially in rural areas. So also with income inequality that has a positive effect if the distribution of infrastructure is evenly distributed. Similarly, the infrastructure sector has an effect on the level of eradication poverty. This study analyzed 2 provinces namely Banteay Meanchey and Svay Rieng in 2006. In line with the research of Michael., Et al. (2018) which examines " Human Capital Spending, Inequality, and Growth in Middle-Income Asia" which explains the impact of Human Capital Spending on poverty alleviation and income inequality has effect on the significant extent to which Investment Human Capital can increase economic growth with one of them being productive work.This study uses a Case Study in the Philippines and Fiscal Balance in 12 Asian Countries Anderson, et al (2018) conducted research on "Does Government Spending Affect Income Poverty? A Meta-regression Analysis," explained that the even distribution of Public Spending distribution can reduce poverty and increase economic growth. Using Meta Regression Analysis.

3 Empirical Model

3.1 Estimation Technique

The approach taken by this research is a quantitative approach. The type of data in this study is secondary data in the form of time series with a quarterly period beginning in 2015 to 2017. The object of this research is in the form of panel data, namely 33 provinces in Indonesia. The economic reasons and methodology for the use of the annual period began in 2015 to 2017 in 33 provinces. in 2015 to 2017 there were many economic phenomena which caused fluctuations in tackling poverty levels, income inequality and economic growth. and by using the data panel, it is vulnerable to a longer time and is expected to minimize estimation errors.

3.2 Empirical Model

This research uses multiple linear regression analysis method because the independent variables consist of more than one. And this research model was formed based on several empirical factors and previous research by combining several sources of village expenditure, poverty, income inequality and estimation methods. Previous research was used as the main reference in the formation of empirical models namely (Ansari, 2017) and (Teguh Dartanto, et al., 2017), as follows:

$$\mathrm{Poverty}_{it} = b_0 + b_1\,\mathrm{DD}_{it} + b_2\,\mathrm{Inq}_{it} + b_3\,\mathrm{GDP}_{it} + b_4\,\mathrm{HDI}_{it} + \varepsilon_{it}$$
$$\mathrm{Inq}_{it} = b_0 + b_1\,\mathrm{DD}_{it} + b_2\,\mathrm{Poverty}_{it} + b_3\,\mathrm{GDP}_{it} + b_4\,\mathrm{HDI}_{it} + \varepsilon_{it}$$

$\mathrm{Poverty}_{it}$ is Village poverty, DD_{it} is Village Fund, Inq_{it} is Income Inequality of Village GDP_{it} is Growth , IPM_{it} is Human Development Index, ε_{it} is Error Term. i is Cross Section (data panel), t is Time series.

4 Results And Discussions

4.1 Test Results Estimation Panel Least Square

This study uses panel data which is a data set consisting of data time series and cross section data. The use of panel data makes it possible to capture relevant relationships over time and can monitor possible unobserved variables. The panel model used in building the model Least Squares Panel (PLS).

Table 1.
Estimation Test Results of the Poverty Model

Variable	Coefficient	Std.error	Prob.	Remarks
Inequality	59.51	5.37	0.00 *	Significant
LOGDD	0.43	0.19	0.03 *	Significant
GDP	-0.16	0.07	0.02 *	Significant
HDI	-1.04	0.05	0.00 *	Significant
C	50.97	6.95	0.00 *	-
Important Indicators				
R-squared	0.59			
Adjusted R-squared	0.58			
SE of regression	3.82			
Akaike info criterion	5.53			
Schwarz criterion	5.58			
Hannan-Quinn criter.	5.55			
Durbin-Watson stat	0.01			

[*) Significant at the level of α = 5%; This test uses the least square panel system to estimate the poverty model, a fixed and random effect model will be carried out at the next testing phase.]

[*) Significant at the level of α = 5%; This test uses the least square panel system to estimate the poverty model, a fixed and random effect model will be carried out at the next testing phase.]

Based on the estimation results of the Least Square Panel (PLS) above, it is known that the Inequality, Village Fund, GDP and HDI variables are significantly positive to reduce income poverty in Indonesia in 2015Q1 - 2017Q4, which is indicated by a smaller probability value than the critical value α = 5% = 0.05%. The probability value of Inequality is 0.0004% <α = 5% = 0.05%, so if Poverty increases by 1% then inequality also increases by 1%. Likewise the probability of a Village Fund is 0.0016 <α = 5% = 0.05% if the Village Fund increases by 1% then income inequality will increase by 1%. Probability value of GDP variable is 0.0024 <α = 5% = 0.05% explaining if GDP increases by 1% then inequality increases by 1%, as well as the probability value of IPM variable is 0.0047 <α = 5% = 0.05% if HDI increases by 1% hence income inequality increases by 1%.

Table 2.
Estimation Test Results of the Inequality Model

Variable	Coefficient	Std.error	Prob.	Remarks
Poverty	0.0040	0.0004	0.0000 *	Significant
LOGDD	0.0042	0.0016	0.0074 *	Significant
GDP	0.0024	0.0006	0.0000 *	Significant
HDI	0.0047	0.0006	0.0000 *	Significant
C-	0.1402	0.0605	0.0210 *	-
		Important Indicators		
R-squared				0.293
Adjusted R-squared				0.286
SE of regression				0.031
Akaike info criterion				-4,074
Schwarz criterion				-4,023
Hannan-Quinn criter.				-4,054
Durbin-Watson stat				0.050

[*) Significant at level α = 5%; This test uses the least square panel system to estimate the model of inequality, the fixed and random effect models will be carried out at the next testing phase.)

Based on the estimation results of the Least Square Panel (PLS) above, it is known that the Poverty, Village Funds, GDP and HDI variables are significantly positive to reduce income inequality in Indonesia in 2015Q1 - 2017Q4, which is indicated by a smaller probability value than the critical value α = 5% = 0.05%. The probability value of Inequality is 0.0004% <α = 5% = 0.05%, so if Poverty increases by 1% then inequality also increases by 1%. Likewise the probability of a Village Fund is 0.0016 <α = 5% = 0.05% if the Village Fund increases by 1% then income inequality will increase by 1%. Probability value of GDP variable is 0.0024 <α = 5% = 0.05% explaining if GDP increases by 1% then inequality increases by 1%, as well as the probability value of IPM variable is 0.0047 <α = 5% = 0.05% if HDI increases by 1% hence income inequality increases by 1%.

4.2 Important Findings

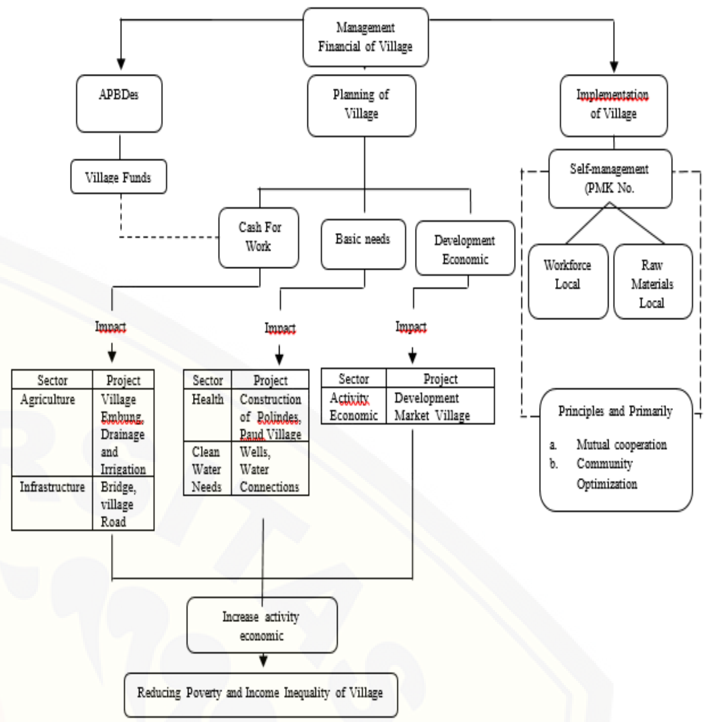

Figure 1. *Impact of Village Funds toward Poverty and Income Inequality Reduction*

There are important findings on the impact of conditions in the use of village funds optimally against poverty and income inequality. With the implementation of Village Fund, the village carried out management in the management of self-managed activities involving the village community itself the implementation and planning of these activities independently. This important finding gives how much influence village independence has in increasing the income of rural communities to improve the quality of life. The Figure above shows the flow of Village Financial Management that has an impact on poverty and income inequality intended for rural communities with the aim of improving village welfare. Starting from the APBDes, which is the annual financial plan of the village government, which is arranged according to the format, stipulated in Permendagri 113 of 2014. In the APBDes there are village income, village expenditure and village financing. Village income, namely village income, transfers that include the Village Fund State Budget, Regional Budget for PDRD Results and other income. Because this study focuses on village fund flushing policies that have been passed by Law No. 6 of 2014, in this part of the chart we will explain how the flow of village funds has an impact on alleviating poverty and income inequality in the village. In the Figure it is also explained how the flow of village fund disbursement is managed and that is generated after the village fund policy is given to the village. Improving the welfare society in the village needed a planing or village planning efficiently and effectively. There are 3 priority factors for village planning that have a direct impact on alleviating poverty and inequality in village income, namely Cash For Work, Basic Needs and Local Economic Development. The third factor is the goal of increasing the income of the community who will increase consumption so that basic needs in everyday life can be fulfilled. Where it has been explained in the background, it is said that poor people cannot fulfill basic needs. Each of these factors in the process of village development requires different funds, namely Work Forces (Cash for Work) of 80%, Basic Needs of 10% and Local Economic Development of 10%. From the explanation of the village, planning it is necessary to implement the village. Priorities for the implementation of activities funded by the Village Fund are prioritized through self-management using local resources or raw materials and strived to absorb more labor from the local village community. This can also make the village become independent in village development by optimizing existing local resources or materials and the workforce of the village community itself so that occurs multiplier effect which is managed in the village itself and the results for the village community itself. With the main principle of self-management, namely cooperation and optimizing the community in the village. The phenomenon of the relationship between poverty and income inequality among rural and urban communities does not have a significant effect, but on the contrary, the relationship between poverty and income inequality has a negative effect. Poverty growth has decreased but not with income inequality that has increased. An increase in inequality is caused more by spending on village communities. The income of the village people goes up spending (spending). Whereas in the city the income rises is not necessarily expenditure increases because the habits of the village and city people in managing income are very different, where the villagers if they get more income they will buy the needs they need at that time. In contrast to the way, people think in cities, if they get more income, they will invest and save. Gross Domestic Product (GDP) also significantly affects poverty. This is due to national economic growth expected to increase along with the realization of infrastructure development and maintained public purchasing power. In addition, the gap between poor people is getting worse. This is evident from the economic sector growth is uneven and more dominated by capital-intensive sector and solid skilled labor (services, trade, and finance) are growing faster than the real sector (agriculture, mining, and manufacturing). On the other hand, Gross Domestic Product (GDP) also affects inequality. Policy stability Priceand empowerment of MSMEs are prioritized to increase sources of growth from household consumption, which can narrow inequality so that economic growth can be of high quality. Some of the factors that influence the inequality are limited access to basic services in the lowest community groups. Some people have limited access to education, health, housing, clean water, and electricity. Uneven distribution of access to education and health that can improve the quality of human resources. Lack of access to education and health has an impact on the quality of human resources (HR). Poor HR is difficult to compete with; it is difficult to get out of the poverty chain. Inequality in the quality of work also occurs between those who are skilled and less skilled. Those who have alias skill skills are now having difficulty getting up in class from the side of work that has an impact on income. The Human Development Index has a significant effect on reducing poverty. Increased HDI will reduce poverty due to the quality of quality human resources, as well as the use of village funds prioritized to improve access to education and health so that the quality of human resources to find employment is adequate. Human Development Index significantly influences inequality. This is due to the HDI being an indicator used to see the development progress in the long run. Therefore, although HDI has increased significantly, it will not affect income inequality because it is vulnerable to the analysis of this study, which is used in the short term from 2015-2017. With a 3-year vulnerable time, the HDI cannot reduce the gap between regions.

5. Conclusions

Policies Village fund provide new perspectives on changing patterns of economic development. The village fund policy basically aims to activate the economy wheels in the village which in turn will have an impact on reducing poverty and inequality. So the perspective of the development model is not only done from the center, but changes in economic development are also carried out through changes in the village. Based on the results of the analysis, this study found that the contribution of village funds had a significant impact on poverty and village income inequality. Increasing village funds impacts poverty and village income inequality in the long run. Economic growth has a significant impact on reducing poverty and village income inequality. Likewise, the human development index factor has a significant impact on reducing poverty and village inequality. By optimizing the stimulus provided by the central government through village funds aimed at increasing village economic activity. As well as increasing village independence by optimizing the management of village funds managed by the village community and the results enjoyed by the village scope.

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