ANALYSIS OF GOVERNMENT SPENDING REALIZATION ON POVERTY IN ACEH PROVINCE, INDONESIA

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ABSTRACT

This study aims to determine the effect of regional spending realization on poverty in Aceh Province. The scope of the study was involving 23 districts/cities in Aceh from 2008-2017. The regression model uses panel data with the analysis method Fixed Effect Model. The results showed that realization of education spending and realization of health spending partially had a negative and significant effect on poverty. Simultaneously education spending has a negative and significant effect on poverty, while health spending has no effect and is not significant. The policy implication of the results of this study is that it is important for the Aceh and district/city governments to increase the optimization of regional spending, especially in education and health spending in order to reduce and alleviate poverty.

Keywords: Realization of Education Spending, Health Spending Realization, Poverty, Panel Data, Fixed Effect Model

1. INTRODUCTION

Poverty has become a problem that is experienced and must be addressed by developing countries and is a major focus in economic development both at global and national levels. Poverty is one of the fundamental problems that hinder the progess of development and arises because of the inability of people to achieve a standard of living in a particular region. This condition causes a decrease in the quality of human resources which leads to low productivity and income of the people. On the other hand, it will also have an impact on social instability, hunger, and low levels of health and malnutrition.

Poverty rate is relatively high, especially in regions that have low income and are still very dependent on the Regional Budget (APBD). Poverty reduction has always been the main target

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of policy for the government. The implementation of fiscal decentralization is based on the consideration that local governments are more aware of the needs and standards of service for the people in their respective region, so that they can accelerate improvement in people's welfare and reduce poverty. Thus, spending priorities should be prioritized in order to improve human development. Economic performance in recent years has been increasing, but still leaves the problem of poverty. Poverty is still a problem in both urban and rural areas, which occurs because of the low capacity of the community and minimum employment.

Aceh is one of the provinces that has a poor population in 2017 reaching 872,610 people, making Aceh the sixth poorest nationally, while it has the highest number of poor people in the Sumatra region. The poverty rate in Aceh is higher than the national poverty level, this shows that the government's performance in alleviating poverty is not yet on target. In 2008 Aceh's poverty rate reached 23.53 percent and its condition improved with a decline of up to 16.98 percent in 2014 but again worsened with an increase of 18.89 percent in 2017.

This raise the question mark as to why there are fluctuations in the number and percentage of poverty in Aceh, while the amount of the Aceh government budget in the form of the Aceh Revenue and Spending Budget (APBA) continues to increase from each year. Over the past six years poverty in Aceh province has only decreased by 0.57 percent, far from the current target of the government with a reduction in poverty rate of one percent per year (acehprov.go.id, 2018). The high number of poor people is a problem for the Aceh government to immediately implement and make policies that can alleviate poverty.

In 2017 there was economic instability in Aceh due to weak budget absorption, resulting in a sluggish, slowing down economy. This happened because Aceh is a province that is still very dependent and expects on government spending in economic development and poverty alleviation, so that government spending in Aceh is still very large compared to the Regional Original Revenue (PAD) received. Regional spending is an important capital that is used for economic development in Aceh, especially for 23 regencies/cities in running their government. It is because Aceh does not yet other significant income yet.

Data explains that the large budget has not been able to deliver a reduction in poverty in Aceh. Thus, it is very necessary for local government policies to prioritize the usage of budgets that are right for the purpose of overcoming the problem of poverty with optimal regional spending, such as education and health spending. The large amount of spending of the Aceh government is not commensurate with the decline in poverty, so this becomes a problem that must be a major concern in regional development and resolved.

Government spending is a fiscal policy that can be used to reduce poverty through the allocation of public budgets that are right on target. Setting budget spending priorities will foster a better economy and will have a direct impact on reducing and overcoming the problem of poverty which has been the main problem in Aceh. Proper development will also increase community income per capita that will foster optimal economic growth and certainly reduce poverty rate.

From the problems that have been raised in the background of the research above, the main problem that will be discussed in this study is how much influence the realization of regional spending on poverty in the Aceh Province.

2. LITERATURE REVIEW

Poverty, Regional Spendings and Fiscal Policy

Some analysts define poverty in terms of the amount of income needed to provide families of a certain size with minimum food, clothing, shelter, and education needs. Absolute poverty standards specify specific income levels for households that are determined to live in poverty (Agola and Awange, 2014). In the popular scientific dictionary, the word "poor" means not possessing any assets (or existing assets are not enough to fulfil daily needs). The word "indigent" is defined as people who are very poor and unable to meet their daily needs (Siregar and Mudawali, 2014). The poor and indigent belong to the lower class of society who are unable to meet their daily needs, but the level of the indigent is lower than poor. Poor is categorized as the inability of someone to fulfill their daily needs, especially consumption, both clothing and food.

According to the cause, poverty is divided into two types. The first is cultural poverty, which is poverty caused by traditional or cultural factors in a particular area that holds a person, or a group of people bound to poverty. Second is structural poverty, which occurs as a result of the powerlessness of a particular person or group of people towards an unfair social system or order, because they are in a very weak bargaining position and does not have access to develop and get out from the poverty trap (BPS, 2017) .

The classical theory of poverty is the oldest theory and according to classical economics, markets are self-regulating and resources efficiently. Poverty is seen not as a result of market failure but poor economic decisions from individuals such as lazy, not working hard, not persevering or becoming uneducated (Davis and Sanchez-Martinez, 2014). According to this liberal approach; market distortions, institutional rigidity and general backwardness can cause poverty in individuals. Therefore, government intervention is seen as a means to promote economic development and prosperity (Davis and Sanchez-Martinez, 2014). During the Great Depression of the 1930s, J M Keynes, a British economist argued that government intervention through

expansionary fiscal policy was needed to stimulate the economy through a multiplier effect and reduce poverty.

Fiscal policy, which is often also called fiscal politics, is defined as actions taken by the government in the field of budgetary spending with the intention of influencing the economy. APBD is the main instrument of fiscal policy which greatly influences the economy and investment decisions made by market participants. The application of regional autonomy and fiscal decentralization policies is based on the idea that local governments understand better on the potential, conditions and problems of their own regions. Therefore, the local government understands the magnitude of the budget needs in order to carry out government activities and development.

Aceh's spending includes all spendings from the Aceh General Cash account which reduces current fund equity, which is the government obligation in one fiscal year which repaymet will not be received back by Aceh goverment. Aceh Spending consists of several components: 1. Indirect Spendings which consist of employee spending, grant spending, social assistance spending, profit sharing spending to provinces / districts / cities and village governments, financial assistance spending to provinces / districts / cities, political parties and indirect shopping. 2. Direct spending which consists of employee spending, goods and services spending and capital spending. OTSUS funds are intended to finance development especially infrastructure development and maintenance, people's economic empowerment, poverty alleviation and education, social and health funding (Article 183 paragraph 1 of the UUPA).

Regional government spendings are one of the instruments to achieve the welfare of the community, namely by priority in regional government spendings which are very closely related to poverty or becoming a determining factor for overcoming poverty reduction. These spendings are government budget spendings on the education and health sectors and to look out clearly for the management of government budgets in the education and health sectors which are important in efforts to reduce poverty (Bahalau et al. 2015).

Education and Health are fundamental development goals in a region. According to Sanggelorang, et al (2015) education or human capital, can contribute to development. This is because education is basically a form of savings, causing accumulation of human capital and aggregate output growth if human capital is an input in the aggregate production function. While health is at the core of prosperity, and education is essential to achieve a decent life.

In Government Spendings in the Education Sector, according to Sanggelorang, et al (2015), there are two education costs, namely individual direct education costs and indirect education costs. At present the government provides a budget of at least 20 percent of the APBN / APBD for the

education sector. This policy is stated in Law No. 20 of 2003. Whereas for government spending on the Health Sector regulated in Law No. 36 of 2009, it is stated that the government health budget is allocated a minimum of 5 percent of the state budget excluding salaries, whilst the amount of budget of provincial government and districts / cities is allocated by a minimum of 10 percent of the regional budget excluding salary.

According to Bahalau, et al. (2015) government spending on the health sector proved to be quite large in improving the sector's performance in reducing poverty. While Deffrinica (2015) explains the relationship between economic growth and government spending, positive and significant impact on poverty in West Kalimantan, the effect of public spending is positive and significant. Barika (2013) shows that government spending has a significant negative effect while unemployment has a significant positive effect on poverty levels in the province of Sumatra.

Meanwhile Widodo, et al. (2011) explained that the increase in government spending in the education and health sectors was followed by not only an increase in the Human Development Index (HDI) but also a decrease in the percentage of poor people. As a result, government spending on the education and health sector itself does not affect the immediate reduction in poverty levels. Whereas Nurmainah (2013) uses panel data that combines time series data and cross section. This data was analyzed using the Structural Equation Modeling equation with AMOS. The results of the study indicate that the Human Development Index is significantly negative towards poverty.

Bahalau et al. (2015) in the results of the estimation of their study shows that government spending in the education and health sectors together simultaneously have a significant influence on the level of poverty. However, the influence of each sector, on the contrary, does not have a significant effect.

Paseki et al (2014) with the path analysis method shows that the results of this study are that in combination, the General Allocation Fund and direct spending on poverty have a significant influence in reducing poverty in the city of Manado. Whereas Sunusi et al (2014) show that government spending directly influences poverty.

Mehmood and Sadiq (2010) show a negative relationship between government spending and poverty. This is different from Nyarkoh (2016) who examined the effect of government spending on poverty for Ghana with Johansen test (JH), Vector Error Correction test (VECM), and Ordinary Least Square (OLS), found that poverty correlated positively with government spending. In a similar study of the relationship between poverty and government spending in Nigeria, Okulegu (2013) examines the effect of government spending (indicated by agricultural

spending) on poverty reduction. The research findings show a negative relationship between poverty reduction and government spending for the period of the study.

Siregar and Mudawali (2014) show the results of their study that the realization of regional spending has a positive and significant effect on poverty. If the spending realization increases, it will reduce poverty. Osundina et al. (2014) show that government spending on education and health was not significantly negative and positive for each. Whereas Kasha (2014) finds that government spending in the form of social security had a non-significant impact on poverty. Nwosa (2014) also found that government spending had a negative and not significant impact on the level of poverty.

Hidalgo and Iturbe-Ormaetxe (2018) reveal that public spending on education has a strong long-term effect to reduce the incidence of poverty. Whereas Omari and Muturi (2016) show that there is a stable long-term relationship between poverty levels and government spending. The regression results show that health spending has a positive and significant influence on poverty level while education spending at the poverty level is not significant. The conceptual ramework of the research can be seen on the following figure 1:
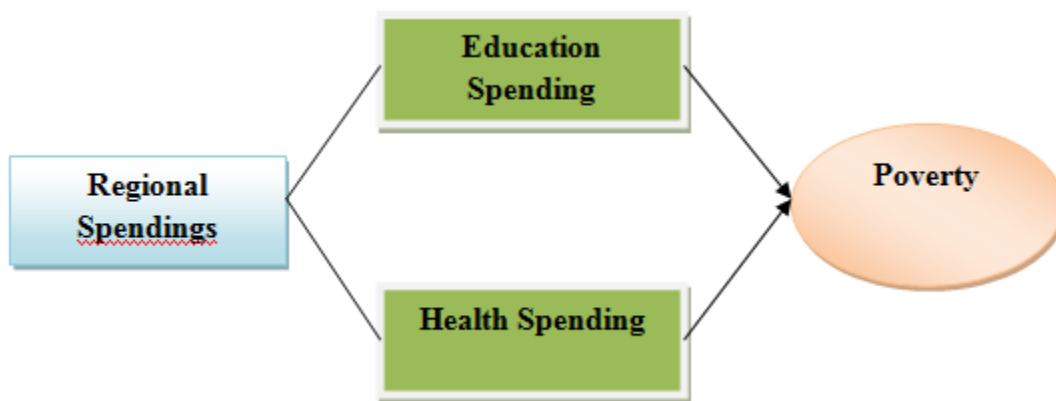
Figure 1: Conceptual Framework

Hypothesis

Based on the background of research, literature review and previous research, the authors hypothesize it is assumed that the realization of regional spending negatively affects poverty in Aceh Province.

3. RESEARCH METHOD

The scope of this study is limited to education spending and health spending as independent variables and poverty as dependent variables. The type of data used is the Panel Data, which is a combination of Time Series and Cross Section. The Time Series data used is annual data, namely in 2008-2017, while Cross Section data is 23 districts/cities in Aceh Province.

Model and Analysis Method

Given the data used in this study is panel data which is a combination of cross section data (data of 23 districts/cities) and time series data (data from 2008 to 2017). Linear regression models using time series data and cross section, the model is written:

$Y_{it} = \alpha + \beta\, X_{it} + \varepsilon_{it}$; i = 1,2,....,N; t = 1,2,....., T   ………………….....(1)

Where :

N   = number of observations

T   = amount of time

N x T   = the number of panel data

then the model for the influence of regional spending on poverty can be written as follows;

$P_{it} = \alpha_0 + \beta_1 ES_{it} + e_{it}$ …………. (2)

$P_{it} = \alpha_0 + \beta_2 HS_{it} + e_{it}$ …………. (3)

$P_{it} = \alpha_0 + \beta_1 ES_{it} + \beta_2 HS_{it} + e_{it}$ …………. (4)

Where :

P_{it} = Poor number of districts / cities i,

ES_{it} = Education Spending for each Regional Government (Rupiah)

HS_{it} = Health Spending for for each Regional Government (Rupiah)

α = Constants

β_1, β_2 = Regression Coefficient

ε = *error term*

i   = District / City in Aceh Province

t   = Time Series (2008 - 2017)

To estimate model parameters with panel data, there are several techniques offered, namely;

    1. *Common Effect Model* or *Pooled Effect Model (PLS)*

It is an OLS method, it cannot be seen the difference between individuals (districts/cities), or between time (2008-2017). This is certainly not in accordance with the purpose of using panel data. Both intercept and slope do not change between individuals or between times.

    2. *Fixed Effect Model*

This method allows for changes in α (intercept) in each i and t (district and time). To find out whether α (intercept) is constant at each i and t, or is variable (Nachrowi, Hardius Usman, 2006: 315). The F value of the statistic is compared with table F, if the calculated value is greater than F table, then we can reject the hypothesis, which means that α (intercept) is not constant for every i and t, or in other words MET (Fixed Effect Method) is better.

    3. *Random Effect Model*

This technique also takes into account that errors may correlate throughout time series and cross sections. Given that there are two components that contribute to error formation, namely individual and time, then random errors in Random Effect Model also need to be parsed into errors for individual components, time component errors and combined errors.

To choose a model that is better or more precise than the three analysis techniques, we need several tests that must be done, namely F Test (Chow Test), Hausman Test, and LM (Lagrange Multiplier) Test.

a.   Chow Test; to determine between common (pool) and fixed effects.
    Assuming the hypothesis as follows:
    H0: pooled least square method
    H1: fixed effects method
    Criteria if Fhit> Ftable then H0 is rejected
b.   Hausman Test; aims to choose the fixed effect method or random effects.
    Assuming the hypothesis as follows:
    H0: random effect method
    H1: fixed effects method

Criteria if X2hit> X2 (p, α), where P = number of slope coefficients or P-value <α (error rate), then reject H0.

c.   LM (Lagrange Multiplier) Test; stopping between the best random effects or common effects methods is used.

Assuming the hypothesis as follows:

H0: common effects method

H1: random effects method

If LM is greater than chi-square in a significant table (certain a), then H0 is rejected.

The advantages obtained using panel data are:

1.   The panel data is a combination of time series and cross section data capable of providing more data so that it will produce a greater degree of freedom and be able to increase the analysis of the estimates made.

2.   Combining information from time series data and cross section can overcome problems that arise when there are omitted-variable problems.

Operational Definition of Variables

Operational definitions of variables are needed so as not to give rise to other interpretations in this study, while the operational definition of the variables in this study are as follows;

•   Regional Spending Realization is the realization of education and health spending in 23 Regencies/Cities in Aceh Province from 2008-2017 measured in billion rupiahs.

•   Poverty is the percentage of the poor in the study area, namely Aceh each year in units of thousands of people.

4. RESULTS AND DISCUSSIONS

Results of Analysis of the Effect of Education Spendings on Poverty

The output of regression analysis of the research related to the effect of education spending on proverty can be seen on the table 1 as follows:

Table 1: Results of Regression Analysis for the Effect of Education Spendings on Poverty by the Fixed Effect Model Method

Fixed Effect Model				
Dependent Variable	: Poverty (P)			
Independent Variables	Coefficient	*Std. Error*	t-statistic	Prob (p-value)
C	44.15592	0.551944	80.00074	0.0000
Education Spending (ES)	-0.024407	0.002320	-10.5213	0.0000
R-square	= 0.990633			
Adjusted R-square	= 0.989587			
F-*statistic*	= 947.1864			
Prob(F-*statistic*)	= 0.000000			

Source: Results of Processing Eviews 10 (2018)

Based on the constant value of 44.15592, it is explained that if the realization of education spending is assumed to be constant or unchanged, then the poverty rate in 23 districts/cities in Aceh Province will increase by 44.15 percent. The coefficient for education spending is -0.024407 will indicates that education spending has a negative effect on poverty, meaning that every time there is an increase in education spending of one billion rupiah, it can reduce poverty by 0.024 percent assuming cateris paribus. When viewed from the value of the calculated (Tstactistc) variable is -10.5213 with a probability of 0.0000, it means that the probability (p-value) is greater than α = 5 percent (0.0000 <0.05), so it is concluded with a 95 percent confidence level hypothesis zero (H0) rejected. The results of the study on the realization of education spending has negative and significant effect on poverty. Adj.R2 value is 0.9895 which means that 98.95 percent of poverty in 23 districts/cities in Aceh province is influenced by the realization of education spending, while the remaining 1.05 percent is influenced by other variables.

Results of Analysis of the Effect of Health Spendings on Poverty

The regression analysis output regarding the influence of Health spending on Poverty may be seen on the Table 2 as follows:

Table 2: The Result of Regression Analysis for the Effect of Health Spendings on Poverty by the Fixed Effect Model Method

Fixed Effect Model				
Dependent Variable	: Poverty (P)			
Independent Variables	Coefficient	*Std. Error*	t-statistic	Prob (p-value)
C	40.92176	0.365712	111.8960	0.0000
Health Spnding (HS)	-0.022877	0.003104	-7.371308	0.0000
R-squared	= 0.988604			
Adjusted R-squared	= 0.987332			
F-statistic	= 776.9819			
Prob(F-statistic)	= 0.000000			

Source: Results of Processing Eviews 10 (2018)

The table above shows that the constant value of 40.92176 explains that if it is assumed the realization of health spending is constant or unchanged, then the poverty rate in 23 districts / cities in Aceh Province will constantly increase by 40.92 percent. The coefficient for realization of health spendings of -0.022877 explains that every increase in health spending by one billion rupiahs can reduce poverty by 0.023 percent assuming cateris paribus. If seen from the value of the calculated variable at -7.371308 with a probability of 0.0000, it means that the probability (p-value) is smaller than α = 5 percent (0.0000 <0.05) so that the null hypothesis (H0) can be rejected and accepted H1. The concluded result is that the realization of health spending has a negative and significant effect on poverty. Poverty in 23 districts/cities in Aceh is strongly influenced by the variable health spending realization of 98.73 percent, while the remaining 1.27 percent is influenced by other variables.

Results of Analysis of the Effect of Education Spendings and Health Spendings on Poverty

In order to find out the results of the analysis of the effect of education spending and health spending on 23 districts/cities in Aceh Province it needs to be regressed simultaneously for how much education and health spending influence the poverty. The results of the regression and analysis can be seen pn the table 3 below.

Table 3: Results of Regression Analysis for the Effect of Education Spendings and Health Spendings on Poverty by the Fixed Effect Model Method

Fixed Effect Model				
Dependent Variable	: Poverty (P)			
Independent Variables	Coefficient	*Std. Error*	t-statistik	Prob (p-value)
C	44.41271	0.614713	72.24955	0.0000
Education Spending (ES)	-0.027611	0.004094	-6.744843	0.0000
Health Spending (HS)	0.004717	0.004966	0.949878	0.3433
R-squared	= 0.990674			
Adjusted R-squared	= 0.989582			
F-statistic	= 907.3272			
Prob(F-statistic)	= 0.000000			

Source: Results of Processing Eviews 10 (2018)

The table above shows that the constant value is 44.41271, explaining that if it is assumed the realization of education and health spending is constant or unchanged, then the poverty rate in 23 districts / cities in Aceh Province will constantly increase by 44.41 percent. The coefficient for realization of education spending (ES) is -0.027611, which indicates that every increase in education spending by one billion rupiahs can reduce poverty by 0.027 percent assuming cateris paribus. While for coefficient health spending which amounts to 0.004717, it explains that every increase in the health spending budget (HS) of one billion rupiahs, it will increase the poverty rate by 0.004 percent assuming cateris paribus.

If seen from the calculated value of the education spending variable (ES) is equal to -6.744843 with a probability of 0.0000, meaning that the probability (p-value) is smaller than $\alpha = 5$ percent (0.0000 <0.05) so that the null hypothesis can be drawn (H0) is rejected and accepts H1. The results of the analysis show that the realization of education spending has a negative and significant effect on poverty. While the calculation of health spending variable (HS) is 0.949878 with a probability of 0.3433, meaning that the probability (p-value) is greater than $\alpha = 5$ percent (0.3433 <0.05) so the conclusion is that the null hypothesis (H0) is accepted and rejects H1 . This means that this analysis shows that the realization of health spending has a positive and not significant effect on poverty. The Adj.R2 value in this study is 0.9895 which illustrates that the effect of education spending and health spending together is 98.95 percent for poverty in 23 districts / cities in Aceh, while the remaining 1.05 percent is influenced by other variables.

5. CONCLUSIONS

Concluding statement

The realization of education and health spending partially has a negative and significant effect on poverty. This is in accordance with the theory, meaning that if education and health spending increase, poverty will decline. The realization of education and health spending together (simultaneously) has an influence on poverty by 98.95 percent, while the remaining 1.05 percent is influenced by other variables. However, education spending has a negative and significant effect, while health spending has no significancy and no effect to poverty.

Suggestion

Based on the above conclusion, there are several suggestions that can be put forward:

- District / city governments must be able to manage their respective regional spendings, especially for education and health spending by optimizing it so that poverty in each area can be minimized or reduced.
- Local governments can increase budget allocations in the education and health sector for the welfare of the poor by providing free schools and free health service so that it can improve human resources (HR) and adequate standard of living which then can alleviate poverty in Aceh. The results of this study could be a reference for the Government of Aceh in making effective public policy in the regional budget spending.

REFERENCES

Aceh Financial Management Agency. (2018). Responsibilities of Regency/City APBK. Aceh.

Agola, Nathaniel O. and Awange, Joseph L. 2014. Poverty: Environmental Link. Globalized Poverty and Environment pp 3-25. 2014

Bahalau, Yoan.,Walewangko, Een Novritha. And Siwu, Hanly F. Dj. (2015). Analysis of the Effect of Fiscal Policy on Poverty Reduction Measures in North Sulawesi Province (Period 1994-2013. Journal of Scientific Periodic Efficiency. Volume 15 No. 04 of 2015. Sam Ratulangi University. Manado.

Barika. (2013). Effects of Economic Growth, Government Spendings, Unemployment and Inflation on Poverty Rates in Sumatra Province. Journal of Economics and Development Planning (JEPP). Vol 5 No 01 January - June 2013. ISSN: 1979 - 7338.

Central Bureau of Statistics. (2018). Aceh Province in 2017 Figures. Aceh.

_____. (2018). Indonesian Macro Calculation and Analysis in 2017. Aceh

Davis, E. P., and Sanchez-Martinez, M. (2014). A Review of Economic Theories of Poverty. London: NIESR.

Deffrinica. (2015). Effects of Economic Growth and Government Spendings on Poverty in West Kalimantan 2009-2013. Journal of Regional Economics (JEDA) Vol 1 No. 1 2015.

Gujarati, N.Damodar. (2011). Basics of Econometrics, fifth edition. Jakarta: Salemba Empat.

Kasha, F. K. (2014). Effects of Macroeconomic Variables on Poverty in Iran (Application of Bootstrap Techniques). Theoretical and Applied Economics, Vol. XXI (5), pp. 85-96.

Law of the Republic of Indonesia Number 20 of 2003 concerning the National Education System.

Law of the Republic of Indonesia Number 36 of 2009 concerning Health.

Law Number 11 of 2006 concerning the Government of Aceh.

Mehmood, Rashid., And Sadiq, Sara. (2010). The Relationship between Government Spending and Poverty: A Cointegration Analysis. Romanian Journal of Fiscal Policy Volume 1, Issue 1, July-December 2010, Pages 29-37

Nachrowi D. (2006), Econometrics, for Economic and Financial Analysis, First Print, Jakarta: Institute of Publishers FE UI.

Really, James Bright. (2016). Modeling Government Spending-Poverty Nexus for Ghana. Munich Personal RePec Archive (MPRA) Paper No. 75727, posted 22 December 2016

Nwosa, Philip. (2016). Impact of Macroeconomic Policies on Poverty and Unemployment Rates in Nigeria, Implications for Inclusive Growth. Acta Universitatis Danubius. Onomconomica, Vol 12, No. 2 (2016).

Nwosa, P. I. (2014). Government Spending, Unemployment and Poverty Rates in Nigeria. Journal of Research in National Development (JORIND), Vol. 12 (1), pp. 77-84.

Nurmainah, Santi. (2013). Analysis of the Effect of Local Government Capital Spendings, Absorbed Labor and Human Development Index Against Economic Growth and Poverty. Journal of Business and Economics (JBE), September 2013, p. 131 - 141 Vol. 20, No. 2 131 ISSN: 1412-3126. Faculty of Economics, Diponegoro University. Semarang.

Okulegu, B. E. (2013). Government Spending and Poverty Reduction in Nigeria's Economic Growth. International Journal of Social Sciences and Humanities Reviews, 4 (1), 103115.

Omari, Loyce V and Muturi, Willy. (2016). The Effect of Government Sectoral Spending on Poverty Level in Kenya. Global Journal of Human-Social Science: E Economics. Volume 16 Issue 2 Version 1.0 Year 2016. Publisher: Global Journals Inc. (USA)

Osundina C. K., Ebere, Chidinma & Osundina, O.A (2014). Disaggregated Government Spending on Infrastructure and Poverty Reduction in Nigeria. Global Journal of Human-Social Science: E Economics. Volume 14 Issue 5 Version 1.0 Year 2014. Publisher: Global Journals Inc. (USA)

Paseki, Meilen Greri., Naukoko, Amran., And Wauran, Patrick. (2014). Effect of General Allocation Funds and Direct Spendings on Economic Growth and Its Impact on Poverty in Manado City 2004-2012. Journal of Scientific Periodic Efficiency. Volume 14 No.3 October 2014. Sam Ratulangi University. Manado.

Sanggelorang, Septiana M. Rumate, Vekie A. Siwu, Hanly F.DJ. 2015. Effect of Government Spendings in the Education and Health Sector on the Human Development Index in North Sulawesi. Junal Periodically Scientific Efficiency, Vol. 15 No.2 July 2015 edition Sam Ratulangi University. Manado.

Siregar, Muhammad Ilhamsyah and Mudawali, Iqbal. (2014). Analysis of Realization of the Aceh Regional Revenue and Spending Budget Against Economic Growth, Unemployment and Poverty. Journal of Economic Management & Business (E-Mabis Unimal) Vol. 15 No.3 July 2014.

Sunusi, Dewi Kurniawati., Kumenaung, Anderson., And Rotinsulu, Debby. (2014). Analysis of the Effect of Number of Labor, Education Levels, Government Spendings on Economic Growth and Its Impact on Poverty in North Sulawesi 2001-201. Journal of Scientific Periodic Efficiency. Volume 14 No.2 May 2014 Sam Ratulangi University. Manado.

Widodo, Adi., Waridin, and Maria K. Johanna. (2011). Analysis of the Effect of Government Spendings in the Education and Health Sector on Poverty Alleviation through Increasing Human Development in Central Java Province. Journal of Dynamics of Economic Development, July 2011, volume 1, number 1. Faculty of Economics and Business, Diponegoro University. Semarang.

https://www.acehprov.go.id (2018). Retrieved April 21, 2018.