IS FISCAL DECENTRALIZATION ABLE TO REDUCE POVERTY? EMPIRICAL CASES IN INDONESIA

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ABSTRACT
The objective of this study was to analyze the influence of the implementation of fiscal decentralization on the poverty status taken place at district/city level in Central Java province. The analysis tool used was multiple linear regression, and the method applied was Fixed Effect Model (FEM) supported by data pooling during 2009 - 2015 taken from 35 districts/cities in Central Java province. The study found that fiscal decentralization are able to reduce the number of poor people in Central Java. In addition, the increasing number of private investments and employment functions as an instrument to reduce the number of poor people.

Key words: Fiscal decentralization, Investment, Labor, Poverty.


1. INTRODUCTION
Inequality in economic, social, and politic among regions in Indonesia has caused regional administrations demand central government to be equitable in sharing its power. The central government responded by granting regions autonomy and decentralization through the issuance of law No. 32 of 2004 on Regional Government [1] and Law No. 33 of 2004 on Financial Balance between Central and Local Government[2].

The purposes of sharing regional autonomy and decentralization are 1). Politic; to create a superstructure and infrastructure of democratic politics based on people's sovereignty; 2). Administration; local government are capable to perform well by maximizing the value of effectiveness, efficiency, equity, and economy; 3). Socio-economic; to realize the utilization
of social capital, intellectual capital, and financial capital, in order to create public welfare of the society.

In order to achieve the purpose of the autonomy and decentralization, fiscal decentralization may function and drive economic growth in the regions and therefore may help reduce poverty. Fiscal decentralization embodied in the government spending should be allocated to productive sectors; so that, it can empower people and help them out of poverty (Sudewi, 2013) [3].

As a result, fiscal decentralization may provide a positive impact on reducing the number of poor people because it is able to increase income per capita of the regions. Central Bureau of Statistics (2016) [4] reported that the number of the poor in every district/city in Central Java has decreased significantly. The empirical data of the number of poor people in Central Java in 2009-2015 is shown in Figure 1.

![Number of Poor People in Central Java Indonesia in 2009-2015](image)

**Figure 1** Number of Poor People in Central Java Indonesia in 2009-2015

Source: Central Bureau of Statistics, 2016

Fiscal decentralization embodied in the government spending has been allocated to achieve the goals of economic and social, particularly in decreasing poverty through appropriate allocation of expenditure implemented by lower levels government administration. Odior (2014) [5] proved that government spending on productive sectors can increase gross domestic product and reduce poverty. Meanwhile, Steiner (2005) [6] concluded that decentralization has an impact on poverty through policies in economic and political fields.

In addition to fiscal allocation from the government, private investment has also an important role in reducing poverty. Consequently, local government should create a conducive business climate and work opportunities to attract investors to come as the influx of the investment will absorb labor forces and reduce poverty. Regional Investment Board (2016) [7] reported that the realization of the investment in Central Java was Rp 18.7 trillion in 2014 and Rp 26.04 trillion in 2015. Meanwhile, the number of workers in different fields of business in Central Java continues to rise. In August 2014, the labor force absorbed was 16.55 million people and increased to 17.32 million in February 2015 (Central Bureau of Statistics, 2016).

Based on the background, the objective of this study was to analyze the effect of fiscal decentralization, investment, and labor on the number of poor people in Central Java Indonesia.
2. LITERATURE REVIEW

According to the World Development Report (1999) [8], poverty is a severe shortage of well-being, property, income, health, education, asset ownership, and rights of the society such as freedom of speech. From capability approach, Sen (1993) [9] describes poverty as the absence or failure of the function to achieve basic capabilities to the level of fulfillment of the minimum requirements. The capability approach shows that the investment policy on poverty reduction expand basic capabilities through monetary income and improve the allocation of social goods to education (Lok-dessallien, 2004) [10].

As poverty has become an important issue, scholars categorizes it differently. For example, Pradhan et al. (2000) [11] classifies poverty into relative poverty, absolute poverty, and structural poverty. Meanwhile, Suryawati (2005) [12] classifies poverty into absolute poverty, cultural poverty, and structural poverty. In relation to this study, the concept of poverty chosen is absolute poverty. Absolute poverty is defined as a condition in which the income of a person or a group of persons is below the poverty line and thus it is not sufficient to fulfill minimum standard for food, clothing, health, education, and housing needed to improve the quality of life.

To measure poverty, Center of Statistics Agency (Central Bureau of Statistics (CBS), 2008) [13] applied the concept of basic needs fulfillment. According to CBS, poor people is population who spent an average monthly expenditure per capita below the poverty line. Food poverty line is the minimum food expenditure equivalent to 2,100 kilo calories per capita per day. The equalization of minimum food expenditure is calculated from the average price of food calories represented by 52 commodities.

Moreover, Wagle (2007) [14] measures poverty from three dimensions; the dimension of economic, the dimension of the ability to determine the quality of life, and the dimensions of political freedom. The economic dimension covers the adequacy of income, wealth, consumption, and subjective views about the adequacy of income and consumption. The ability to determine the quality of life is measured by education, health, nutrition, self-esteem, prestige, gender, and ethnic disparity. In this case, the dimension of political freedom is measured by political rights, participation in elections, and maintains contact with political representatives.

Poverty is a social problem faced by all developing countries, including Indonesia. In the era of autonomy and fiscal decentralization taking place in Indonesia, local governments are encouraged to stimulate economy to improve the welfare of the societies by managing revenue and expenditure effectively and efficiently. Therefore, it is essential that local governments allocate their spending to productive sectors to improve economic growth and gradually reduce poverty. Fuso study results (2010) [15] found that the average income growth became the main driver behind the decline and increase of poverty.

According to Keefer and Khemani (2004) [16], decentralization might not be effectively serve the poor caused by:

- Miss targeted budget allocation; the allocated budget is consumed by wrong target groups or targets.
- Precisely targeted budget allocation but it is corrupted; the budget has been correctly allocated, but persons either from government or private sector miss conduct it or corrupt it.
- Minimum profit budget allocation; budget for schools or health has weak incentive, motivation, or capacity to provide effective services; as a result, the project produces a minimal profit.
To reduce poverty, government have to invest through policy instruments in the form of government spending, and the source of private sectors’ investment might come from both domestic and off shore. The amount of incoming investment might provide a strong impetus to achieve high of economic growth and reduce poverty as economic growth increases income of the poor proportionally to the overall growth. Investment is a strong link to economic growth and poverty reduction (Ocaya et al, 2012) [17], and economic growth is a major driver to decrease or increase poverty (Fosu, 2010).

According to Shamim et al.(2014) [18], there are some policies that can be taken by government to reduce poverty through investment policy:

- The government should provide adequate facilities. The secure and stable situation are essential to attract investment to reduce poverty.
- Government must create political stability to ensure and protect foreign direct investors in helping economic growth while at the same time reduce the rate of poverty.
- The Government should reduce complicated rules that obstruct foreign investment and international trades.
- The government should increase the level of exchange rate flexibility to increase the flow of investment that increases economic growth and decreases poverty.
- Government should provide different facilities for human capital in the form of education and training in order to improve the level of efficiency, skills, and abilities.

Labor affects the number of poor people from the perspective of economic growth impact. Economic growth theorist of Neo Classic, Todaro, (2015) [19], stated that economic growth is influenced by capital, labor, and technology. The availability of qualified workforces can attract investment into a region and absorb unemployment. Therefore, the availability of a qualified workforce is needed to address the socio-economic problems such as poverty. Furthermore, Samuelson and Nordhaus (2010) [20], argued that labor input consists of quantity and skills of the work force. Many economists believe that the quality of labor input is an important element in economic growth that late affect poverty reduction.

3. RESEARCH METHODS

The dependent variable of this study was poverty as the absolute number of poor people based on the criteria of the Central Bureau of Statistics (CBS). Meanwhile, the independent variable is: 1). Fiscal decentralization; the spending ratio between the government of districts/cities and total expenditure of the central government. 2). Investment; the overall realization of the investment of both foreign and domestic investment. 3) Labor forces; labor forces aged 15-64 years old that work in various business fields.

The data used were secondary data from the Central Bureau of Statistics, Board of Investment, and the Ministry of Finance. The data panel is a combination of time series data (7 years; 2009-2015) and cross section (35 districts/cities). The analysis tool used was multiple linear regression methods using Fixed Effect Model (FEM). The research model was formulated in the following equation:

\[ \text{POV}_t = f(\text{DF}_t, \text{INV}_t, L_t) \]

\[ \text{POV}_t = \beta_0 + \beta_1 \text{DF}_t + \beta_2 \text{INV}_t + \beta_3 L_t + \mu_t \]

Note:

POV = the number of poor people
DF = fiscal decentralization
INV = investment  
L = labor  
β = coefficient of regression  
μ = residual value existing outside the model  
i = cross section of 35 districts/cities in Central Java  
t = time series in the period of 2009-2015

4. RESULTS AND DISCUSSION

This study used panel data, covering 35 districts/cities in Central Java province in the period 2009-2015. The three independent variables had a relationship in terms of macroeconomics in the area. The volatility occurring during the observation did not always be on the upward and downward trend correspondingly. Data from three independent variables and the dependent variable were analyzed using Fixed Effect Model that its estimation result is exhibited in Table 1:

Table 1 Estimates of Fixed Effects Model (FEM) of the Dependent Variables of Poverty

<table>
<thead>
<tr>
<th>Var.Independent</th>
<th>Coef.</th>
<th>Std. Error</th>
<th>T</th>
<th>Prob.</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cons</td>
<td>5.025904</td>
<td>0.079916</td>
<td>62.88956</td>
<td>0.0000*</td>
<td>significance</td>
</tr>
<tr>
<td>DF</td>
<td>-0.002886</td>
<td>0.001057</td>
<td>2.731367</td>
<td>0.0069*</td>
<td>significance</td>
</tr>
<tr>
<td>Inv</td>
<td>-1.703308</td>
<td>6.123309</td>
<td>-2.786977</td>
<td>0.0058*</td>
<td>significance</td>
</tr>
<tr>
<td>L</td>
<td>-0.117874</td>
<td>0.015569</td>
<td>7.570848</td>
<td>0.0000*</td>
<td>significance</td>
</tr>
</tbody>
</table>

R-squared 0.990266  
Adjusted R-squ 0.988518  
F-statistic 566.4315  
Prob(F-statistic) 0.000000  
Prob(Wald F-stat) 0.000000  

Note: *) Significance at α=5%

Sumber: Secondary Data Analyzed,

Based on the results of the panel data estimates in Table 1, the equation is as follows:

\[ Y = 5.025904 - 0.002886DF - 1.703308Inv - 0.117874L \]

The explanation of each independent variable on the dependent variable is as follows:

4.1. Estimated Results of the Effect of Fiscal Decentralization on Poverty

The estimation results using FEM method indicated that fiscal decentralization variable significantly but negatively affected poverty. If fiscal decentralization increases which is in line with the increase of the government spending on poverty reduction programs, the number of regional poverty in Central Java will reduce. Fiscal decentralization measured by the ratio of total expenditure of a region to that of the central government described the expenditure assignment approach in which the responsibility of public service changed from central government to local governments takes place that resulted in the increase of the role of local public goods.

The result is consistent with the finding of Gbettor (2014) [21], that fiscal decentralization affect the poverty reduction in 165 countries examined. Generally, the successful implementation of fiscal decentralization occurred in the developing countries such as Ghana,
South Africa, Tanzania, and the Philippines as the principle of "responsiveness and participation" was applied. In this principle, communities are invited to actively participate in the implementation of the government’s programs which developed based on people’s needs aiming to enhance the level of welfare and reduce poverty. Steiner (2005) has also pointed out that decentralization negatively related to the level of poverty. She further elaborated the strategy of fiscal decentralization in reducing poverty as: First, provide the poor a chance to improve their quality of lives by providing access to jobs, markets, financial services, infrastructure (roads, electricity, telecommunications), social services (education, health), and soil. Second, facilitate community in decision-making to achieve a responsive and accountable in making public policy and non-discrimination. Third, increase security by reducing the vulnerability of the poor to different threats, such as economic shocks, natural disasters, ill health, disability, and personal violence. These stated require a macro-economic policies to manage the risk of the broader economy such as: diversification of the households’ activities, public welfare systems, and various insurance mechanisms.

The allocation of the government spending on infrastructure was very influential in reducing poverty. Various projects funded by the government needed workers so there would be an increase in welfare and poverty reduction. Therefore, fiscal decentralization might reduce poverty through appropriate allocation of spending by local governments, as it has been proven that government spending reduces poverty (Odior, 2014). Meanwhile, economic performance could significantly be improved if public expenditure was allocated from unproductive sector to productive sectors. A case in Nigeria proved that 10% reallocation of government expenditure (1.36% of GDP) from unproductive sectors to productive sectors can reduce poverty and the income gap. In addition, Nigeria's GDP growth increased by 1.49% from the relocation of government spending. It has been proven that the government spending, especially in the productive sector, reduce poverty in the regional administration.

In addition, Jutting et al. (2004) [22], using cross-country data suggested that the relationship between fiscal decentralization and the eradication of poverty is ambiguous. In some poor countries, the under qualified institutions and political conflict causes poverty eradication policies do not reach its target. Therefore, it can be summarized that the impact of poverty on decentralization depends on the quality of the infrastructure of a country that affect the capacity and ability of policy makers to devote attention to the eradication of poverty.

4.2. Estimation Results of the Effect of Investment on Poverty

Investment is needed by regions because the influx of investment in the region could overcome some problems, such as unemployment, poverty, and others. Private investment such as plant construction and other projects absorb work forces and therefore provide and increase income that can be used to meet workers’ needs.

The result of the estimated regression indicated that the investment variables significantly but negatively affects poverty in the district/city in Central Java province. This result showed that if the investment sustainably increased, the poverty would decline. The realization of the investment in the period of 2009 - 2015 in the region of the research proved to be constantly increases and therefore reduced poverty. The reason was that private investment coming to Central Java was an investment in labor-intensive industries. The increase in investment would create new jobs in the industrial sector and absorbed labor forces.

This finding is consistent with Agarwal and Atri (2015) [23], who identify a negative - significant relationship between investment and poverty. The integrated investment lifted up the demand of semi-skilled labor as a minimum level of skills required for production.
Therefore, skilled labor or semi-skilled benefited from the investment, while the unskilled labor became increasingly marginalized. It also means increasing the level of poverty. However, in India, a study showed that the number of skilled and semi-skilled workers was higher than that of unskilled workers; as a result, the investment remained successful in reducing poverty. Furthermore, Ucal (2014) [24], identifies significant relationship between foreign direct investment (FDI) and poverty. FDI proved to reduce poverty in developing countries. FDI provides a direct and important contribution to poverty reduction. In this case the impact of FDI on poverty worked through its impact on employment. The influx of investment into a region might gave an impact on job creation and unemployment reduction. In addition, there will be improvements of social welfare and poverty reduction.

Another finding of Sharp et al. (2003) [25], clarified that one of the causes of poverty is due to the differences in accessing to capital. If an access to capital is easy, community can take the available loan to expand their businesses. Having this opportunity, poor people might increase their productivity in the hope that their income will also increase and lead to become more prosperous. Therefore, protecting the poor from making an investment decision was a bad idea. Afraid of the gain produced being controlled by foreign investors would not take place as long as the state remains under competitive conditions. In fact, investors might get normal gain without interfering state’s value generated from productivity gains. Klein et al. (2001) [26], foreign direct investment is the key to economic growth and poverty reduction in developing countries

4.3. Estimation Results of the Effect of Labor on Poverty

The estimation result of regression showed that the variables of labor significantly but negatively affects poverty. Therefore, if there is an increase in the number of people working, then poverty will decline. The statistical test was confirmed by the empirical facts of the level of work force and the number of poor people that the increasing number of labor was followed by the reduction number of poor people in Central Java. This finding is in line with the one of Karnani (2011) [27], who concluded that the best way to reduce poverty is to increase the incomes of the poor by encouraging them to be producers or labor. Therefore, creating employment with fair wages was the best way to bring people out of poverty.

The availability of the number of qualified labor could attract investors to establish businesses in a particular region as labor is one of the main input in the production. The finding of Abdullah et al. (2016) [28], in 42 countries revealed that poverty negatively affect employment; the higher the level of poverty of a country the lower the available workforce will be. This condition took place as the number of skilled workers that had been accommodated in the workplace were more than the unemployed workforce. As a result, the workforce of the 42 countries contributed a substantial role in reducing poverty.

The efforts to reduce unemployment and poverty levels was equally important. Theoretically, when people are working they generate income expected to meet any necessities of life. When the needs are met, the poor will not be poor anymore, and the poverty rate will also be lower.

On the other hand, Aggarwal (2007) [29], highlights the violation of labor rights such as mandatory overtime, job insecurity, poor working conditions, and pressure to meet targets. The labor rights violations often occur in countries having a high level of employment as such China, India, and Palestine. Furthermore, labors in high populated countries have a close relation to poverty, because they are fettered by unfair regulations such as short-term contract workers, dismissal without compensation, excessive salary deductions, and others. Therefore,
it is necessary to review regulations that give a pressure to the workers in order to improve their welfare.

5. CONCLUSIONS
The results of the empirical analyses can be concluded that the fiscal decentralization that has been implemented in the regions of Central Java is able to reduce the number of poor people. Moreover, the increasing number of the realization of private investment (domestic and foreign) and of workers working in various business fields has a negative correlation with the number of poor people. This condition reveals that the increase number of the realization of the private investment and of people working reduces the number of poor people.

REFERENCES


IS Fiscal Decentralization Able to Reduce Poverty? Empirical Cases in Indonesia


