

THE EFFECT OF THE PROVINCIAL GOVERNMENT PUBLIC EXPENDITURES ON THE AUTONOMY REGIONAL ERA IN INDONESIA

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ABSTRACT: *The purpose of this study was to analyze the influence of economic spending (BEK) and education spending (BPD) by province on poverty in the era of regional autonomy in Indonesia. Data were collected through the publication of the Indonesian Central Bureau of Statistics and the Director General of Fiscal Balance of the Indonesian Ministry of Finance for the period of 2012 to 2015. The analysis in this study was conducted with panel data analysis model, using fixed effect model. Based on the estimation result, it is found that the variables of economic expenditure and education expenditure are significant together with poverty, while the partial variable of economic expenditure by province has significant and significant effect to poverty in the era of regional autonomy in Indonesia, and the variable of education expenditure by province is not significant. However, the ability of independent variables in to have an update dependent variable of 34.71% and the rest of 65.29% influenced by other variables not included in this research.*

KEYWORDS: Poverty, Economic Expenditure, Education Shopping, and era of autonomy Area

INTRODUCTION

Since the enactment of regional autonomy in 2001 marked by the reinforcement of widespread autonomy in 2004, where sub-national governments have provided wide discretion in the field of determining the size of the budget to achieve a result that can increase the level of community welfare or the lifting of society from poverty to not poor in each region = respectively. Fiscal decentralization is transferring central government expenditure responsibilities to local or sub-national governments, such as to meet the needs of local populations, and allocate resources more efficiently (Jia, Guo, and Zhang 2014). However, after 15 years of implementation of regional autonomy or fiscal decentralization, it is seen that poverty rate in every province in Indonesia is still high. Where, on average the percentage of poverty to total population by province in 2015 for all provinces in Indonesia is at 11.88%. Implementation of regional autonomy or fiscal decentralization that poured on the local government (sub-national) authority can actually reduce poverty. Economic spending may reduce the level of poverty in Ethiopia (Ababa 2009) Asghar, Hussain, and Rehman (2012) that government spending on education and law and order significantly contributes to poverty reduction in Pakistan. Then, Dahmardeh and Tabar (2013) states that constructive spending has a positive effect on poverty reduction in Sistan and Baluchestan Iran.

Furthermore, the program of providing health insurance can reduce the poverty rate in the United States (Sommers and Oellerich 2013). And housing spending is very helpful to the poor in Colombia (Gilbert 2014). Paddu (2015) states that the increase in the ratio (total) of health

and education expenditures to total provincial revenues significantly affects poverty in eastern Indonesia. Then, Omari and Muturi (2016) agricultural and health expenditures have a positive and significant impact on poverty levels, and education spending has no effect on poverty in Kenya. Economic spending on agriculture can reduce poverty (Johnson, Kovarik, and Meinzen-dick 2016). Distribution of income and education is important to combat the intensity of poverty (Marinho, Campelo, and Araujo 2017). The decentralization era can also create an efficient state at the level of local government in Russia (Yushkov (2015). In Indonesia, poverty alleviation caused by the system of government, the central government creates a policy, that is, the widespread fiscal decentralization to the government under it. However, the magnitude of nations sectoral expenditure in each province has not been able to create a state of poverty is at a position below 5 percent. Based on previously, it can be formulated research question is whether the economic sector spending and education sector expenditures either together or partially affect the poverty of regional autonomy in Indonesia The objective is to examine the effect of economic sector expenditure and education spending by province on poverty on fiscal autonomy in Indonesia”.

THEORETICAL REVIEW

Poverty

There is no general consensus in defining poverty, but in the past, poverty was primarily seen as a problem of economic inefficiency, but its significance has now been extended to include material deficiencies, lack of human resources, including low achievements in education and health, powerlessness and starvation risk (Vijayakumar & Olga 2012). Furthermore, poverty is perceived as financial and material scarcity, and greatly determines the level of health (Bratanova et al., 2016 and Reid et al., 2016). As an example of the inability to provide fuel for home warming is a form of poverty (Mavrogianni et al., 2017). Many factors cause poverty, such as job loss and low income or low income to meet their needs (Reid et al., 2016; Mai & Mahadevan 2016; and Moore & Donaldson 2016). Furthermore, poverty is not only caused by the lack of material, but it is caused by the low level of service and the level of education, health, and housing or in other words due to the inability to meet the physical needs of man (Boyle & Boyle 2015 and Vijayakumar & Olga 2012).

There are two categories of poverty: (1) absolute poverty is the number of people unable to get enough resources to meet basic needs (Todoro & Smith 2006: 242-243; Vijayakumar & Olga 2012; Boyle & Boyle 2015; and Bratanova et al., 2016); and (2) Relative poverty is the number of people who have resources capable of meeting their needs, but there are fewer than others (Boyle & Boyle 2015; and Bratanova et al., 2016). An example of relative poverty is the minimum wage of industry workers, as Manning (2008) and Saari et al. (2016) that the minimum wage may appoint an informal and informal ethnic person or household to reduce a little poverty in other words will be lifted from absolute poverty to relatif. To measure poverty, BPS (Badan Pusat Statistik) Republic of Indonesia uses the concept of basic needs approach (basic needs approach). With this approach, poverty is seen as an economic inability to meet the basic needs of food and not food as measured by expenditure. Thus, the poor are residents with average per capita spending per month below the poverty line. The poverty line can be calculated by the following formula:

$$GK = GKM + GKNM$$

Where, GK is the poverty line, GKM is the food poverty line, and GKNM is the non-food poverty line. In this analysis, poverty (MIS) can be measured by the following formula:

$$MIS = \frac{T_{\text{total Poor population by province}}}{\text{Total population by province}}$$

The Era of Regional Autonomy or the Fiscal Decentralization Era

The fiscal decentralization policy will be able to create efficiency at the subnational or provincial level, as sub-national governments or governments at the subnational level better understand their needs and have more experience in procuring low-cost public goods (Martinez-vazquez & McNab 2003 and Yushkov 2015). In line with the opinion of Neyapti (2010) that with fiscal decentralization will be more efficient in spending because local government better understand local preferences. The main objective of fiscal decentralization is to make it easier for local governments to develop social infrastructure (public goods), with their main function not to widen the spatial gap in social infrastructure development (Kalirajan 2012). Thus, fiscal decentralization is transferring central government expenditure responsibilities to local or sub-national governments, such as to meet the needs of local populations, and resource allocation to be more efficient (Jia et al 2014) and the authority of local governments in deciding to produce public goods and services for improving the welfare of local communities (Kumari 2016). Fiscal decentralization will result in better and more productive resource allocation due to its small areas (Xie & Davoodi 1999; and Thornton & Thornton 2007). The policy of fiscal decentralization is a fiscal transfer, granting power and responsibility from the central (national) government to the local government (Vo 2009).

The Concept of Fiscal Decentralization in Indonesia

The implementation of fiscal decentralization in Indonesia was officially started on 1 January 2001. The process was initiated by the enactment of Law No. 22 of 1999 on regional government and Law No. 25/1999 on the financial balance between central and regional government (PKPD). Until now, both regulations have been revised several times until the last Law No. 33 of 2004 on financial balance between central government and local government, as well as Law Number 32 Year 2004 regarding local government. Local governments or local governments are given the authority to obtain funds for development financing, as stated in Law no. 33 In 2004 the source of revenue used for local government funding in the implementation of fiscal decentralization is the locally-generated revenue (LGR), the General Allocation Fund (GAF), the Special Allocation Fund (Special Allocation Fun, SAF), the profit sharing fund, the regional loan, legitimate. Fiscal decentralization represents the government's choices in determining the amount of spending or spending and the amount of revenue, which is explicitly used to affect the economy (Nangarumba, 2016).

Sectoral Expenditure in the Fiscal Decentralization Era

Fiscal decentralization can be seen as the total expenditure of provincial governments in Indonesia. This statement is in line with the opinions of Jin & Zou (2005) and Jia et al. (2014) that fiscal decentralization can be seen from total local or regional government expenditures. Fiscal decentralization is also measured as the ability to manage tax collection, and spending or spending on local government (Noor 2012: 38). Thus, the provincial government's fiscal or sectoral expenditure in the era of fiscal decentralization is in accordance with the scheme of

the Directorate General of Fiscal Balance of the Indonesian Ministry of Finance and Law No. 23 of 2014 there are nine sectors or matters, namely public service spending, order and peace, economy, environment life, housing and public facilities, health, tourism and culture, education, and social protection. However, in this study considered as closely related to poverty are (1) economic expenditure (BEK), which is proxied as per capital economic expenditure by province, and (2) education expenditure (BPD), which is proxied as per capita education expenditure by province.

Effect of Government Expenditure and Poverty

Government spending both in the short and long term has a relationship with poverty (Mehmood & Sadiq 2010). The policy of economic expenditures in the transport sector has an effect on poverty (Sanchez 2008). Ababa (2009) that improving road quality and increasing access to agricultural extension services led to faster consumption growth and lower poverty rates in rural areas. The development of agricultural projects can increase women's incomes and reduce poverty (Johnson et al., 2016). Economic spending that can reduce poverty directly through employment effects and indirectly through investment and consumption relationships with small-scale agricultural and non-agricultural sectors (Broeck and Maertens 2017). Measurement of economic expenditure (BEK) can be done with the following formula:

$$BEK = \frac{\text{Total economic expenditure per year by province}}{\text{Total population by province}}$$

Education expenditure (BPD) is all expenditures spent on education infrastructure including the provision of education personnel, youth and sports, and so on. This expenditure has a close relationship to poverty, as Cremin and Goretti (2012) argued that sustainable economic development can not be achieved without human development. Then, the expenditure of elementary school education is more pro-poor to the absolute (Amakom 2012). Paddu (2015) suggests that an increase in the ratio (total) of health and education expenditures to total provincial revenues significantly affects poverty. Furthermore, that the increase in government spending on education has a positive long-term effect on human capital accumulation (Dissou, Didic, and Yakautsava 2016). Measurement of education spending (BPD) can be done with the following formula:

$$BPD = \frac{\text{Total education expenditure per year by province}}{\text{Total education by province}}$$

RESEARCH METHOD

The location of this research is in the Republic of Indonesia. While the object of research is 33 provinces in Indonesia. This study uses panel data that combines time series and cross section data in 33 provinces. The focus of research on poverty measured by the number of poor people of each province from 2012 to 2015. Definition and operationalization of variables in this study consisted of dependent variables and independent variables, the dependent variable is Poverty (MIS), ie the number of poor people per province each observation period. Meanwhile, the independent variables are (1) economic expenditure (BEK), which is economic expenditure divided by population per province from each observation period, and (2) education expenditure (BPD), that is education expenditure divided by population per province every observation period .

Data analysis model

According to Green (2012: 349) and (Feng et al., 2017) that in general the pooled model regression is as follows:

$$Y_{it} = \alpha + X'_{it}\beta + \varepsilon_{it} \quad \text{where, } i = 1, \dots, n, \text{ and } t = 1, \dots, T$$

Thus can be formulated data analysis model in this study are as follows:

$$MIS_{it} = \beta_0 + \beta_1 BEK_{it} + \beta_2 BPD_{it} + \varepsilon_{it}$$

Where, MIS_{it} is the number of poor people per province, BEK_{it} is the average economic expenditure per province, and BPD_{it} is the spending of education function, i is Cross section $i = 1, \dots, N$, t is the Time series ($t = 1, \dots, T$), β_0 are constants, β_1 , and β_2 are the estimated coefficients or parameters, and ε_{it} is error.

Selection of Estimation Model

To select one model on panel data regression, the selection between fixed effect model with common effect model can be done by Chow test. Where, if the value of $F_{count} > F_{(n-1, nT-n-K)}$ or $F_{count} > F_{table}$ or $\rho\text{-value} < \alpha$ (the level of significance or alpha), then the selected model is a fixed effect model. Instead. If $\rho\text{-value} < \alpha$ (significance level or alpha), then the selected model is the common effect model Next, the Hausman test is performed to select the fixed effect model model and the random effect model. or $\rho\text{-value} > \alpha$ (level of significance or alpha), then the selected model is a random effect model. Conversely, if $\rho\text{-value} < \alpha$ (level of significance or alpha), then the selected model is a fixed effect model.

RESEARCH RESULTS

Selection of Analysis Model

Chow test results as in the following table:

Table: Chow Test Results

Effects Test	Statistic	d.f.	Prob.
Cross-section F	677.716341	(32,97)	0.0000

Based on the above obtained Prob value. Cross-section F of 0.0000, it can be stated that it is smaller than the critical value 0.05 ($0.0000 < 0.05$). Thus, it can be concluded that the fixed

effect model model is better used than the common effect model. Hausman test results as in the following table:

Table: Hausman Test Results

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	11.545723	2	0.0031

Based on the above table can be seen the value Prob. Cross-section random of 0.0031 is smaller than the critical value 0.05 ($0.0031 < 0.05$). Thus, it can be concluded that the fixed effect model is better used than the random effect model. Furthermore, based on the results of chow test and Hausman test obtained that the best analysis model for this research is fixed effect model.

Estimate

Estimation with fixed effect model, as in the following table

Table: Estimation Result with fixe effect model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	20.06224	0.958203	20.93735	0.0000
LOG(BEK)	-0.617836	0.081647	-7.567187	0.0000
LOG(BPD)	0.013853	0.075487	0.183509	0.8547

Valuei R-squared = 0.347083 F-statistic = 34.28741 Prob(F-statistic = 0.0000

Based on the above table, it can be concluded that economic spending (BEK) and special education spending (SES) together have significant and significant effect on poverty in the era of regional autonomy in Indonesia or it can be stated that the influence is very strong. Economic expenditure variables (BEK) are significant and significant to poverty, while education spending is not significant to poverty in the era of regional autonomy in Indonesia.

DISCUSSION

Based on the estimation result with the previous fixed effect model, the economic expenditure (BEK) and education spending (BPD) variables significantly and significantly affect the poverty in the era of regional autonomy in Indonesia. Meanwhile, the partial variable of economic expenditure (BEK) has a strong influence in the context of poverty alleviation in the era of regional tonomy in Indonesia. The effect of BEK on poverty is -0.617836 units, meaning that if there is an economic expenditure of one unit or 100% will be able to reduce poverty of 0.617836 units. However, education expenditure variables do not affect poverty. The ability of economic expenditure variable (BEK) and special education expenditure (SEE) in influencing the poverty variable is 34.71% and the rest of 65.29% is influenced by other variables not included in this research. Thus, in the framework of poverty alleviation in Indonesia, it should

be reviewed or increased economic expenditure by province effective and efficient in some provinces so that the national development goal to improve people's welfare is achieved.

CONCLUSION

Based on the previously discussed discussion, the conclusions of this research are: (1) that the economic expenditure (BEK) and education spending (BPD) by province are jointly significant and significant to poverty in the era of regional autonomy in Indonesia, (2) economic expenditure variables (BEK) have significant and significant effect on poverty in the era of regional autonomy in Indonesia, (3) variable of education expenditure (BPD) is not significant to poverty in the era of regional autonomy in Indonesia, and (3) BEK) and education expenditure (BPD) in influencing the poverty variable of 34.71% and the rest of 65.29% influenced by other variables not included in this study.

REFERENCE

- Ababa, Addis. 2009. "THE IMPACT OF AGRICULTURAL EXTENSION AND ROADS ON POVERTY AND CONSUMPTION GROWTH IN FIFTEEN ETHIOPIAN VILLAGES" 91 (November): 1007-21. doi: 10.1111 / j.1467-8276.2009.01325.x.
- Amakom, Uzochukwu. 2012. "Public Expenditure on Education and Healthcare in Nigeria: Who Benefits and Why?" 7 (12): 48-59. doi: 10.5539 / ijbm.v7n12p48.
- Asghar, Nabeela, Zakir Hussain, and Hafeez Ur Rehman. 2012. "The Impact of Government Spending on Poverty Reduction: Evidence from Pakistan 1972 to 2008" 6 (3): 845-53. doi: 10.5897 / AJBM11.922.
- Broeck, Goedele Van Den, and Miet Maertens. 2017. "Moving Up or Moving Out? Insights into Rural Development and Poverty Reduction in Senegal." *World Development* 99. Elsevier Ltd: 95-109. doi: 10.1016 / j.worlddev.2017.07.009.
- Boyle, E.J.O. & Boyle, E.J.O., 2015. Review of Social Economy Toward an Improved Definition of Poverty. , 6764 (November).
- Bratanova, B. et al., 2016. Poverty, inequality, and higher consumption of high calorie food: Experimental evidence for a causal link. *Appetite*, 100, pp.162-171. Available at: <http://dx.doi.org/10.1016/j.appet.2016.01.028>.
- Cremin, Peadar, and Mary Goretti. 2012. "International Journal of Educational Development Education, Development and Poverty Reduction: A Literature Critique § "32. Elsevier Ltd: 499-506. doi: 10.1016 / j.ijedudev.2012.02.015.
- Dahmardeh, Nazar, and Mahmoud Hashemi Tabar. 2013. "Government Expenditures and Its Impact on Poverty Reduction (Empirical From Sistan and Baluchestan Province of Iran)" 2 (1): 251-60
- Dissou, Yazid, Selma Didic, and Tatsiana Yakautsava. 2016. "Government Spending on Education, Human Capital Accumulation, and Growth ☆." *Economic Modeling* 58. Elsevier B.V. : 9-21. doi: 10.1016 / j.econmod.2016.04.015.
- Feng, Guohua, Jiti Gao, Bin Peng, and Xiaohui Zhang. 2017. "A Varying-Coefficient Panel Data Model with Fixed Effects: Theory and an Application to US Commercial Banks" 196. Elsevier B.V. : 68-82. doi: 10.1016 / j.jeconom.2016.09.011

- Gilbert, Alan G. 2014. "International Housing for the Poor: An Effective Way to Address Poverty?" *Habitat International* 41. Elsevier Ltd: 253-61. doi: 10.1016 / j.habitatint.2013.08.009.
- Green, W. H. (2012). *Econometric Analysis*. Seventh Edition. New York: Pearson Education, Inc.
- Johnson, Nancy L, Chiara Kovarik, and Ruth Meinzen-dick. 2016. "Gender, Assets, and Agricultural Development: Lessons from Eight Projects." *WORLD DEVELOPMENT* xx. Elsevier Ltd. doi: 10.1016 / j.worlddev.2016.01.009.
- Jia, J., Guo, Q. & Zhang, J., 2014. China Economic Review Fiscal decentralization and local expenditure policy in China ☆. *China Economic Review*, 28, pp.107-122. Available at: <http://dx.doi.org/10.1016/j.chieco.2014.01.002>.
- Jin, J. & Zou, H., 2005. Fiscal decentralization, revenue and expenditure assignments, and growth in China. , 16, pp.1047-1064.
- Kalirajan, K., 2012. Fiscal Decentralization and Development Outcomes in India: An Exploratory Analysis. *World Development*, 40 (8), pp.1511-1521. Available at: <http://dx.doi.org/10.1016/j.worlddev.2012.04.005>.
- Kumari, R. (2016). Impact of Fiscal Decentralization on Policy of Local Government. *International Journal of Advanced Research*, 1013 - 1014.
- Mai, T. & Mahadevan, R., 2016. A research note on the poverty dynamics and cost of poverty inequality: Case study of Indonesia. *Economic Analysis and Policy*, 49, pp.100-107. Available at: <http://dx.doi.org/10.1016/j.eap.2015.12.003>.
- Manning, Chris. 2008. "Minimum Wages and Poverty in a Developing Country: Simulations from Indonesia 'S Household Survey "36 (5): 916-33. doi: 10.1016 / j.worlddev.2007.05.012.
- Marinho, Emerson, Guaracyane Campelo, and Jair Araujo. 2017. "Impact of Infrastructure Expenses in Strategic Sectors for Brazilian Poverty, "1-17. doi: 10.1016 / j.econ.2017.01.002.
- Martinez-vazquez, J. & McNab, R.M., 2003. Fiscal Decentralization and Economic Growth. , 31 (9), pp.1597-1616.
- Mavrogiani, A. et al., 2017. On the minimal thermal habitability conditions in low income dwellings in Spain for a new de fi nition of fuel poverty nchez