

CAUSES OF ECONOMIC GROWTH IN INDONESIA: EVIDENCE FROM EIGHTEEN PROVINCES

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ABSTRACT

This study aims to analyze the composition of local government spending (education, health, marine and fisheries, agriculture, and general allocation funds), the number of poor people, inflation, foreign direct investment and opinion Supreme Audit Agency against the Local Government Financial Report to economic growth in several provinces in Indonesia. This study uses data from 18 provinces in Indonesia from 2010 to 2015.

The model used in this study is panel data regression, the use of data panels in economic research has several main advantages over the data type cross section and time series. Panel data can provide researchers with a large number of observations, increasing the degree of freedom, data having great variability and reducing the collinearity between explanatory variables, which can produce efficient econometric estimates.

Almost all variables have an influence on economic growth (government expenditure for education, government expenditure for health, government expenditure for marine and fishery, government expenditure for agriculture, general allocation fund, foreign direct investment, and inflation), except the number of poor people and opinion of the Supreme Audit Agency against the Local Government Financial Report has no influence on on economic growth.

Keywords: economic growth, panel data, good governance, and fiscal policy.

A. Background

One of the targets of Indonesia's national development is to create economic growth and equity of development outcomes, including the distribution of income among regions. Indonesia's national development of the next five years needs to prioritize efforts to achieve food sovereignty, energy adequacy and management of maritime and marine resources (Medium Term Development Plan 2014-2019). In order to achieve the national goal, the nation is faced with three main issues, namely: (1) the decline of state authority; (2) the weakening of the joints of the national economy; and (3) the outbreak of intolerance and personality crisis of the nation.

The weakness of the nation's economic joints is evident from the unresolved issues of poverty, social inequalities, inequality among regions, environmental degradation due to excessive exploitation of natural resources, food, energy, financial and technological dependence. The state is unable to utilize the enormous wealth of natural resources for the welfare of its people. The hope for the strengthening of the nation's economic joints becomes even further when the state is unable to provide health insurance and a decent quality of life for its citizens, failing in minimizing inequality and inequality of national income, through dependence on foreign debt and the provision of food that relies on imports. In the face of energy crisis problems due to the dominance of production tools and global corporate capital and reduced national oil reserves.

Economics explained that investment is the purchase of capital or goods that are not consumed, but used for production activities so as to produce goods or services in the future. The result of Barro's research, 1991, economic growth is not significantly related to public investment stocks. Sylwester, 2000, Increased levels of human capital have no positive relationship, and a direct influence on growth. Mehanna, that trade openness stimulates investment, which in turn boosts economic growth. Nawatmi, 2013, investment has a positive influence on economic growth.

Practically, government spending will affect economic activity, not only because government spending can create a development process, but also as an aggregate demand component that can add products. The results of Suleiman, 2012, there is a long-term relationship between government spending and national income, and public expenditures and revenues for the Nigerian case. Hendarmin, 2013, the effect of government capital expenditure on economic growth is positive but insignificant, Sujaningsih, et al., 2012, there is a cointegration relationship between government spending and tax on output in the long term.

The debate over the relationship between corruption and growth still continues today. Economists, historians and political experts have been involved in a long debate over whether corruption endangers economic growth. The general view holds that corruption disrupts economic activity by distorting the efficient allocation of resources in the economy.

The results of Paolo Mauro, 1995, Corruption can reduce investment, thereby reducing economic growth. Brempong, 2002, corruption reduces the rate of revenue growth. An increase of one unit of corruption index reduces the GDP growth rate between 0.75 and 0.9 percentage points, and per capita income is between 0.39 and 0.41 percentage points; a relatively large effect given the slow economic growth in Africa. Corruption lowers the rate of per capita income growth directly by reducing the productivity of existing resources and indirectly through reduced investment. Nawatmi, 2013, corruption has negative influence on economic growth. The sincerity from the government in building this area is measured by the existence of a government system known as Regional Autonomy. In support of this, the government passed Law Number 22 of 1999 on Regional Government which was subsequently revised to Law No.32 of 2004 and Law No. 25/1999 on the financial balance between the central and regional government which was subsequently revised into Laws Law Number 33 Year 2004.

The law is the foundation for the region to develop its region independently by relying more on the capability and potential of the region. This law also gives local discretion to the regions to design various development programs that suit local needs.

From the above background, researchers are very interested in analyzing the factors that determine the growth of provinces in some regions of Indonesia. This research is expected to prove the role of local government expenditures, especially in the areas of education, health, marine and fisheries, agriculture, general allocation funds, population and foreign investment, and opinion of the Supreme Audit Board to the Regional Government Financial Reports in encouraging economic growth, Creating effectiveness and harmony in regional economic development, as well as the creation of good governance.

The purpose of this study is to know the effect of population size, government expenditure on education, government expenditures for health, government expenditures on marine and fisheries, government expenditures for agriculture, general allocation funds, foreign investment and opinion of the Supreme Audit Agency against Local Government Financial Statements on growth regional economy.

B. Library Review

Reviews about literature review that discussed theoretical references used and tracing the results of previous empirical studies are among a series of research processes to determine the extent to which previous studies have discussed the factors driving the economic growth of a region.

Research conducted by Sylwester (2000), Rustam A (2013), and Gisore (2014) stated that population growth coupled with efforts to improve health, education and general welfare will promote economic growth. Shora, A. et al (2014) population growth is not matched by efforts to increase productivity will hamper economic development.

Most researchers like Suleiman, (2012), Sujaningsih et al (2012), Rustam A (2013), Wasiaturrehman (2013), and Chiawa Et al (2012) concluded that government spending could be a driver of economic growth. But there are also some researchers like Hendarmin (2012) and Dogur et al (2006) in his research concluding that the government budget has no effect on economic growth. Srinivasan (2013) in his study concluded that the government budget has a negative influence on economic growth, this can occur because of government spending that is not right on target.

Most researchers argue that investment has an influence on economic growth. On the other hand there are researchers such as Hendarmin (2012) and Olabisi et al (2012) argue that foreign capital investments actually reduce economic growth through exclusive agreements in production with the government by not re-making the profits they get. Olabisi et al (2012) and Louzi & Abadi (2011) in their study concluded that foreign investment had no effect on economic growth.

Nawatmi (2013), Brempong (2002), Hung Mo (2001) and Shora et al (2014) are more likely to view this corruption as slowing or lowering economic growth, as well as generating inequalities and income disparities. Based on the above brief description, the research on the drivers of regional economic growth tries to observe the composition of government expenditure on economic growth into a more integrated or more comprehensive model. Especially for the composition of government expenditure, the researchers divide into allocation for education, health, marine and fishery, agriculture and general allocation fund, this research tries to add one more variable that is opinion of Supreme Audit Board to Local Government Financial Report.

Economic growth is related to the process of increasing the production of goods and services in the economic activities of society. It can be argued that economic growth involves the development of a single dimension and is measured by increased production and income. In economic growth, a production process typically involves a number of product types using a certain number of production facilities (Sumitro, 1994). In this connection, there is a quantitative equilibrium relationship between a number of means of production on the one hand and the output of all production on the other. To each other it can be expressed in terms of mathematical formats. Models about economic growth should be tested with empirical-quantitative measurements.

Development has a broader meaning compared to economic growth. Increased production is indeed one of the main characteristics in the development process. In addition to quantitative aspects of production improvement, the development process involves changes in the composition of production, changes in the pattern of use of production resources among sectors of economic activity, changes in the pattern of distribution of wealth and income among various economic actors, changes in the institutional framework in life Society as a whole.

A very important thing in the development process is the increasing opportunities on widespread employment that are productive. Economic development should bring about active participation in productive activities for all members of society who wish to participate in the economic process. Productive economic activity contains many positive impacts, including adding real income to the majority of the population. This can increase the purchasing power of consumption qualitatively and quantitatively.

According to Adam Smith economic development is a process of integration between population growth and technological progress (Suryana, 2000: 55). Todaro (2000) defines development as a multidimensional process involving major changes in social structure, public attitudes, national institutions as well as the acceleration of economic growth, the reduction of inequality and the abolition of absolute poverty.

According Rostow, economic development or transformation of a traditional society into a modern society is a process that has many dimensions. Economic development, according to him, is not only about changes in economic structure, but also about the process that causes; Changes in the orientation of economic organizations, changes in society, changes in the way of capital investment, changes in the way society in determining the position of a person to be determined by the ability to carry out the work and the changes of society who originally believed that human life is determined by nature, then view that man must manipulate the natural state surrounding creates progress.

The notion of economic development according to Simon Kuznets (Suryana, 2000, 64) is a long-term increase in the ability of a country to provide more types of economic goods to its inhabitants. This capability grows according to technological advances, and the institutional and ideological adjustments it needs. This definition has three components: first, the economic growth of a nation is seen from the continuous increase of inventories; Second, advanced technology is a factor in economic growth that determines the degree of capability growth in the provision of various goods to the population; Thirdly, the widespread and efficient use of technology requires adjustment in the institutional and ideological fields so that the innovations produced by human science can be properly utilized. Boediono (1999: 8) mentions economic growth is the

process of increasing output in the long run. This definition includes three aspects, namely process, output per capita, and long term.

According to Sukirno (1996: 33), economic growth and development have different definitions, namely economic growth is a process of per capita output increase continuously in the long term. Economic growth is one indicator of development success. From the definition of the above experts can be concluded that economic development is defined as a process that causes income per capita population of a society increases in the long term. From this definition contains three elements. (1) economic development as a process means continuous change in which it contains elements of its own power for new investments; (2) increasing income per capita; (3) an increase in per capita income should last in the long run.

C. Previous Research

Rapid population growth poses serious problems for the welfare of mankind throughout the world. The problems of population in many countries will be able to either support or hinder economic development.

Fiscal policy is an economic policy undertaken by the government in the management of state finances (through spending on education, health spending, agricultural expenditures, etc.) to guide the economic conditions for the better. Fiscal policy is sourced from state revenues from tax or non-tax and allocated in the form of state expenditure contained in the Revenue Budget.

Sylwester (2000), Mehana, Wasiaturrehma (2013), Dada (2013, Brempong (2002), Idrees and Siddiqi, 2013, Muthui et al (2013), and Nworji et al 2012) concluded that government spending on education has a positive influence on economic development.

Research by Shora et al (2014) concluded that government spending on education has a negative effect on economic development. Olabisi et al (2012), Gisore (2014) and Al-Shafti in their research concluded that government spending on education allocation has no effect on economic growth.

All researches on the effect of health budget on economic growth conclude that health budget increase economic growth, the increasing of health budget impact to the increasing of public health degree, increase public health cause increase of labor productivity and push economic growth rate.

The role of agriculture in economic development is only considered as a supporting element, development is defined by the structural transformation of an economy that is based on agricultural activities into the industrial economy of goods and services. So the role of government is needed, especially in encouraging activities in agriculture through the provision of agricultural facilities and infrastructure (such as irrigation, fertilizers and seeds). Oyinbo et al. 2013 in his research state that agricultural budgets have no impact on economic growth. Mean while Ebere, Chidinma and Osundina, Kemisola C, 2012 stated in his research that the government budget for agricultural allocation could boost economic growth.

Government expenditures that is used to influence the economic course of a region (eg educational, health, transport and other infrastructure) will result in increased economic activity and encourage economic growth and almost some research supports that effective government spending can promote economic growth. But there are also

some researchers like Hendarmin (2012) and Dagur et al (2006) in his research concluding that the government budget has no effect on economic growth. While Srinivasan (2013) in his study concluded that the government budget has a negative influence on economic growth, this can occur because of government spending that is not right on target.

In the theory of economic development there are supporting arguments and which are counter to the role of foreign companies in supporting economic development. Most researchers agree that foreign investment can drive economic growth through its role in filling shortages of resources between targeted investments and mobilized savings in the country.

Other researchers Hendarmin (2012) and Olabisi and colleagues (2012) argue that foreign investment actually reduces economic growth through exclusive agreements in production with the government by not re-profiting them. Shora et al (2012) and Louzi & Abadi (2011) in their study concluded that foreign investment had no effect on economic growth.

The results of Osuala, A.E., et. Al., (2013) was conducted to evaluate the impact of inflation on economic growth in the context of emerging markets using empirical evidence from Nigeria. The results of his findings indicate that there is a statistically significant positive relationship between inflation and economic growth in Nigeria. The Osuala study is in accordance with Behera J. (2014) research results, Behera examines the impact of inflation on economic growth and establishes the relationship of inflation growth in the context of South Asian countries. The result of the findings is that there is a high positive correlation between inflation and economic growth. Unlike the results of his research Aidi F.K., and Mwakanemela K, (2013), the results showed that inflation has a negative impact on economic growth.

The relationship between poverty and economic growth can be drawn from the results of Okoroafor's research, et. Al, (2013), Empirical results show no correlation between poverty and economic growth in Nigeria. This result is caused by the weakness of the government's attitude toward human capital development. While the results of research Afzal, M., et al. (2012) poverty has a strong relationship with education and economic growth and in the long term, poverty and economic growth are inversely and significantly.

Some authors argue that corruption can only promote economic growth. This is through two types of mechanisms (Mauro, 1995). First, the corrupt practices that with the provision of funds to speed things up so as to enable economic actors to avoid the delays of its affairs. As is well known, avoiding delays for economic activity means cost, either from the side of a possible business opportunity, or the costs of interest, and other costs. This can support growth if the country's bureaucracy rules are very bad. Secondly, this corruption can encourage government employees to work harder. Those who had not been too eager to complete their routine matters became stimulated to work because of the incentives of his service money. Things like this can happen in any country. While Nawatmi (2013), Brempong (2002), Hung Mo (2001) and Shora et al (2014) are more likely to view this corruption as slowing or lowering economic growth, as well as generating inequalities and inequalities in people's incomes.

D. Estimation Procedure and Data Collection

Regression used in this research is regression with panel data. Panel data is a combination of time and cross data. With recurrent cross-section observation, panel analysis allows researchers to study the dynamics of change with short time series. The combination of time series with cross-section can improve the quality and quantity of data in a way that is impossible to use only one of two dimensions (Gujarati, 2003; 638-640). Analysis of panel data can provide a rich and robust study of a set of people, if one is willing to consider both space and time dimensions of the data.

The use of panel data in modeling has its advantages and disadvantages. Hsiao (2006) and Klevmarken (1989) in Baltagi (2005) describe the benefits of using panel data, among others: (1). Controlling individual heterogeneity. Panel data can treat individuals, companies, countries heterogeneously. Greene (2002) mentioned that in some panel data, the number of cross section units is large, but the observation period is small, so the time series method is no longer suitable for use. The condition of such data would be better if analyzed by techniques focused on cross section variation or heterogeneity. In addition, panel data is also able to analyze variables that do not change over time. (2). Panel data more informative, varied, collinearity between smaller variables, greater degrees of freedom, and more efficient. More informative data can yield more reliable parameter estimates. (3). Panel data is good for analyzing dynamic phenomena, one of which is poverty and income dynamics. (4). Panel data both to identify and measure undetectable effects on cross section data and time series.

$$\text{GDRP} = f(\text{EDUC}, \text{HEALTH}, \text{MARINE}, \text{AGRIC}, \text{DAU}, \text{POVERT}, \text{INF}, \text{FDI}, \text{OPINI})$$

Where the GDRP represents gross domestic product, EDUC represents local government spending on education, HEALTH represents local government spending on health, MARINE represents local government spending on marine and fisheries, AGRIC represents local government expenditure on agriculture, DAU represents revenue sharing between central and Local government, POVERT symbolizes the number of poor people, INF symbolizes the amount of inflation, FDI symbolizes foreign investment, and OPINI symbolizes the assessment of the Supreme Audit Agency against the Local Government Financial Report.

Model in this research is as follows:

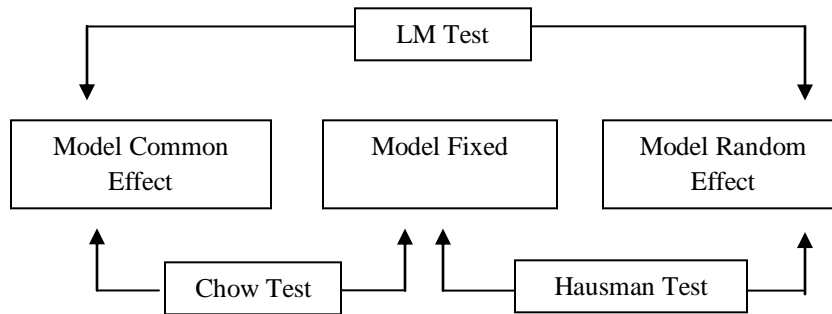
$$\text{GDRP}_{it} = \beta_0 + \beta_1\text{EDUC}_{it} + \beta_2\text{HEALTH}_{it} + \beta_3\text{MARINE}_{it} + \beta_4\text{AGRIC}_{it} + \beta_5\text{DAU}_{it} + \beta_6\text{POVERT}_{it} + \beta_7\text{INF}_{it} + \beta_8\text{FDI}_{it} + \beta_9\text{OPINI}_{it} + e_t$$

Then we turn the model into a double log model, so it becomes the following equation:

$$\text{Log}(\text{GDRP}_{it}) = \beta_0 + \beta_1\text{Log}(\text{EDUC}_{it}) + \beta_2\text{Log}(\text{HEALTH}_{it}) + \beta_3\text{Log}(\text{MARINE}_{it}) + \beta_4\text{Log}(\text{AGRIC}_{it}) + \beta_5\text{Log}(\text{DAU}_{it}) + \beta_6\text{Log}(\text{POVERT}_{it}) + \beta_7\text{Log}(\text{INF}_{it}) + \beta_8\text{Log}(\text{FDI}_{it}) + \beta_9\text{Log}(\text{OPINI}_{it}) + e_t$$

In rearranging panel data will yield three results of model equation; None effect, fixed effect and random effect. To select the most appropriate model to be used in this

research, it can be done several tests, namely: (1). Chow test is a test to determine the Fixed Effect or Random Effect model that is best used in estimating panel data. (2). The Hausman test can be defined as a statistical test to select whether the most appropriate Fixed Effect or Random Effect model is used. (3). To determine whether the Random Effect model is better than the Common Effect (OLS) method, the Lagrange Multiplier (LM) test is used.



Source : Gujarati, 2003

Figure 1. Model Selection Test

The data in this study are secondary data collected from the Central Bureau of Statistics, Bank Indonesia, the Ministry of Finance Republic of Indonesia and the Supreme Audit Board of the Republic of Indonesia various publications from 2010 to 2015. Secondary data are data obtained from third parties and from existing sources .

Table 1. Sources of Data

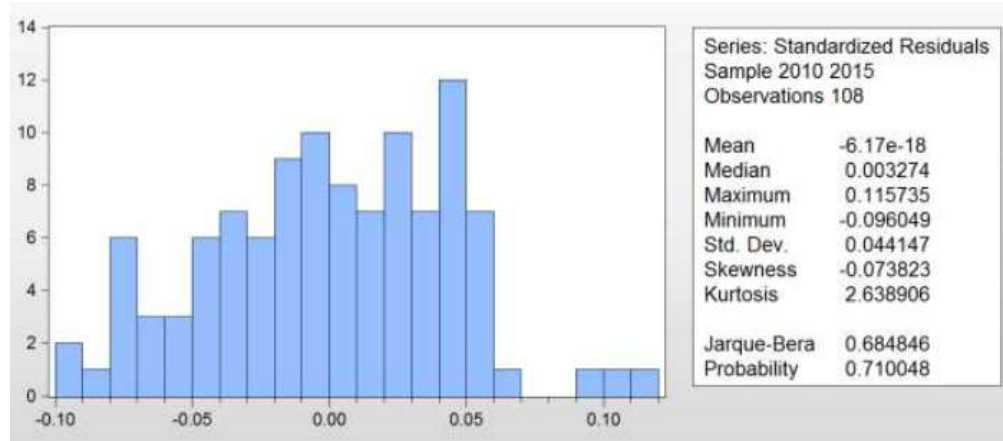
	Measurement	Source(s)
GDRP	Gross Domestic Regional Income (Billions of Rupiah)	Central Bureau of Statistics
EDUC	Government Expenditures for Education (Million Rupiah)	Ministry of finance Republic Indonesia
HEALTH	Government Expenditures for Health (Million Rupiah)	Ministry of finance Republic Indonesia
MARINE	Government Expenditures for Marine and Fisheries (Million Rupiah)	Ministry of finance Republic Indonesia
AGRIC	Government Expenditure on Agricultural (Million Rupiah)	Ministry of finance Republic Indonesia
DAU	Revenue sharing between central government and local government (Million Rupiah)	Ministry of finance Republic Indonesia
POVERT	Number of Poor People (persons)	Central Bureau of Statistics
INF	General price increase (percent)	Bank Indonesia
FDI	Foreign Investment (million rupiah)	Central Bureau of Statistics
OPINI	Statement of the Supreme Audit Board to the Financial Report of the Regional	Financial Auditing Agency of the Republic Indonesia

E. Results and Discussion

1. Classic Assumption Test

Normality test is used to determine whether the residual is normally distributed or not. To test whether the data distribution is normal or not can be done by using the Jarque-Berra test (J-B test). Based on the normality test it can be seen that ρ -value is $0.71 > \alpha = 5\%$. Thus, it can be concluded that the data used in the model is normally distributed.

Tabel 2. Normality Test Results



There is no single strong and rigorous rule to detect heteroscedasticity. Nevertheless, econometric experts suggest several methods for detecting the presence of heteroscedasticity problems in empirical models, such as by Park (1966), Glejser (1969), White Test (1980), Breusch-Pagan-Godfre (Gujarati, 1995, 369-380), Sumodiningrat, 1994: 270-278, Koutsoyiannis, 1977: 185-187, Ramanathan, 1996: 418-424, Thomas, 1997: 284-288, Breusch and Pagan, 1979: 1287-1294 And White (1980: 817-838).

The following is heteroscedasticity results by using Park Test as shown in the table below:

Tabel 3. Test Heteroscedasticity with Park Test

Variable	Coefficient	Prob.
LOG(EDUC)	-0.001853	0.5217
LOG(HEALTH)	0.003411	0.3657
LOG(MARINE)	-0.000510	0.8794
LOG(AGRIC)	-0.001482	0.7260
LOG(DAU)	-0.001097	0.7590
LOG(FDI)	-0.001112	0.3074
INF	0.000126	0.7341
LOG(POVERT)	0.006517	0.7185
OPINI	7.06E-05	0.9426
C	-0.051350	0.8324

Source: Appendix

Information: *** = significant in 1% ** = significant in 5% * = significant in 10%

From table 3, it can be concluded that the data used avoid the problem of heteroscedasticity.

Multicollinearity test is a state where between independent variables in multiple regression models found the existence of correlation between one another. Multicollinearity test aims to test whether in this regression found the existence of such correlation. In the case of multicollinearity, the regression coefficient of independent variables will be insignificant and have a high standard error. The smaller the correlation between the independent variables, the regression model will be better. From the calculation result in table 4 the value of correlation coefficient between independent variables is not greater than [0.9] then the data in this research model does not occur multicollinearity problem.

Tabel 4. Test Multicollinearity

	L(GDRP)	L(EDUC)	L(HEALTH)	L(MARINE)	L(AGRIC)	L(DAU)	L(POVERT)	INF
L(GDRP)	1.0000	0.7092	0.7318	0.3871	0.6570	-0.1546	0.7357	0.0012
L(EDUC)	0.7092	1.0000	0.7737	0.5588	0.6895	-0.1875	0.4418	0.0345
L(HEALTH)	0.7318	0.7737	1.0000	0.5896	0.7818	-0.0422	0.6492	0.0203
L(MARINE)	0.3871	0.5588	0.5896	1.0000	0.7657	0.1419	0.3623	0.0221
L(AGRIC)	0.6570	0.6895	0.7818	0.7657	1.0000	0.0642	0.5715	0.0644
L(DAU)	-0.1546	-0.1875	-0.0422	0.1419	0.0642	1.0000	0.1637	-2.8E-05
L(POVERT)	0.7357	0.4418	0.6491	0.3623	0.5715	0.1637	1.0000	0.0040
INF	0.0012	0.0345	0.0203	0.0221	0.0644	-2.87E-05	0.0040	1.0000

Source: Appendix

2. Best Model Analysis

In the panel data model analysis there are three kinds of approaches that can be used, namely the least squares approach (ordinary/pooled least square), fixed effect approach, and random effect approach. The statistical test for selecting the first model is to test the Chow to determine whether Pooled least square method or fixed effect should be used in creating panel data regression.

The selection of this model using the best analytical test is described in the following table.

Table 5. Result of Estimation of Panel Data

LOG(GDRP) is dependent Variabel	Model		
	None Effect	Fixed Effect	Random Effect
LOG(EDUC)	0.560166*** (0.078684)	-0.02553*** (0.009667)	-0.00034 (0.021422)
LOG(HEALTH)	-0.38103*** (0.107138)	0.058876*** (0.010469)	0.063609** (0.027882)
LOG(MARINE)	-0.18333*	0.086002***	0.056763**

	(0.10193)	(0.010478)	(0.024409)
LOG(AGRIC)	0.276073* (0.147313)	0.096411*** (0.015623)	0.167639*** (0.03062)
LOG(DAU)	-0.18785*** (0.062619)	0.087346*** (0.022175)	0.014611 (0.02614)
LOG(FDI)	0.230766 (0.025811)	-0.00385 (0.003008)	0.005797 (0.008023)
INF	-0.01391*** (0.021083)	-0.00225* (0.001217)	-0.006** (0.002725)
LOG(POVERT)	0.676093*** (0.064108)	0.03264*** (0.053776)	0.508933*** (0.089407)
OPINI	0.07139 (0.045705)	0.002556 (0.003676)	-0.00712 (0.00722)
C	4.197967*** (1.043515)	13.15973*** (0.766209)	6.931731*** (1.210671)
R-squared	0.875092	0.999693	0.734144
Prob(F-statistic)	76.28639	10141.09	30.06899
Observations	108	108	108

Source: Data processed

Information : ***= significant in 1% **= significant in 5% *= significant in 10%

Based on the Chow Test results, the two probability values of Cross Section F and Chi Square are smaller than Alpha 0.05 thereby rejecting the null hypothesis. So according to Chow Test, the best model used is the model by using the Fixed effect method.

Tabel 6. Chow Test Results

Equation: Untitled

Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	2517.147928	(17,82)	0.0000

Source : Data processed

Based on the Chow Test results that rejected the null hypothesis, the test data continues to Hausman Test. Based on Hausman's test results, the probability value of Cross-section random is 0.0002 which is smaller than Alpha 0,05 thus rejecting the null hypothesis. So according to Hausman test, the best model used is model by using Fixed Effect method.

Tabel 7. Hausman Test Results

Equation: Untitled
 Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	22.047856	8	0.0048

Source : Data processed

Based on test model specification that has been done and comparing the best value, lastly the regression model used is Fixed Effect Model. Fixed Effect Model (FEM) is a panel data estimation technique using dummy variables to determine intercept differences between cross sections. The following table shows the results of data estimation with the number of observations of 18 provinces during the period 2010-2014 (5 years).

Table 8. Fixed Effect Model Estimate Results

LOG(GDRP) is dependent Variabel	Fixed Effect Model			
	Model 1	Model 2	Model 3	Model 4
LOG(EDUC)	-0.0243*** (0.0096)	-0.0223** (0.0092)	-0.0265*** (0.0103)	-0.0249** (0.0102)
LOG(HEALTH)	0.0581*** (0.0113)	0.0570*** (0.0095)	0.0639*** (0.0121)	0.0600*** (0.0123)
LOG(MARINE)	0.0844*** (0.0099)	0.0841*** (0.0104)	0.0837*** (0.0113)	0.0854*** (0.0112)
LOG(AGRIC)	0.0934*** (0.0142)	0.1027*** (0.0139)	0.0936*** (0.0145)	0.0869*** (0.0146)
LOG(DAU)	0.0981*** (0.0231)	0.0842*** (0.0217)	0.0962*** (0.0229)	0.0977*** (0.0224)
LOG(POVERT)		0.0342 (0.0522)	0.0528 (0.0553)	0.0325 (0.0548)
INF		-0.0029*** (0.0010)		
LOG(FDI)			-0.0053** (0.0030)	-0.0056** (0.0030)
OPINI				0.0045 (0.0033)
C	13.4302*** (0.2056)	13.0706*** (0.7388)	12.7991*** (0.7805)	13.1218*** (0.7826)
R-squared	0.999696	0.999688	0.999675	0.999685
Prob(F-statistic)	12718.92	11087.67	10643.69	10395.84

Observations	108	108	108	108
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Source: Data processed

Information : ***= significant in 1% **= significant in 5% *= significant in 10%

From table 8 above we can see, there are 4 models of data panel regression with fixed effect approach. From the results of the 4 models we can analyze almost all variables have an influence on economic growth, except the number of poor people and opinion of the Supreme Audit Agency against the Local Government Financial Report.

The result of regression of fixed effect model panel data can be seen from the value of Prob (t-stat) less than 0.05 (for government expenditure for education, government expenditure for health, government expenditure for marine and fishery, government expenditure for agriculture, general allocation fund). With a confidence level of 95 percent, almost all the variables have a significant effect on economic growth. Significant variables are marked by prob t-statistics (as partial test) which is less than 0.05. So with a 99 percent confidence level variable that does not significantly affect economic growth is the variable allocation of education budget and foreign investment has no effect on economic growth. And the model can explain 99.96 percent of the variations that occur in the PDRB variable (adjusted R-squared).

Government expenditure for Education has negative impact on regional economic growth. This means that the allocation of education cannot improve the quality and quantity of education but only improve the welfare of educators. This means that the increase in allocation of education funds is mostly used for certification and school operations. The misconception of ideas have been made in several provinces in Indonesia that stated the creation and expansion of the opportunity to obtain rapid, quantitative education is the key to the success of national development, the more educational opportunities, the faster the development process will be. Departing from that opinion the region is vying to hold the expansion of education in a short time, so this field becomes more politically sensitive. Each of the ownership of the head of the region always raised free education. The rapid expansion of educational opportunities has cost enormous amounts, but the average condition of the community actually has a development gap.

Our country is faced with two fundamental alternatives to policy in addressing educational issues, first expanding the formal education system quantitatively with some minor modifications in curricula, teaching methods and evaluations without changing the costly educational policies and institutional structures of markets Workforce. Second, try to reform the entire system of education, accompanied by changes to the conditions of demand and supply of school opportunities and redirect the curriculum to fit national needs. Evidence suggests that the first alternative will only exacerbate problems of unemployment, poverty, inequality of income distribution, and stagnation of the village economy. The results of this study are supported by the research of Adela Shera et al (2014) that spending on education has negative relationship with economic growth.

Government spending on health has a positive effect on regional economic growth, proving that an increase in health spending will lead to a reduction in infant and maternal mortality to boost economic growth. Besides, with the existence of

healthy insurance Indonesia can encourage productivity, which in turn will encourage the economic growth.

Government spending on marine and fishery allocations has positive effect on regional economic growth. This is because 2/3 parts of our country tangible ocean then the allocation of government spending will optimize resources in the field of marine and fisheries, so the maritime sector will develop.

Based on the analysis it can be concluded that development expenditure for agriculture has an influence on economic growth in 18 provinces in Indonesia. The objective of agricultural development in Indonesia is to improve the living standards of rural communities by increasing income, total production, and productivity of small farmers, the first thing that must be done by the government is to identify the main sources of agricultural progress and the basic conditions that would affect The successful achievement of agricultural development goals, all these important elements are clearly related to each other to form a very complex network of relationships. To facilitate the understanding we can divide into three components of small-scale agricultural development resources, namely: (1) improvement of technological progress and innovation in agricultural activities is an important prerequisite that must be fulfilled in order to achieve the improvement of output level and productivity, (2) Economic policy Appropriate government policies such as regulation and protection of prices of agricultural commodities, especially cereals of basic foodstuffs. (3) Land Reform, agricultural and rural development only succeeds in bringing the benefits to many if there is a joint effort between the government and all farmers, especially the granting and improving the right of ownership or land use to each farmer. If the programs of land reform can be effectively treated and effectively implemented by the government it will create a solid foundation for improving the output and living standards of rural farmers.

General allocation funds have a positive influence on regional economic growth. General Allocation Fund (DAU) is the amount of funds allocated to each Autonomous Region (province/district/city) in Indonesia each year as development fund. DAU is one component of expenditure on APBN, and becomes one component of revenue in APBD. The purpose of the DAU is as equitable distribution of inter-regional financial capacity to fund the needs of the Autonomous Region in the context of decentralization. DAU is used by local governments to encourage economic growth, especially as a complementary fund in regional development.

The number of poor people has no effect on economic growth. Poverty occurs because the ability of economic actors are not the same, so there are people who can not participate in the development process or enjoy the results of development. In the effort to overcome poverty there are two main strategies that must be taken by the government. First, protect families and poor communities through the fulfillment of their basic needs. Second, empower them to have the ability to do business and prevent new poverty. The results of this study are in accordance with Okoroafor's findings, et. Al, (2013), there is no correlation between poverty and economic growth in Nigeria.

Inflation has a negative effect on economic growth, meaning that if inflation rises it will reduce economic growth. The results of this study are in accordance with

the results of Aidi F.K., and Mwakanemela K, (2013) studies, that inflation has a negative impact on economic growth.

The relationship between foreign investment and economic growth shows a negative relationship. So far, foreign investment in Indonesia has been exploring natural resources, and regions that only rely on natural resources have low average economic growth, so the government must make a policy to raise the added value of natural products so that the investment role can be optimally used. This study supports the results of Hendarmin (2012) and Olabisi et al (2012) research, that foreign capital investment actually reduces economic growth through exclusive agreements in production with the government by not generating the returns they gain. Criticisms of foreign investment have been largely undertaken due to the uneven impacts of development outcomes in Indonesia and in many cases the activities of foreign capital firms that only reinforce the dualistic economic structure and exacerbate the distribution of income. They will divert resources from use to produce food to use to produce sophisticated goods that mostly satisfy only certain groups and tend to exacerbate the imbalance of economic opportunities between rural and urban areas with most operating in urban areas and accelerate the flow of urbanization from village to city. Foreign investment companies tend to produce unsuitable goods (only consumed by certain groups), thus encouraging the luxury consumption pattern through advertising and the resulting goods tend to use capital-intensive technology. So that domestic resources tend to be allocated to socially unprofitable projects.

Opinion of the Supreme Audit Agency to the Local Government Financial Report has no relationship to regional economic growth. Financial audits are conducted in order to provide an opinion on the fairness of financial information presented in the financial statements. Performance audit aims to assess the economic aspects, efficiency, and effectiveness, but do not see the outcomes. So in terms of BPK assessment is very reasonable but macroeconomic performance is not achieved as expected. The government should have started implementing performance-based budgets, budgeting with this performance approach is structured with output orientation. The benchmark of the success of this budget system is the performance or achievement of the objective or budget outcome by using funds efficiently. By building a budgeting system that can integrate performance planning with an annual budget, there will be a link between available funds and the expected outcomes.

F. Conclusions

Almost all variables have an influence on economic growth, except the number of poor people and opinion of the Supreme Audit Agency against the Local Government Financial Report.

From the analysis of the influence of the composition of government spending (education, health, marine and fisheries, agriculture, and general allocation funds). Firstly, from the government expenditure component including government expenditure on marine and fishery has the biggest contribution in encouraging economic growth in the Indonesian territory, and this is in accordance with the shape of our country which consists of a number of islands with 2/3 of the waters area. Both components of

government expenditure on agriculture contribute second only to marine and fishery expenditures, this is also very much in line with employment in Indonesia, 35 per cent of labor absorption is in the agricultural sector, so the priority of agricultural development or government-backed government programs is appropriate .

Government expenditure for education has negative impact on regional economic growth. Government needs to reevaluate basic education in terms of curriculum, teaching methods, and educational evaluation. So that not only the pursuit of quantity but also maintain the quality of basic education.

Inflation has a negative effect on economic growth, meaning that if inflation rises it will reduce economic growth. Inflation is one of the major macroeconomic diseases, so the government together with financial institutions can keep the price stability of goods through inflation control, so as not to disrupt economic growth.

There is a negative relationship between foreign investment and economic growth. Foreign investment companies tend to produce unsuitable goods (only consumed by certain groups), thus encouraging the luxury consumption pattern through advertising and the resulting goods tend to use as capital-intensive technology. Hence domestic resources tend to be allocated to socially unprofitable projects.

The opinion of the Supreme Audit Agency on the financial reports of local governments has no relationship to regional economic growth. The government needs to simplify procedures and optimize the role of the KPK, as well as the inherent supervision of agencies directly related to the use of budgets for public purposes.

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