Leverage of Number of Population, GDRP, HDI and Unemployment on Poverty Level in Six District in South Sumatera

Erawati Agustini
Master Program of Economics, Faculty of Economics, Universitas Sriwijaya

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Abstract: The level of poverty in South Sumatra Province is still a development issue that requires lot of focus of attention to be resolved. The purpose of this study is to know the leverage of population, PDRB, HDI, and unemployment on poverty level in six urban districts in South Sumatra in 2011-2016. Data analysis using panel data regression techniques with the help of Software Eviews Version 8.1. The results showed that both simultaneously and partially independent variables significantly influence the dependent variable.

1 INTRODUCTION

Poverty is an inequality of opportunity to formulate the basis of social power, which includes assets (land, housing, equipment, health), financial resources (adequate income and credit), socio-political organizations that can be used to achieve common interests, goods or services, adequate knowledge and skills, and useful information. Therefore, the government's program to handle poverty is primarily to reduce the number of poor people. But in reality the number of poor people from year to year is not getting decreased, but even more and more.

Differences between districts and cities in some aspects can affect the number of poor people. In this case the problem of poverty in the district is more complex, because of the wide poverty range. Nevertheless, the existing public facilities in the district are still inferior to the existing public facilities in the city, other than that for people living in remote villages will find it difficult to access these services. The wide area of the district is also an obstacle to the spread of infrastructure evenly, because it requires more funds than infrastructure development in cities that tend to be more narrow than the district.

The existence of regional expansion discourse that continues to grow in the community especially the community in the region behind the government and Regional Representative Council (DPD) Republic Indonesia (RI) to formulate a grand strategy or grand design on the arrangement of autonomous regions in Indonesia to be used until the year 2025. From the grand design is the reference for the number of provinces and the ideal districts in Indonesia that gave birth to the division of pemekaran, one of which is the Province of South Sumatra, which is rumored to be divided into 2 (two) with the possibility of the province to be formed is the Province of South-West Sumatera(Sumselbar) or with the possibility of other names namely Musi Raya Province developed as part of the Great Design of the Regions (Desartada) RI 2025. Sumselbar or Musi Raya Province is planned to be 6 (six) districts / cities, namely Lubuk Linggau City, Empat Lawang Regency, Musi Rawas Regency, North Musi Rawas Regency (Muratara), Musi Banyuasin Regency (Muba), and Banyuasin Regency.

The districts and municipalities belonging to the Musi Raya area, especially in Musi Rawas and Musi Banyuasin districts, are based on data having higher numbers and percentage of poor people than the number and percentage of poor people in South Sumatera Province.

Based on the data in the last 4 (four) years can be seen that in terms of poverty rate and the level and number of poverty in the region of Musi Raya every year experienced changes in the increase and
decrease. However, the order of regencies / municipalities did not change, as follows: Musi Banyuasin Regency, Musi Rawas, Lubuk Linggau, Four Lawang, and last Banyuasin Regency.

### Tabel 1: Number And Percentage of Poor People In the Regency / City Region Musi Raya Province of South Sumatera (In Thousands Heads)

<table>
<thead>
<tr>
<th>NO</th>
<th>KABUPATEN/KOTA</th>
<th>JUMLAH/% PENDUDUK MISKIN</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2011</td>
</tr>
<tr>
<td>1</td>
<td>Musi Rawas</td>
<td>97.99</td>
</tr>
<tr>
<td></td>
<td></td>
<td>18.25</td>
</tr>
<tr>
<td>2</td>
<td>Musi Banyuasin</td>
<td>108.84</td>
</tr>
<tr>
<td></td>
<td></td>
<td>18.99</td>
</tr>
<tr>
<td>3</td>
<td>Banyuasin</td>
<td>89.35</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11.66</td>
</tr>
<tr>
<td>4</td>
<td>Empat Lawang</td>
<td>31.32</td>
</tr>
<tr>
<td></td>
<td></td>
<td>13.82</td>
</tr>
<tr>
<td>5</td>
<td>Lubuk Linggau</td>
<td>29.69</td>
</tr>
<tr>
<td></td>
<td></td>
<td>14.43</td>
</tr>
<tr>
<td>6</td>
<td>Musi Rawas Utara</td>
<td>1,105.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>14.80</td>
</tr>
</tbody>
</table>


### 2.2 Total population

The population is the number of population in 6 (Six) districts / municipalities in South Sumatra Province in 2011 until 2017 in units of soul which then dilog to obtain percentage number for the unit becomes equivalent to other variables.

### 2.3 Gross Regional Domestic Product (GRDP)

GRDP is the net value of goods and services produced by various economic activities in an area within a period. Data used in this research is GRDP data at 6 (Six) Regency / City in South Sumatera Province in 2011 until 2017.

### 2.4 Human Development Index (HDI)

HDI is a single composite indicator used to measure the achievement of human development that has been done in a region. Data used in this research is data of HDI at 6 (Six) Regency / City in South Sumatera Province year 2011 until 2017.

### 2.5 Unemployment Rate

Unemployment is a person who enters the
workforce (15 years and above) who is looking for a job, preparing a business, who is not looking for a job. Data used to see unemployment is the ratio of open unemployment to population in 6 (Six) Districts / Cities in South Sumatra Province in 2011 to 2017 (in percentage units).

2.6 Data Source

Sources of data used in this study are secondary data, ie data obtained in the form that has been or has been collected from other sources and obtained from other parties such as literature books, notes or sources related to the problems studied. The data taken is the data of all six districts / cities in South Sumatra.

Research model

The research model in this research is using econometric model of regression of data panel. This equation model will be estimated based on the theory and hypothesis that the poverty rate is influenced by population variables, unemployment rate, GRDP, and HDI.

\[ Y_K = f (X_{JK} \ , X_{TPT} \ , X_{PDRB} \ , X_{IPM}) \]

\[ K = a + b_1JK_t + b_2TPT_t + b_3PDRB_t + b_4IPM_t + e \]

\[ K = \text{Poverty rate} \]

\[ A = \text{constants/intercept} \]

\[ b_1, b_2, b_3, b_4 = \text{variable coefficient number} \]

\[ JK = \text{total population} \]

\[ TPT = \text{unemployment rate} \]

\[ GRDP = \text{Gross Regional Domestic Product} \]

\[ HDI = \text{Human Development Index} \]

\[ I = \text{Regional Zone (City Lubuk Linggau, Empat Lawang District, Musi Rawas District, North Musi Rawas Regency(Muratara), Musi Banyuasin District (Muba), and Banyuasin Regency.} \]

\[ T = \text{years of observation (2011-2017)} \]

\[ e = \text{error/(s)} \]

3 RESULTS AND DISCUSSION ANALYSIS

3.1 Analysis of Classical Assumption Detection With Eviews

Prior to the interpretation of the regression results of the model used, then first tested the classical assumption, to determine whether the model is considered relevant or not. In this study after testing classical assumption that includes data normality test, heteroskedastisitas test, multicolinearity test, and autocorrelation test then based on the results if the data is declared free of assumption test.

3.2 Panel Data Regression Analysis

Panel data regression analysis is used to determine the effect of Population, GRDP, HDI and unemployment rate to poverty level in six districts / cities in South Sumatra in 2011-2015. Based on calculations conducted using Program Eviews then obtained the following results:

1. The constant values is 12.8408000088, meaning if the population, GRDP, HDI, and unemployment rate is 0, then the values of K is 12.840800001003. When adjusted for population data, GRDP, HDI, and existing unemployment rate, each increase of 0 then the poverty rate will be constants at 12.8408000088 in the next year.

2. The regression coefficient of the population variable is -3.605227, meaning that any increase in population of 1 unit will decrease K by -3.605227.

3. The regression coefficient of GRDP is -8.251528, meaning that any increase of GRDP by 1 unit will reduce poverty by 8.251528.

4. The coefficient of variable regression of HDI is -5.217020, meaning every increase of HDI of 1 unit will decrease poverty of 5.217020.

5. Regression coefficient of variable unemployment rate equal to 8.189897, meaning every increase of unemployment rate equal to 1 unit will increase poverty equal to 8.189897.

4 CONCLUSION

This study analyzes how the influence of population variable, GRDP, HDI, and unemployment to poverty level in six districts / cities in South Sumatra in 2011-2015. Based on the description that has been done in the previous
chapters, it can be concluded as follows:
1. Variable of population has positive and significant sign of poverty level. In accordance with the hypothesis, the positive sign indicates that the higher the population, the higher the level of poverty. In addition, the rapid population growth will cause new problems both in social and economic terms.
2. Gross Regional Domestic Product (GRDP) variable has negative and significant sign of poverty level. In accordance with the hypothesis, the negative sign indicates that the higher the GRDP, the lower the poverty level.
3. Variable of Human Development Index (HDI) has a negative sign and significant to poverty level. In accordance with the hypothesis, the negative sign indicates that the higher the HDI, it will reduce the level of poverty. The value of HDI in its calculation includes education, health, and expenditure indicators per capita, so that it can be used as one of the indicators of poverty of a region.
4. The unemployment variable has a negative and insignificant sign to the poverty level. The results are not in accordance with the hypothesis and the previous theories and research that became the theoretical basis of this study. Because as the population is open unemployed there are some kinds of unemployed, those looking for work, those preparing for the business, those who are not looking for a job because they feel unlikely to get a job and the last one who already has a job but has not started work.

5 SUGGESTION

1. Further research is expected to examine other variables besides the variables in this study in order to obtain a varied outcome of anything that affects poverty.
2. Subsequent research can take samples in the narrower scope of the City / District for more accurate research results.
3. The object of research should be more focused in order to really know the variables that affect the level of poverty.
4. Required solutions of large population from year to year, for example with population-oriented development, population-oriented development contains two meanings that are development that is adjusted to the potential and condition of the existing population. Population should be a central point in the development process, the population must be subject and object in development, development is by residents and for the population. This means that development is more emphasis on improving the quality of human resources than infrastructure development alone.
5. From the result of the research, it is found that GRDP have negative effect to poverty level, so that in the future the improvement of GRDP can be balanced with equitable distribution of income oriented equity and equitable distribution of economic results to all community groups, and efforts to increase economic growth in each region by relying on its own potential.
6. Indicators of HDI that describe the human life cycle consisting of educational measures, life expectancy and adjusted per-capita expenditure are crucial to the decline of the poor in the study area, the government needs to design a sustainable program in order to spur up the HDI value by facilitating access education and health especially for the poor.
7. Unemployment based on the results of the study has a negative and significant effect on poverty, with the result is expected more districts / cities to expand the employment opportunities and promote the development of the informal sector, such as home industry.
8. The need for longer time series data usage to know how the influence of government policy in efforts to reduce the poverty level of research areas in particular and South Sumatra in particular.

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