Research:

# ANALYSIS ABOUT THE IMPACT OF 'KABUPATEN APBD' BUDGET ALLOCATION AGAINST THE POVERTY IN INDONESIA 2006-2009

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**Abstract**. This research aims to analyze the impact of APBD/counties/ regency/city budget allocation against the poverty in Indonesia for the period of 2006 – 2009. By using the panel data of 172 regencies/cities, this research has found that the allocation of APBD budgeting is not pro-poor oriented, but it could have the possibility to reduce the poverty level. The result of this research has explained that low rate of the inflation could reduce the poverty level itself.

Keywords: budgeting allocation, APBD (counties, district, city budgeting), pro-poor, poverty level.

## INTRODUCTION

Poverty is a common problem that should have to be solved in order to reach the goal of the country development which is one of the target in the Millenium Development Goals (MDG) stated on the webpage of www.undp.org to reduce poor people in the worldwide at least half of them. The Report of the Poverty Management Coordinating Result in 2005 – 2009 showed that the total of poor population had reached 32.53 million people or 14.15 % of the Indonesian citizen in 2009. Even though the level of its poverty had been reduced but it was still far beyond the government target to be 8.2 %.

Our government has tried so hard to reduce the level of poverty thru the regulations to fulfill the basic right of our people. The government has implemented the programs based on the National Strategy to Manage Its Poverty (SNPK). This SNPK program covers; opportunity enlargement; society development; capacity evolvement; social security; global partnership management (pbhmi.org,2010). The program has been coordinated by the National Team to speed up the poverty management (TNP2K) which was stipulated by the Presidential Regulation No. 15/2010 (Chief of the Secretary TNP2K, 2010).

As it is mentioned on the SNPK documentation, poverty is a multi-dimensional problem. Schiller(2004)stated that there are three basic causes of poverty: individual characteristic, opportunity limitation, and states regulations which are not correct. Modern poverty is the problem which is evolving along with social problem or other environment. Based on the aforementioned conditions, the regulation to reduce its poverty should have to be studied very carefully to find out the causes of poverty and of course it should have to consider the other reasons reflecting to its poverty evolvement.

The study about budgeting allocation for the poor obviously has been done only at the expenses/spending point of view. Previous research about the impact of budgeting allocation against the poor was done by Laabas and Liman (2004); Agrawal (2007); Mehmood and Sadiq (2010). Laabas and Liman (2004) research and Mehmood and Sadiq (2010) research had been done at the central part of the government, but Agrawal (2007) was at the province. The three previous researches had found that social sector government spending were the main reasons to be able to decrease the poverty itself at different kind of spending. Agrawal (2007) found that social security expenses as social sector expenses had a big impact to reduce the poverty. Laabas and Limam research (2004); Mehmood and Sadiq research (2010) had found that the education spending as social sector expenses were the big impact to reduce the poverty. Laabas and Limam (2004); Mehmood and Sadiq (2010) had found too that agriculture expenses was pro-poor oriented.

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Research about the relationship between government spending and the poverty had been done by Fan *et al* (2000), Jha *et al* (2001). Fan *et al* (2004a) had been doing a research about central government spending. Ravallion and Datt(1999) and Jung *et al* (2009) had been doing such a research at regional area. Ravallion and Datt (1999) had been doing a research about government expenses at provinces, meanwhile Jung *et all* (2009) at regencies area.

Research about poverty at the villages had been done by Fan *et al* (2000) and Fan *et al* (2004a), and they had found that there were significant impacts of agriculture, education, health expenses against the poverty reduction. The result of the research had been supported by Agussalim research (2004) in relation with Indonesia's cases. Agussalim found that government's spending for the education and health expenses had been managed in accordance with pro-poor policy, and health expenses in accordance with pro-growth oriented as well. The other research done by Jha *et al* (2001) had considered that the government's spending for education and agriculture expenses were pro-poor expenses oriented. Research done by Jung *et al* (2009) was a slightly different result about poverty at the south of USA regencies/cities. Using GWR method the result of the research had encountered that the expenses at recreation facilities had a big marginal impact in reducing the poverty itself. Research done by Ravallion (2004), Mawardi and Sumarto (2003) stated additionally that budgeting allocation at infrastructure sector is a regulation which is pro-poor growth.

The writer of this research has tried to fill in an area which had not been done yet by the former researcher, Agrawal (2007) about the relationship between budgeting allocation and poverty itself, as he had been doing it only at provinces coverage. Jung *et al (2009)* had taken the data about government spending only up to counties area, but it was still only a part of the country. This research, as a thesis using the data at counties area as what Jung *at al* (2009) had done, but it is not limited at a particular area.

## METHODOLOGY

The researcher has measured the poverty approaching the minimum consumption of poor people. The calculation is based on the research of Forster *et al* (1984) which is FGT model (Foster-Greer-Thorbecke). He has applied a formulation for this research is as the following:

$$Pa = (1/n) \left[ \sum_{i=1}^{q} (g_i / z)^a \right]$$
,  $a \ge 0$ 

- Pa: poverty measurement where a = 0 against Head Count Ratio; a = 1 as for poverty gap; and a=2 as for poverty quadrate gap.
- gi : family poverty gap number -i
- q : total of the family which is under the boundary of poverty.

#### z. boundary line.

Poverty boundary line which is applied in this research is the boundary line implemented at every province issued by BPS. Family poverty gap calculation is calculated by reducing the boundary line against its consumption per capita.

Researcher has used model of Ravallion and Datt (1999) which was modified.

InP<sub>it</sub>=
$$\beta_i^{\text{YLD}}$$
InYLD<sub>it</sub>+ $\beta_i^{\text{NFP}}$ InNFP<sub>it</sub>+ $\beta_i^{\text{DEV}}$ InGOV<sub>it</sub>+ $\gamma$ INF<sub>it</sub>+ $\pi_{it}$ + V, i + $\sum_{it}$ 

P is FGT poverty measurement :

YLD : agriculture products, measured using PDB sub-sector of the agrarian sector.

NFP : non-agriculture products, measured using PDB non agriculture sector.

GOV : government expenses for its development cost and INF is an inflation rate.

Form (2) model has been modified in order to see the impact of budgeting allocation. Such a modification should be done to change GOV variable to be GOV / GDP to approach the budgeting allocation. Total amount of the government spending is the amount had been spent. Other modification is to substitute YLD and NFP variables with GDRP variable which has shown

Dimas Ari Darmantyo: Analysis About the Impact of 'Kabupaten APBD' Budget Allocation Against the Poverty in Indonesia 2006-2009 counties PDRB. The modification should have to be executed because we have limited data. Form (2) model will be as follows:

InPit=
$$\beta_1$$
InGDRP<sub>it</sub>+ $\beta_2$ InGOV/GDP<sub>it</sub>+ $\gamma$ INF<sub>it</sub> + $\pi_{it}$  + V, i + $\sum_{it}$ 

Form (2) model should have to be modified again to see the impact of direct and indirect spending allocation. GOV variable was changed to DIR / GOV and IND / GOV. Model was modified into two types of the model.

 $InP_{it} = \beta_1 InGDRP_{it} + \beta_2 In(DIR/GOV)_{it} + \gamma INF_{it} + \pi_{it} + V, i + \sum_{it} (4); dan$ 

 $InP_{it} = \beta_1 InGDRP_{it} + \beta_2 In(DIR/GOV)_{it} + \gamma INF_{it} + \pi_{it} + V, i + \sum_{it} (5)$ 

DIR / GOV variables within form (4) is applied to measure the proportion of direct spending, meanwhile IND / GOV within form (5) is applied to measure the indirect spending.

Gujarati (2004) said that logarithm regression model has been applied to measure the elasticity level of Y variable against X variable. This research has modified Ravallion and Datt model (1999) by using GOV / GDP budgeting allocation variable. Government spending for this research is an overall expenses so that the effect of the poverty was unable to decide. According to Mehmood and Sadiq research (2010), it is said that the impact of government expenses spending against the poverty is influenced by the composition of the spending itself. Budgeting allocation is pro-poor oriented which has negative influences and has a high elasticity value over the changes of poverty level.

The other variable related to the government spending is DIR / GOV variable which is mentioned in the form(4). DIR / GOV variable is applied to see the effect of direct spending allocation to poverty reduction. Direct spending as explained aforementioned is the government spending related to the policy of the development. Based on the aforementioned matter, DIR/GOV variable is expected to have a negative sign which is in accordance with Ravallion and Datt research (1999).

The impact of indirect spending allocation which is mentioned in the form(5) IND / GOV, has a positive effect and negative effect against the poverty level. Positive effect is based on the research of Dollar and Kray (2002) mentioning that the government expenses spending which is not allocated for the development itself could reduce the living standard of the poverty. Negative effect based on the research of Agrawal (2007) encountered that the spending for social support has a significant influence to the poverty reduction.

INF variable is applied to see the effect of the inflation rate against the changes of poverty itself. INF is expected to be able to give a positive effect to the poverty changes.

This research has used the panel data which is integrated between gross-section data and time series. Using this panel data is in accordance with the existing development which is (its panel data unit-root) has been evaluated. The evaluation of unit-root has two generations such as: First generation is using cross-sectional independence assumption. Second generation is using cross-sectional dependent assumption (Barbiere, 2010). Unit-root evaluation has been done using STATA 11 software application which is having unit-root evaluation of the first generation.

Data of spending the budget allocation in this research is taken from APBD data of all over the cities (counties) in Indonesia for the periode of 2003-2007. Inflation and PDRB data is from BPS. But the poverty measurement is from SUSENAS 2006-2009 data. Those data has been processed by using STATA computer program and Excel.

#### **Poverty in Indonesia**

Poverty reduction in Indonesia had shown a big development in 1976-1993. It was because of a good result of the poverty reduction in 1984-1987 which was influenced by Bonanza oil in 1976-1981 (Ravallion and Huppi, 1989). Having had the influence of Bonanza Oil reflecting to the economy development in Indonesia significantly accompanied with the government spending in a proper way. Even though the record had administered only for three years, but within 17 years period up to 1993, obviously the poverty reduction in Indonesia had decreased to 5 % yearly. The result of poverty reduction in Indonesia had been decreased from 54.2 million people in 1976 to 25.9 million people in 1993.

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In 1984 – 1987 was a record for Indonesia which had succeeded to reduce its poverty. According to Hill (2000) this achievement had been gained relating to the three factors. First, the private sectors had not been concentrating yet on agriculture sector and manufacturing industries. Second, Rice sector had been performing strong performance and many of well developed industries had appeared which had the exportation oriented. And the last factor was that public policies has paid attention to the poor since mid of 1960. Mubyarto (2001) said that the achievement of the poverty reduction in Indonesia was because of its local institution roles.

In 1996 the total of poor people had been increasing to 34.5 million people. It happened because of the last period of Bonanza oil involvement in 1981 which caused a slowing down of poverty reduction (Wie; 2006, 2010). In 1998 the total of poor people had increased significantly to 49.5 million as the impact of the crises cumulatively coming up from the previous years (TKPK, 2005). But according to Mubyarto (2001), the increasing of poor population was happened due to the government policies which had not been at the right post during the crises period. It was not because of the poverty reduction program. It had caused low-income people had been put aside during the crises happened.

In 1999 the total of poor population had been decreasing to 47.9 million people. The condition had been happening till 2005 which the poor people decreased to 35.1 million people. In 1999-2005, even though there was a slightly increasing of poor population within 2002 but mostly poor population in the villages had been decreasing (TPKP, 2005).

In 2006 the population of poor people had been increasing to 39.3 million (TKPK, 2009). This increasing had been influenced by the increasing price of human basic needs significantly in 2005 – 2006 (BPS, 2008). After passing thru the crises year in 2006 the total of poor people had been reducing till 2010 and the total of poor people was 31.02 million.

The important thing that should have to be noted was unbalanced matters happened in Indonesia. Though the International worldwide admitted that the poverty reduction had succeeded to be achieved before the crises period but it was still unbalanced matters had not been fixed up (Hill, 2000; Mubyarto, 2001). Most of the poor people spending share had changed slightly, but most of the upper income people shares had never been changing.

### **RESULT AND EXPLANATION**

The analysis result of the research has explained that the budget allocation has a positive impact significantly against the poverty reduction itself which is for head-count measurement. Budget allocation has not obtained a significant impact to poverty gap index and severity index. Poverty elasticity has shown positive value of head-count measurement 0.00017 against budget allocation. It has appeared that when budget allocation has increased to 1 % at average, head-count ration has only been increasing to 0.00017 %. Poverty elasticity against budget allocation is 0.000178 for poverty gap index and 0.000179 for severity index, but it does not have any significant impact.

Counties APBD budget allocation has been impacting significantly to the head-count of poverty. Based on the suggestions of Laabas and Limam (2004) the result of this analysis has explained that the government policies related to the poor is only focusing to the reduction of poverty instead of focusing to the degree of poorness itself and to the most poorest people. Elasticity of head-count ratio is only 0.00017 against the budget allocation which is having a positive value. According to Ravallion (2004) APBD counties budget allocation has not reduced the poverty level which is not pro-poor oriented. Laabas and Limam (2004) has mentioned that non pro-poor oriented budget allocation happened because the composition of government spending has not been focusing to the government spending to reduce the poverty itself (economical services spending and social sectors spending).

Furthermore, the analysis of APBD counties budget allocation are using quadrate formula to acknowledge whether the budget allocation variables has given its poverty increasing rate or decreasing rate. Table 5.5.1 has explained the poverty elasticity against the budget allocation is at 0.000204, but the poverty elasticity against quadrate budget allocation is showing a negative value. It has explained that at every 1% of increasing of budget allocation at average reflecting the head-count ratio increasing to 0.000204 % which means the increasing has happened as to decreasing rate. The aforementioned is explaining that counties APBD budget allocation could have the probability to reduce its poverty some times.

Dimas Ari Darmantyo: Analysis About the Impact of 'Kabupaten APBD' Budget Allocation Against the Poverty in Indonesia 2006-2009 Other variables that could give an impact to the poverty changes are INF (inflation). Inflation has a positive impact to the poverty changes significantly at severity index measurement. It is 0.0490 severity index coefficient. It is explaining that at every 1% of inflation decrease will reduce 0.0490 % severity index. Meanwhile, for head-count measurement, every 1% of inflation decrease has only reduced 0.0234-0.0235% head-count value. The inflation impact of headcount measurement is lower than severity index, but bigger coefficient comparing to the budget allocation log-natural, the impact of inflation reduction rate is tougher than reducing the poverty level.

The analysis has resulted that low inflation rate could probably reduce the poverty level itself. The impact of inflation rate control is bigger than budget allocation. Based on the significant level of the inflation variable, the inflation control is more useful to be implemented to obtain the poverty reduction which is focusing to the poorness level.

APBD counties budget allocation is not pro-poor oriented. It is explaining that APBD counties budgeting has not yet been focusing to the reduction of the poverty level. Laabas and Limam has explained that budget allocation could have been either pro-poor or non pro-poor oriented depending on the spending composition. Other research of Dollar and Kray (2000) has explained that government budget allocation is not pro-poor oriented when the government spending has not been focusing obviously to the development itself. Budget allocation will only be able to give a significant impact to head-count ratio, so that the changes of the composition of APBD counties spending will only be focusing to the poverty reduction but ignoring the level of its poorness.

Low inflation rate could reduce the poverty. This result is in compliance with the previous result of analysis. The analysis of this research has been explaining that low inflation rate has bigger impact to the reducing of poverty severity index. According to Laabas and Limamm (2004) mentioning that bigger inflation impact of severity index has shown that the reduction of the inflation rate is the proper way for the government policy to be implemented to reduce the poverty by focusing to the poorest people.

The result of this research analysis has explained that the direct and indirect counties budget allocation does not have any significant impact to the poverty itself. The indirect budget allocation does have a negative elasticity value because of social spending support and finance spending support which are pro-poor oriented that has been stated in Agrawal research (2007) and Jung et al (2009). INF variables have positive influences to the poverty changes.

Direct budget allocation does not have any significant impact too to the poverty changes, but the influencing itself has a positive value. This result is opposite to the writer expectation about direct budget allocation. It happened because of APBD counties budget allocation has a positive influencing against the poverty changes.

## CONCLUSION

There are three questions appeared in this research. First question is related to pro-poor characterization against the APBD counties budget allocation. Second and third questions are about the interrelationship between direct spending and indirect spending against the poverty changes. Based on the research it is showing that APBD counties budget allocation cannot be categorized as pro-poor oriented. It is proved that only by having a positive influencing of the counties budget allocation could reduce the poverty level. Though it is not pro-poor but it could be able to reduce the poverty level some times. Non pro-poor budget allocation has shown that the composition of APBD spending has not been focusing to the poverty reduction.

The allocation of direct and indirect APBD spending does not influence the poverty changes. It could have happened because of non pro-poor allocation and its spending allocation is different with other countries. A positive impact of the direct spending will happen when it is related to the definition of direct spending, it might be happened because of non pro-poor counties budget allocation. Negative influences of indirect spending allocation happened because of the type of its spending had existed in the indirect spending itself.

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