

## Panel Analysis on the Effect of Government Expenditure on Education and Health Sector against Poverty Numbers in Aceh 2010-2015

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### Abstract

The purpose of this research is to know the effect of government expenditure on education and health sector, the difference of districts with the city and the difference of parent regions to the poverty rate in Aceh Province. The method used in this study is the analysis with secondary data period 2010-2015. The Chow test yields the conclusion that the exact model used is the Common Effect Model. The estimation results indicate that the education budget, the urban area significantly influences the poverty rate, while the health budget and the district / city expansion have no effect on the poverty reduction. The simulation results concluded that if the education budget is budgeted 20 percent of the total Regional Revenue and Expenditure Budget ( APBD) and the health budget is realized by 10 percent of the total APBD budget it will be able to reduce poverty in Aceh Province on average by 0.55 percent per year. Regency / municipality governments are expected to realize the education budget of 20% of APBD in accordance with Law no. 20 of 2003 article 49 paragraph 1 of the National Education System and the health budget of 10% of APBD in accordance with Law No.36 of 2009 article 171 paragraph 2 on Health.

**Keywords:** Poverty, Education Budget, Health Budget, Dummy Regencies /districts and dummy areas of expansion / parent

### 1. Introduction

Aceh province is one of the regions with very large per capita spending both in education and health but in fact until now that Aceh Province is the highest province of poverty level in Indonesia according to the data in table 1.1

Table 1.1 National Poverty Rate Year 2015

NO	Provinsi	Miskin (000 orang)	Miskin (%)
1	Papua	898,21	28,40
2	West Papua	225,54	25,73
3	Nusa Tenggara Timur	1160,53	22,58
4	Maluku	327,77	19,36
5	Gorontalo	206,52	18,16
6	Bengkulu	322,83	17,16
7	<b>Aceh</b>	<b>859,41</b>	<b>17,11</b>
8	Nusa Tenggara Barat	802,29	16,54
9	Sulawesi Tengah	406,34	14,07
10	Sumatera Selatan	1112,53	13,77

\*Data diolah dari Laporan Sosial Ekonomi BPS Januari 2016.  
\*Tanda merah menunjukkan persentase peningkatan dari periode sebelumnya, tanda hijau menunjukkan penurunan dari periode sebelumnya.

source : research data (2016) Aceh ranks seventh in the poorest province of Indonesia, below Nusa Tenggara Barat (16.54 percent). The three provinces with the highest poverty level by the end of 2015 are Papua 28.40 percent, West Papua 25.73 percent and NTT 22.58 percent respectively and Aceh's poverty is still far above the national average (11.13 percent) . Compared to the tens of billions of APBA funds flowing into Aceh each year, the abundance of the budget still has not had a positive impact on

poverty reduction, including unemployment which is one of the causes of poverty. A study by Omari & Muturi (2016) on the impact of sectoral government spending on poverty levels concludes that there is a stable long-term relationship between poverty levels and government spending, health spending has an influence on poverty rates while education budgets are not as significant as affecting poverty. Research conducted in Papua Province with panel data on the effect of government budget on poverty by Marna (2015) concluded that education budget and health budget are the main factors influencing poverty reduction. However, it is not always the government spending on education and health budgets affecting poverty as Odior's research findings (2014) conclude that reallocating government spending to the education sector is crucial in determining economic growth and poverty reduction in Nigeria.

The division of the region in Aceh Province which originally amounted to 10 districts / cities until 2015 has become 23 districts / municipalities is a policy undertaken by the Aceh government in accordance with regional autonomy and fiscal decentralization which began on 1 January 2001 through the enactment of Law No.22 in 1999 as revised by Law no. 23 of 2014 on the government of Aceh which aims to increase the welfare of the community.

This research will analyze more about the difference of budget influence on the poverty rate in the 17 (seventeen) regency groups and 6 urban areas, 13 (thirteen) regions of areas of expansion and 10 (ten) parent regions, expansion areas (cities), (kabupaten), in Aceh Province using data from 2010-2015. Based on the background that has been described above, it can be formulated problem formulation as follows:

Are government expenditures in the education and health budget, dummy districts and dummies Expansion of health effects simultaneously on poverty reduction in Aceh Province How to estimate poverty reduction by using education budget of 20% of APBD in districts / cities in Aceh Province How to estimate poverty reduction by using health budget 20% of APBD in districts / cities in Aceh Province.

The general objective of this study was to determine the effect of education and health budget, types of district / municipality governments and parent regions in each district / city to poverty rate and specifically to analyze:

1. Effect of education and health budget on poverty reduction in districts / cities
2. Effect of type of district / city government on poverty rate in Aceh Province
3. Effect of regional expansion on poverty rate in districts / municipalities in Aceh Province.

## **2. Literature Review**

### **a. Aceh Revenue and Expenditure Budget (APBA)**

The Regional Revenue and Expenditure Budget (APBD) in a special case in Aceh Province referred to as APBA is a regional government work plan that covers all revenues and expenditures (expenditures) of local governments, both provinces and districts in order to achieve targets development within a period of one year expressed in units of money and approved by the DPRA.

Harrod-Domar said that various government spending will have a positive impact on economic growth. Harrod-Domar combines both the supply-side and demand- side sides. The main aspect is the role of investment that positively impacts through multiplier effects on aggregate demand and aggregate supply through influence in production capacity. Investment can increase the capacity of capital goods and to enhance the overall expenditure of society. In other words to add aggregate shopping

### **b. Investment Human capital**

Forms of human capital investment, especially education is no less important with physical capital investment to achieve long-term economic success of a country, (Mankiw, 2003). Because human capital investment will produce much more productive and skilled labor and skilled workers, because with the level of education and training they gain are better able to perform tasks on a wider and more quality scale than less-educated and skilled workers.

Investments in human capital in education such as in education to a higher level will have the opportunity to fill the job position formation at a higher level. Because the tasks and responsibilities are increasingly greater so that the compensation of rewards will also be worth the higher income rewards as well.

### **c. Relationship of Variable of Capital Expenditure with Variable Level of Education**

Government expenditure in capital expenditure allocation aims to increase the acceleration of development, especially to support the life of the community such as reducing the non-school population, increasing the level of community education to higher levels and providing the necessary advice and infrastructure for continuous quality improvement. Large financing to build strategic sectors such as education will be the government's concern in encouraging regional economic development. The success of this human resource investment is largely dependent on the role of the government, because human resource development requires a considerable amount of funds and is long term. The field of education is a very strategic area in development so it is the only field that is regulated and set in the Constitution of the State. The amendment of the 1945 Constitution to article 31, paragraph 3 states that the state prioritizes the education budget of at least twenty percent (20%) of the state revenue and expenditure budget and from the regional income and expenditure budget to meet the needs and implementation of national education.

### **d. Relationship between Public Expenditure and Poverty.**

The problem of poverty is synonymous with inadequate public incomes, should always be a priority in the development of a country. According to Novianto (2003), the main essence of the problem of poverty is the issue of accessibility. Accessibility means the ability of a person or group of people in a society to be able to achieve or gain a desire to get the basic needs that it deserves as a citizen. Public investment in education and health will provide educational opportunities and health services more equitable to the community so that healthy human resources (HR) reliable to be more and more.

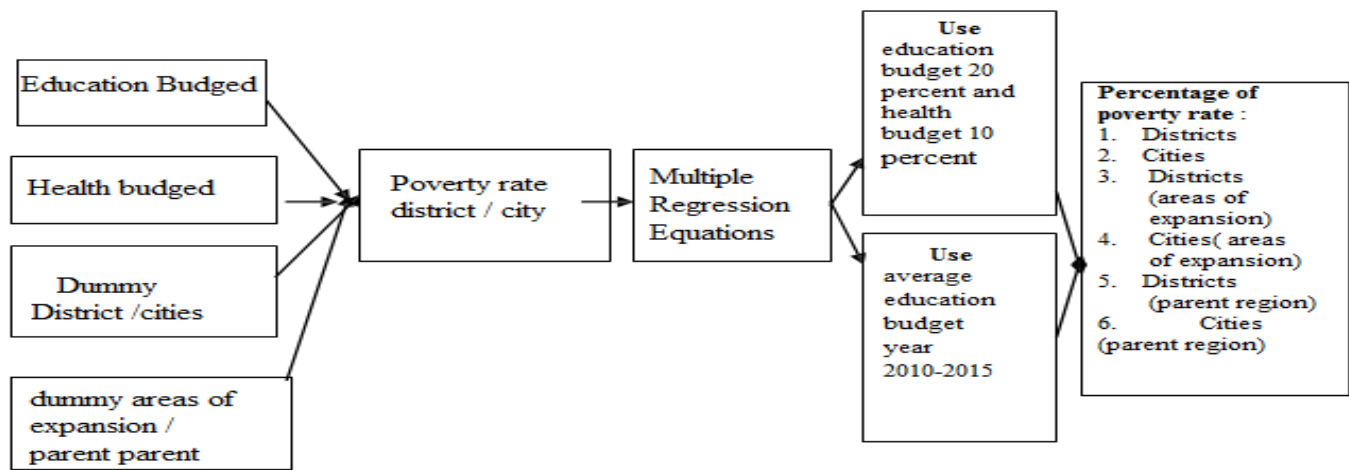
### **e. Expansion Area / Region**

As outlined in the Elucidation of Law No.32 / 2004 on Regional Government, it is emphasized that through broad autonomy it contains several principles of expansion policy in its rules need to know namely; first, the purpose of forming, expanding, deleting and merging the regions is to improve the welfare of the people through enhancing the area of competitiveness by taking into account the principles of democracy, the acceleration of the regional economy, the acceleration of regional potential management, the enhancement of equality and order, and the enhancement of relations between regions and centers.

## **2.2 Theoretical Thinking Framework**

The aim of the development is to expand many options especially in terms of income, education and health in order to achieve a better standard of living. Dritsakis and Adamopoulos (2004) in his research proved that state expenditure significantly affects economic growth, if the economy increases then the absorption of labor force will also increase so that the number of unemployment can be reduced and most likely can overcome the problem of poverty in a region. Schick (1998) mentions that one of the tasks of the government is to distribute resources on the basis of the effectiveness of public service programs and programs. Furthermore, the area of regionalization since the existence of the regional autonomy law in Aceh Province has increased from 10 districts to 23 districts and currently more than the parent regions and the estimates will be analyzed based on the poverty incidence ratio for 18 districts and 5 cities, 3 regions of Expansion Area / Region (cities) and 10 Expansion Area / Region (districts), 8 parent regions (districts) and 2 parent regions (cities) in Aceh Province.

### **Figure 2.1 Framework for Thinking**



## 2.2 Hipotesis

Based on theories and the results of the study and the empirical findings described earlier, several hypotheses are formulated as follows:

- H1 : Government spending on education budget, health budget, district / city dummy and dummy of areas of expansion / parent influence simultaneously to the reduction of poverty rate in districts / cities in Aceh Province
- H2 : Government spending on the education sector is influential to the decrease of poverty rate in regencies/municipalities Aceh Province.
- H3 : Government spending on the health sector is influential to the decrease of poverty rate in regencies/municipalities in Aceh Province.
- H4 : Dummy District affects the numbers poverty in Aceh Province
- H5 : Dummy Areas of expansion affects the decrease in number Poverty in Aceh Province.

## 3. Research Methods

### a. Research variable

The variables used in this study consist of dependent variable (bound) and independent variable (free). The dependent variable is the type of variable that is described or influenced by the independent variable, whereas the independent variable is the type of variable that explains or influences another variable. Dependent variable used in this research is Poverty Numbers (KMK), whereas for independent variable used in this research is government budget of education, health budget, dummy of area of expansion / parent and dummy daerah regency / city of poverty.

### b. Operational Definition of Variables

Variables used in this study include the dependent variable and independent variables. Variables of regional expenditure in the form of education expenditure, health spending, dummy regency / city and dummy of areas of expansion / parent are independent variables. While the variable poverty rate in the form of percentage (%) indicating the number of poor people is dependent variable. The operational definitions of these variables are as follows:

- 1). Government expenditure on education (PPD), is the amount of realization of district / city government expenditure in Aceh Province which is calculated in thousand thousand units for 2010-2015 period.
- 2) Health expenditure (KES) is the amount of realization of local government expenditure of districts / municipalities in Aceh Province which is calculated in thousand rupiah units for 2010-2015 period.
- 3). Poverty (KMK) is a condition of inability to meet basic needs. In this study, the data used is the poverty rate in 23 districts / cities in Aceh Province in 2010 - 2015 (in percent)
- 4). Dummi area of areas of expansion = 1 parent region = 0
- 5) Dummi city is = 1 and County is = 0

**c. Types and Data Sources**

This research uses multiple regression approach in the form of panel data by using secondary data. The data analyzed are data sourced from APBD reports of local government districts obtained from APBD Realization Report of fiscal year 2010 to 2015 which sourced from Central Bureau of Statistics (BPS) of Aceh Province.

**d. Data analysis method**

Through panel data analysis, different individual behaviors over a period of time can be captured to obtain estimation parameters. Specifications of panel data regression models containing individual-specific effects are as follows:

$$y_{it} = \alpha_i + \beta x_{it} + \varepsilon_{it} \dots \dots \dots \text{persamaan 3.1}$$

where  $y_{it}$  and  $x_{it}$  are respectively independent variable variables for each individual  $i$  in period  $t$  where  $i = 1, 2, \dots, N$  and  $t = 1, 2, \dots, T$ .  $\varepsilon_{it}$  is an error term on the panel data regression model. In  $x_{it}$  there is as much as  $K$  slope (excluding intercept) indicating the number of free variables used in the model.  $\alpha_i$  are individual effects that can be of constant value throughout the period  $t$  or even vary for each  $i$ -th person. From the model design that has been described previously, then the model to be used in this research is formulated as follows:

$$\text{Ln KMK}_{it} = \alpha_0 + \alpha_1 \text{Ln PDD}_{it} + \alpha_2 \text{Ln KES}_{it} + \alpha_3 \text{D1}_{it} + \alpha_4 \text{D2}_{it} + u_{it}$$

- KMK : District Poverty Rate in Aceh Province
- PPD : District government education expenditure / city in Aceh Province
- KES : District government health expenditure in Aceh Province.
- $\alpha_0$  : intersep
- $\alpha_1, \alpha_2, \alpha_3, \alpha_4$  : regression coefficient of independent variables  $u_{it}$  : component error at time  $t$  for unit cross section  $i$
- $I$  : 1, 2, 3, ..., 23 (district / city cross-section data) at Province of Aceh)
- $T$  : 1,2,...( time-series data, 2010-2015)
- $D_{1it}$  : Dummy (dummy areas of expansion / parent ), areas of (expansion = 1, Parent = 0)
- $D_{2it}$  : Dummy (City / Regency), City = 1, Regency = 0

**4. Research and Discussion Result**

**4.1 Research**

This chapter consists of several sections that will explain more about the analysis and discussion of the results of testing the research hypothesis.

**a. Heteroscedasticity Test**

In this study the assumption of heteroscedasticity was tested using Breusch-Pagan-Godfrey Test (BPG). Test results provide output in Table 4.1

Tabel 4.1 Uji Breusch-Godfrey

Test	Statistic	d.f.	Prob.
Breusch-Pagan LM	452.2790	253	0.0510
Pesaran scaled LM	7.836556		0.0600
Pesaran CD	9.522620		0.0000

Source: BPS (result of the data)



The heteroscedasticity test using the Breusch-Pagan-Godfrey test produced prob values. 0.0510. This value is greater than alpha 0.05 (5%) which means that the model has no heteroscedasticity problem.

**b. Multicollinearity Test**

If the correlation coefficient between each independent variable is greater than 0.8 means multicollinearity occurs in the model and the data such as table 4.2

**Tabel 4.2 Multicollinearity Test**

	Regency/ city	Poverty	Healthy	areas of expansion	Education
Regency /city	1.00000	-0.440615	-0.238824	-0.462250	-0.139339
Poverty		1.000000	-0.174539	0.304783	-0.326481
Healthy			1.000000	0.095240	0.750913
areas of expansion				1.000000	0.067957
Education					1.000000

Source: BPS (result of the data)

From multicollinearity test according to table 4.2 all correlation independent variables smaller than 0.8 this shows that there is no multicollinearity in regression model, after testing the classical assumption for regression is fulfilled, the next step is to select the best data panel test method.

**c. Testing Panel Data**

The test results using the Common effect model this is because the use of dummy variables causes a singular matrix (inverse matrix X'X is zero).

To solve this singular matrix problem then the solution is to use the Model Pool (the same constant of each observation). Sanjoyo (2015) states that in order to interpret the effect of dummy on dependent variable, the correct model is Pool or Common effect and does not need to test Chow test because in Fixed Effect model will be singular matrix.

**Table. 4.3 Processing with Common Effect Model**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	6.325845	0.634404	9.971319	0.0000
LOG(Education?)	-0.165583	0.044220	-3.744543	0.0003
LOG(Healthy?)	-0.012382	0.049541	-0.249940	0.8030
Regency /city	-0.357549	0.041804	-8.552899	0.0000
Regency /city?	0.037645	0.035920	1.048013	0.2965
R-squared	0.437577	Mean dependent var		2.895890
Adjusted R-squared	0.420662	S.D. dependent var		0.252610
S.E. of regression	0.192272	Akaike info criterion		-0.424251
Sum squared resid	4.916821	Schwarz criterion		-0.318191
Log likelihood	34.27330	Hannan-Quinn criter.		-0.381151
F-statistic	25.86917	Durbin-Watson stat		0.230516
Prob(F-statistic)	0.000000			

Source: BPS (result of the data)

**d. Regression and Hypothesis Estimation Results**

**1). Printing Test (F Test)**

Results Data processing in accordance with table 4.7 note that the value of F statistics of 0.000 is with p value smaller than the value of alpha testing (0.0000 < 0.05). Thus, Hypothesis 1 (H1) concludes with the conclusion that the variables of expenditure in the education sector, health expenditure, dummy districts and dummy regencies / cities as a whole are able to explain variability of poverty rate variable equal to Adjusted R-squared = 33.7%. While the rest of 66.3% is explained by other variables that are not discussed in this study.

## 2) Partial Testing (t -test)

### The Effect of Education Budget on the Poverty Rate

From the test results of the regression model coefficients in the table above, the p-value value for government expenditure variable in education field shows a value of 0,000 which means less than 0.05 ( $0.000 < 0.05$ ). This result concludes that Hypothesis ( $H_2$ ) is accepted which means that "Education budget affects poverty in Aceh Province"

#### a) Effect of Health Budget on Poverty Numbers

From the test results of the regression model coefficients in the table above, the p-value for the Government Health Expenditure variable shows the Prob value. 0.803 which means greater than 0.05 ( $0.000 < 0.05$ ). These results conclude that Hypothesis ( $H_3$ ) is rejected which means that: "Health budget does not affect poverty rate in Aceh Province."

#### b). Influence Dummy District / City terhadap poverty figures

From the result of regression model coefficient test in the above table, p-value for dummy variable of regency / city shows Prob value. 0.000 which means less than 0.05 ( $0.000 < 0.05$ ). This result concludes that Hypothesis ( $H_4$ ) is accepted which means that: "District dummy variables affect poverty rate in Aceh Province"

#### c) Influence of Dummy of Regency / City on Poverty Rate

From the test results of the regression model coefficients in the table above, the p-value for the dummy variable of the Expansion / Parent region shows the Prob value. 0.2965 which means greater than 0.05 ( $0.2965 < 0.05$ ). This result concludes that Hypothesis ( $H_4$ ) is rejected, which means that: "Dummy variation of areas of expansion / mother does not affect poverty rate in Aceh Province."

## 4.2 Discussion of Research Results

The result of data processing of regression equation for poverty rate, regression equation model is:

$$\ln(\text{KMK}) = 6,32 - 0,165 \ln(\text{PDD}) - 0,0123 \ln(\text{Kes}) - 0,35 \text{dummy}(\text{kabkota}) + 0,037 \text{dummy areas of expansion} \quad (t = -3,74)$$

(t = -0,249)                      (t = -8,55)                      (t = 1,048)

### a. Analysis and Implications of the Effect of Education Budget on Poverty Numbers

Based on the results of the data by testing the first hypothesis that proves that the educational budget variable influential signifikan to variable poverty rate. Table 4.3 shows that education budget has negative and significant effect to poverty rate with p-value coefficient 0,165. From the output of the equation, it can be interpreted that in all of Aceh Province if there is an increase of education budget by 1 percent there will be a decrease of poverty figure of 0.165 percent. The results of this study are consistent with the findings of several researchers described in the previous chapter, such as Omari (2016), Ruseva (2015), Odior (2014), Marisa Hidalg (2014), Ruseva, et al (2015) Poverty rate.

### b) Analysis and Implications The Influence of Health Budget on Poverty

Table 4.3 shows that the p-value coefficient is 0.8030. From the output of the equation, it can be interpreted that the health budget does not affect the decrease of poverty rate. These findings contradict the results of the Sepulveda (2010) study, which states that government spending on basic health and basic education has an influence on the poor so as to be seen as pro-poor spending, as well as Wahyudi's (2011) lowered the poverty index by 0.067% of poverty, while education spending reduced the poverty index by 0.304%.

### c) Analysis and Implications Influence of Regency / Municipality Variables on Poverty Rate

Table 4.3 shows that the type of region has significant and significant effect on poverty with p-value coefficient 0.000. From the output of the equation, it can be interpreted that the type of regency / city has an effect on the poverty rate in Aceh Province in terms of dummy determination of city = 1 and dummy regency = 0 indicates that the city area has an effect on the decreasing of poverty. With co- ordination of - 0.35 indicating that every 1% increase in budget in kab / kota area will decrease -0.35 percent poverty rate and urban area can decrease poverty greater than districts. This finding is consistent with the findings of Ermasari (2009) Ermasari (2009) who conducted a study in Java-Madura with the conclusion that the poverty rate in the municipality is lower in percentage than the districts.

#### **d) Analysis and Implication of Influence of Areas of expansion Region on Poverty**

Based on the results of the data by testing the fourth hypothesis does not prove that the variables of the areas of expansion have significant effect on the poverty rate, it is in accordance with the above table that p-value is 0.296 so the conclusion is that the firing does not affect the decrease of poverty rate. This finding is very different from the hopes and objectives of areas of expansion because initially the concept of division of the region itself by Tiebout (1956) which states that the expansion of the region is analogous to a model of perfectly competitive economy where local government has the power to maintain low tax rates, efficient, and permit each individual community to express its preference for each type of service from different levels of government with "vote with their feet.

#### **e) Interpretation and Prediction of Research Results**

**1). With the estimation of the multiple linear equations of the results of this study**, if the realization of education budget 20% of total APBD and the realization of health budget 10% of total APBD then the figures are summed up as follows:

**1) District districts include South Aceh**, Southeast Aceh, East Aceh, Central Aceh, Pidie, Aceh Utara, Aceh Barat, Aceh Besar, Aceh Singkel, Aceh Jaya, Aceh Tamiang, Bener Meriah, Nagan Raya, Siumelu, Bireun, Pidie Jaya, Abdya , Gayo Lues when allocated education budget 20 percent from APBD and Health Budget 10 percent from APBD then average can reduce poverty by 0,31 percent.

**2) The City area** consisting of Banda Aceh City, Sabang City, Lhoekseumawe City, Langsa City, Subulussalam City if allocated 20 percent of education budget from APBD and Health Budget 10 percent from APBD then the average can reduce poverty by 1.43 percent.

**3)Main Areas:** South Aceh, Southeast Aceh, East Aceh, Central Aceh, Pidie, Aceh Utara, Aceh Barat, Aceh Besar, Banda Aceh City, Sabang City if allocated education budget 20 percent of APBD and health budget 10 percent of APBD the district average can reduce the poverty rate by 0.439 percent.

**4) Aceh Jaya, Aceh Tamiang, Bener Meriah, Nagan Raya, Siumelu, Bireun, Pidie Jaya, Abdya, Gayo Lues, Langsa City, Lhoekseumawe City, Subulussalam City** if allocated education budget 20 percent of APBD and health budget 10 percent of APBD then the average district can reduce the poverty rate by 0.67 percent.

**5) The municipality is** Banda Aceh, Sabang when allocated 20 percent of education budget from APBD and health budget 10 percent from APBD then average can reduce poverty rate equal to 1,28 percent.

**6) The area of Areas of expansion (city )** is Langsa City, Lhoekseumawe City, Subulusalam City if allocated education budget 20 percent from APBD and Health Budget 10 percent from APBD then it can reduce the poverty rate by 1.53 percent.

**7) The area of Areas of expansion (District):** Aceh Singkel, Aceh Jaya, Aceh Tamiang, Bener Meriah, Nagan Raya, Siumelu, Bireun, Pidie Jaya, Abdya, Gayo Lues when allocated education budget 20 percent of APBD and Health Budget 10 percent of APBD then can reduce poverty by 0.43 percent.

**From the above data**, using substitution of multiple linear regression results if the district / city governments comply with the Education Law and Health Law by deliberating 20% of the APBD for education and 10% of the APBD for the largest health budget can decrease the number is the area of Areas of expansion city) of

1.53 percent and the lowest is the parent region (district) of 0.2 percent. This difference is due to the allocated and realized budget for health budget in Aceh Province is not sufficient realization in the period 2010-2015 on average only 5.35 percent.

#### **4.3 Prediction of Health Budget 10 percent of total APBD**

The follow-up findings of this study, with prediction of health budget increased by 10% from APBD, the health budget will have a significant effect on the decreasing of poverty rate and to convince this finding, it is done by comparison process with Common Effect model test, it can be concluded that " significant to poverty "with the conclusion that any 1% increase in the health budget will have an effect on reducing the poverty rate by 0.09 percent. So the conclusion for this study is that health budget has no significant effect on the poverty rate in Aceh because the budget allocated by the district government is still very low, which is around 5.4 percent of the total APBD budget in Aceh.



## 5. Conclusions And Policy Implications

### 5.1 Conclusions

Based on the results of data analysis and discussion that has been explained then can be drawn conclusion as follows:

1. Government expenditures in the education sector, health sector, district / city variational and regional variable of areas of expansion / region of Parent have an effect on the poverty rate together and can explain the effect of poverty rate 33,7%.
2. Government spending in education sector has a negative and significant effect on poverty rate in Aceh Province Health sector government expenditure has a negative relationship to poverty but has no significant effect, this is because very low health budget is allocated by district / municipality governments in Aceh Province.
3. Variables The districts / municipalities have a negative and significant effect on the poverty rate in Aceh Province, the city area is lower in poverty than the district.
4. The areas of expansion did not significantly influence the poverty rate in the province of Aceh, the higher the poverty rate compared to the parent regions.
5. The results of the prediction for realizing the health budget of 10% of the total APBD during the period 2010-2015, the health budget has a significant effect on the reduction of poverty in all regencies / municipalities in Aceh Province.

### b. Policy Implications.

1. To accelerate poverty reduction, the allocation of education budget must be realized at least 20 percent of APBD by district / city governments, especially areas with the highest poverty rate in Aceh Province.
2. Regions with high poverty rates are expected by the regional government to allocate a minimum health budget of 10 percent of APBD each year by adjusting to the budget increase per kapita.
3. Because the division will increase the poverty of the community, the regions / regions of the government and the legislature will need to study more detail about the expansion of regions / regions.
4. To reduce poverty in Aceh Province it is expected that district / city governments can comply with the mandate of Law no. 20 of 2003 on National Education System Article 49 concerning education budget allocation of at least 20 percent of APBD and Law No. 36 Year 2009 article 171 paragraph 1 and 2 that the allocation of health budget at least 10 percent of the APBD.

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