Contribution Of Fiscal Decentralization To Poverty Reduction In Eastern Indonesia

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Abstract: Eastern region of Indonesia has over 14 years received additional fiscal capacity and budgetary autonomy that focus on poverty in the context of decentralization but cannot become a potential driving force in improving the social welfare, therefore this study tried to analyze the simultaneous effect of fiscal decentralization on poverty in Eastern Indonesia. Results of this research are: 1) Increased portion (ratio) of the total government transfer to total provincial revenues did not significantly affect poverty in eastern Indonesia, but has significant influence indirectly through investments and through economic growth; 2) Increased portion (ratio) total spending on health and education to total provincial revenues significantly affect poverty, but has no significant influence indirectly through investments and through economic growth.

Keywords: Fiscal Decentralization, Poverty Reduction, Investment.

I. Introduction

Poverty due to the inability to meet basic needs, like clothing, food and shelter, the concept is closer to the approach of absolute poverty overriding social needs [1], [2], [3]. But on the other hand poverty is understood as limited access to income and public services, so that the understanding of the approach taken is approach relative poverty, with more emphasis social needs [4], [5]. Poverty can only occur because of the unequal distribution of income [6]. Picture Sen statement seen in Indonesia, as in Figure 1, which shows the trend of the poverty level in Indonesia from 2002 to 2012.

Sources : Indonesian BPS

Figure 1: Trend of Poverty Indonesia and Eastern Indonesia Year 2002 to 2012

Poverty in Indonesia has a natural decline since 2002 (Figure 1.1), although in the year 2006 it has returned surges. On the other hand, poverty in Eastern Indonesia (KTI) has similar rhythm of decrease in poverty levels equal to the poverty nationally, but always be above the poverty level national, or it can also be said that the average poverty KTI can never be even lower or the same as the national average, thus can also be said that there is inequality of development among regions in Indonesia [7]. The size of the imbalance indicated by the Gini Ratio, the picture of the imbalance that occurs in two areas, like KTI and KBI as shown in Table 1

Table 1: Gini Ratio of Top of Five Province in the Western Region and Eastern Region of Indonesia Year 2012

<table>
<thead>
<tr>
<th>Province</th>
<th>KTI Gini Ratio</th>
<th>KBI Province</th>
<th>KBI Gini Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gorontalo</td>
<td>0.44</td>
<td>DI Yogyakarta</td>
<td>0.43</td>
</tr>
<tr>
<td>Papua</td>
<td>0.44</td>
<td>DKI Jakarta</td>
<td>0.42</td>
</tr>
<tr>
<td>Sulawesi Utara</td>
<td>0.43</td>
<td>Jawa Barat</td>
<td>0.41</td>
</tr>
<tr>
<td>Papua Barat</td>
<td>0.43</td>
<td>Riau</td>
<td>0.40</td>
</tr>
<tr>
<td>Sulawesi Selatan</td>
<td>0.41</td>
<td>Sumatera Selatan</td>
<td>0.40</td>
</tr>
</tbody>
</table>

BPS Indonesia

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The five provinces (Table 1) is the province that has the Gini ratio is the highest in Indonesia, when dividing the territory of Indonesia in two areas, the region of West and East area, then Table 1 shows that the provinces are in the East region is a contributor to the value of the Gini ratio is greater than the national average so that the national value reached 0.41. Thus it can be said that the unevenness of development in Eastern Indonesia is bigger than the KBI. By connecting Table 1 and Figure 1 it is aesthetically that high poverty at KTI (above average poverty rate national), most likely caused by an imbalance of development, as expressed by some researchers that relate to economic growth [8], [9], [10].

Low public capital formation is suspicion to be one of the causes of poverty, then this capital investment is defined as a statement Prof. Nurkse cited by Jhingan ML (2012) and Barro and Sala-i-Martin (1990 - 1995) [11][12].


This research then tried to give way to understand poverty in Eastern Indonesia (KTI) through fiscal decentralization approach, which is the basic theory expressed by Tiebot (1956) [22] and developed by Oates (1972) [23]. Fiscal decentralization is expected to solve the problems of poverty and into the empirical findings by some researchers [24]; [25]; [26], [27], meanwhile if poverty is caused by the imbalance of development for the implementation of decentralization by a government also became empirical evidence [28].

Since published UU No. 22 and No. 25 In 1999, decentralization took effect in Indonesia on January 1, 2001. The law was later amended by UU No. 32 and No. 33 in 2004, with an emphasis on the monitoring mechanism by the central government, and improvements to the accountability of local government spending [30] (Brodjonegoro, 2004). As an illustration of the central government transfers to the regions as grants shown in Figure 2.

![Figure 2: Trend of Government Transfer From 2004-2012(Rp Trillion)](image)

The central government in implementing fiscal decentralization policy to allocate Government Transfer that consists of, the Dana Alokasi Khusus (DAK), Dana Alokasi Umum (DAU), and the Dana Bagi Hasil (DBH). Government transfer became a symbol of the fiscal decentralization in Indonesia on the revenue side as an additional local fiscal capacity, because of fiscal decentralization will give optimum benefits if the autonomous region has adequate fiscal capacity [31]; [32]; [33]. Figure 2 shows that the area is still very high dependence on the central government, as well statement [34].

On the expenditure side can be seen from direct expenditure and indirect expenditure, so that if the government wants to improve the welfare of the community, they have to increase the allocation of direct expenditure. Government spending areas such as education, health, government consumption and government transfers to poor families has a positive effect on economic growth [35]; [36]; [37]; [38]; [39]; [40], but Hamid Paddu (2010) [41] found that the Power Authority is a measure of spending has a negative effect on economic growth.

So it is interesting to see the influence of central government transfers to local governments in total in the province, and the policies of local government spending pro-poor (decentralized approach), to the quality of the handling of poverty in Eastern Indonesia and also see if there is investment support to economic growth on the quality of the handling of poverty. Therefore, the approach taken is a simultaneous approach in the structural models.

Based on research problems that have been disclosed, it is the goal of this research is:

1. Determine the effect of the fiscal capacity of a region within the framework of decentralization on poverty either directly or indirectly through investment, and economic growth
2. Determine the influence of the local government's attention in the education and health budget on poverty either directly or indirectly through investments and economic growth

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II. Theory, Empirical Study, And Methodology

Poverty is not just an individual problem, but rather a structural problem, where poverty occurs because of an imbalance and blockage of certain groups' access to community resources,[42], then Keynes became the answer to this paradigm. Keynes' successful memecakan problem of economic depression of the 1930s in Economic Growth (1995), Barro and Sala-i-Martin developed the Ramsey growth model (1928)[43], which raised again by Cass D (1965) and [45] Koopmans (1963)[44]. The Ramsey model is basically a growth in household consumption, by using the utility function of the household, then he modify the model Solow and Swan models. This model then incorporates elements of the government (G) as aggregate government spending.

Based on the theory of Tiebout (1956)[46], known as "The Tiebout Model" with the phrase "Love it or leave it". This model is the cornerstone of the concept of fiscal decentralization, that with the delegation of authority will enhance the region's ability to serve the needs of public goods with better and more efficient improvement of conditions of service of these public goods in terms of the relationship between the autonomous region will provide competition conditions of competition between districts / cities to maximize satisfaction for society. This theory was later developed by Oates (1969 -2006)[47].

Poverty in relation to fiscal policy becomes empirical finding some researchers[48][49][50][51][52][53][54], although the findings of empirical and they are different measures of poverty. Implicitly also the relationship of growth with poverty expressed by many empirical research[55][56][57][58][59][60][61][62][63][64]. Although in a somewhat different perspective, which sees fiscal decentralization as a means to achieve prosperity. Since the research is to build the structural model, where economic growth is endogenous from poverty, and growth itself is a function of the variables that influence it, such as that built by Pose AR and Kroijer A (2009)[65] states that growth = f (Dec, preferences local, public service innovation), Hamid Paddu (2010) states that growth = f (Dec, Geography), [66] Faridi (2011) states that growth = f (Dec-efficiency public-sector), Nizar, Hamzah, and Syahnur (2013) suggest that growth = f (Foreign Direct Investment)[67].

We use panel data of 2005 - 2013 on 12 provinces in Eastern Indonesia. Based on theories and empirical are then prepared a model of poverty in Eastern Indonesia in the form of simultaneous as follows:

\[ Pov = f (Dec, I, Y) \]

Since \( Pov = \text{Poverty}, Dec = \text{Fiscal Decentralization (Government Transfer, Health and Education Expenditure)}, I = \text{Investment and} Y = \text{economic growth.} \)

Where the investment is a function of fiscal decentralization, and economic growth is a function of fiscal decentralization, by simultaneously as follows:

\[ Pov = f \{ \text{Dec, I (Dec)}, Y (\text{Dec}) \} \]

Fiscal decentralization variable is an exogenous variable that consists of components that are considered to contribute to the alleviation of poverty, namely: \( X_1 \) is government transfer (revenue), \( X_2 \) are education and health spending (expenditure), then the endogenous variables is \( Y_1 = \text{Investment}, Y_2 = \text{Economic Growth} \) and \( Y_3 = \text{Poverty}. \)

\[ Y_1 = f (X_1, X_2) \quad (1) \]
\[ Y_2 = f (X_1, X_2) \quad (2) \]
\[ Y_3 = f (X_1, X_2, Y_1, Y_2) \quad (3) \]

Where:

\( Y_1 = \text{Private investment in the Province} \)
\( Y_2 = \text{Provincial Economic Growth} \)
\( Y_3 = \text{Provincial Poverty Depth Index} \)
\( X_1 = \text{Government Transfer} \)
\( X_2 = \text{Health and Education Expenditure} \)

The Third function of the above then compiled performance form of simultaneous equations as follows:

\[ Y_1 = \alpha_0 + \alpha_1 X_1 + \alpha_2 X_2 + \varepsilon_1 \quad (1a) \]
\[ Y_2 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon_2 \quad (2a) \]
\[ Y_3 = \delta_0 + \delta_1 X_1 + \delta_2 X_2 + \delta_3 Y_1 + \delta_4 Y_2 + \varepsilon_3 \quad (3a) \]

These variables are then defined as follows:
Y₁ = poverty = is a concept that is the opposite of the well being of a society, so that the poverty measure in this study is the large depth of poverty in a society, the road saw the poverty gap index (P1) published by the Central Bureau Statistik (BPS) Indonesia.

Y₂ = Growth is the magnitude of change in GDP year n compared to one year prior to the year n (year n-1), based on the constant price and is measured in percent. In this study measured the economic growth is economic growth in the province (Percent)

Y₃ = Investment is the amount of private investment in the province, which is measured by using a large ratio of investment to the province's gross regional domestic product (ratio)

X₁ = Government transfer of a fund sourced from APBN allocated to the regions to finance the needs of the region in the implementation of decentralization. Government transfer amount set annually in the APBN, consisting of Dana Bagi Hasil (DBH), Dana Alokasi Umum (DAU) and Dana Alokasi Khusus (DAK). In this study were measured in a grand government transfer of total in one province of the total budget in the provincial Revenue (ratio)

X₂ = Education and health spending budget is the realization of educational functions and realization anggran health function In this second study is summed total expenditures in the province, which is then expressed in a ratio to total revenues in one province (ratio)

III. Result And Discussion

We test the hipotesis with Structural Equation Modelling (SEM). Figure 3 shown all of the relationship of variables we analized.

Table 2 shows that the overall requirement that a model is said to be fit fulfilled.

<table>
<thead>
<tr>
<th>GOODNESS OF FIT INDEX</th>
<th>CUT OFF VALUE</th>
<th>HASIL TEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>X²-Chi Square</td>
<td>Kecil</td>
<td>0,170</td>
</tr>
<tr>
<td>Significance Probability</td>
<td>≥ 0,05</td>
<td>0,680</td>
</tr>
<tr>
<td>RMSEA</td>
<td>≤ 0,08</td>
<td>0,000</td>
</tr>
<tr>
<td>GFI</td>
<td>≥ 0,9</td>
<td>0,999</td>
</tr>
<tr>
<td>AGFI</td>
<td>≥ 0,9</td>
<td>0,99</td>
</tr>
</tbody>
</table>

Figure 3: Scheme Framework Hypothesis

Figure 3: SEM Model of Analysis

Table 2: Goodness Of Fit Index
Table 3: Direct Connection Against Exogenous Variables Endogenous Variables

<table>
<thead>
<tr>
<th>Variabel</th>
<th>Koefisien</th>
<th>Critical Ratio</th>
<th>Sig (p)</th>
<th>Hipotesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Transfer (X₁)</td>
<td>0.43</td>
<td>2.501</td>
<td>0.012</td>
<td>Accept</td>
</tr>
<tr>
<td>Health and education expenditure(X₂)</td>
<td>-0.28</td>
<td>-2.184</td>
<td>0.029</td>
<td>Accept</td>
</tr>
<tr>
<td>Health and education expenditure(X₂)</td>
<td>6.044</td>
<td>2.498</td>
<td>0.012</td>
<td>Accept</td>
</tr>
<tr>
<td>Health and education expenditure(X₂)</td>
<td>-1.46</td>
<td>-0.459</td>
<td>0.646</td>
<td>Reject</td>
</tr>
<tr>
<td>Health and education expenditure(X₂)</td>
<td>-5.802</td>
<td>-2.729</td>
<td>0.006</td>
<td>Accept</td>
</tr>
<tr>
<td>Growth (Y₂)</td>
<td>-1.363</td>
<td>-0.895</td>
<td>0.371</td>
<td>Reject</td>
</tr>
<tr>
<td>Growth (Y₂)</td>
<td>0.016</td>
<td>0.198</td>
<td>0.843</td>
<td>Reject</td>
</tr>
</tbody>
</table>

Results of the analysis of the direct relationship between variables (Table 3) shows that:

- Direct connection portion of the total fund balance in the reception area of the portion of investment in regional income EI is positive and significant, indicating that an increase in the portion of fund balance in local government revenue at KTI will increase the share of investment in regional income in the KTI provinces.
- Direct connection portion of total spending on health and education in the reception of local government in eastern Indonesia on economic growth is negative and significant, this suggests that any increase in the portion (ratio) of total education spending and health will reduce the portion of investment (ratio) in regional income provinces KTI.
- Direct connection portion of the total fund balance in the reception area to economic growth in the province of EI is positive and significant, indicating that an increase in the portion of fund balance in local government revenues in the EI economic growth in Eastern Indonesia.
- Direct connection portion of total spending on health and education in local government revenue at KTI to provincial economic growth is positive and significant, this suggests that any increase in the portion (ratio) total education and health spending will boost economic growth in the province of KTI.
- Direct connection portion of the total fund balance in the reception area to the distance of the poor from aris poverty provinces in Eastern Indonesia is negative and significant, indicating that an increase in the portion of fund balance in the revenues of local governments in KTI did not significantly affect the distance of the poor from the poverty line by provinces in Eastern Indonesia.
- Direct connection portion of total spending on health and education in the reception of local government in eastern Indonesia to the distance of the poor from aris poverty provinces in Eastern Indonesia is negative and significant, suggesting that the increased share of total spending on education and health in the reception of local governments in KTI will decrease the distance of the poor from the poverty line according to the province in eastern Indonesia.
- Direct connection portion (ratio) investments in regional income provinces in Eastern Indonesia to the distance of the poor from aris poverty provinces in Eastern Indonesia is negative and significant, indicating that an increase in the portion of investment in regional income provinces in Eastern Indonesia did not significantly affect the distance of the poor of the poverty line by province in eastern Indonesia.
- Direct relationship KTI provinces in economic growth to the distance of the poor from the poverty line in the province of EI is positive and not significant, this suggests that economic growth in the province of KTI did not significantly affect the distance of the poor from the poverty line according to the province in eastern Indonesia.

In this analysis also shows an indirect relationship , as shown in Table 4.

Table 4: Relationship Indirect Exogenous Variables to Endogenous Variables

<table>
<thead>
<tr>
<th>Y₁</th>
<th>X₂</th>
<th>Y₂</th>
<th>Y₃</th>
<th>Y₄</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y₁</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Y₂</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Y₃</td>
<td>0.479</td>
<td>-0.276</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Models are built in this research show that, there is only an indirect relationship of exogenous variables (government transfer and health and education expenditure) to reduce poverty through investment and through economic growth.

- Indirect link portion (ratio) of the total government transfer of the total provincial revenues in the province of KTI is negative and significant (CR > 1.96), indicating that the increase in portion (ratio) of the total government transfer of the total provincial revenues, will decrease the distance residents poor from the poverty line. This condition occurs when an increase in the ratio balance funds used for investment and economic growth.

- Indirect link portion (ratio) total health and education expenditure in total revenues within the province of the poor from the province the poverty line is positive and not significant (CR < 1.96). This indicates that increasing the ratio of spending on health and education has no significant influence indirectly through investment and economic growth to the distance of the poor from the poverty line.

IV. Conclusion

The Conclusion of the research as follows:

1. Increased portion (ratio) of the total government transfer of the total provincial revenues do not significantly affect poverty in eastern Indonesia, but has significant influence indirectly through investments and through economic growth.

2. Increased portion (ratio) total health and education expenditure in total provincial revenues significantly affect poverty, but has no significant influence indirectly through investments and through economic growth

References


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