# EFFECTS OF ECONOMIC GROWTH ON POVERTY IN SOUTHEAST SULAWESI PROVINCE

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**Abstract** : This Research in intended know growth of storey level growth of resident economics and impact growth of economics to poorness storey level area of South East Sulawesi Province. Data which used in this research is data of PDRB and impecunious residents amount is each sub-province town South East Sulawesi Province. Data stem from BPS South East Sulawesi Province and Data of Susenas BPS center year 2003 - 2007. Data analysis which used in this research is quantitative descriptive analysis to measure growth of economics with calculation of amount of PDRB constant prices, analysis mount poorness with impecunious residents amount. Whereas approach of economitric used to know impact growth of economics to degradation of poorness storey level. Result of analysis indicate that storey level growth of economics South East Sulawesi Province to mount from year 2003 - 2007. Mount measured poorness with impecunious residents amount show degradation of year 2003-2007. Whereas quantitative analysis result show growth of storey;level growth of economics have influence which isn't it to degradation of impecunious residents amount.

**Index Terms**: Economic Growth, Poverty, Product Domestic Regional Bruto (PDRB)

## 1 INTRODUCTION

Poverty is one of the serious problems faced by almost all countries in the world including Indonesia. It is not surprising if there are many studies on this issue. Unfortunately, there are different approaches and various poverty limits used on these various studies so that there also lead to different results or descriptions on poverty. There are also applied various countermeasures. But currently, poverty can yet solve.

Since the economic crisis in Indonesia, there was a quite large increase on the number of poverty. In national level, there was fluctuated number and percentage of the poor in the period of 1996 – 2006 from year to year. In the period of 1996 – 1999, there was an increase on the number of the poor by 13,96 million people from 34,01 million in 1996 to be 47,97 million in 1999. There was also an increase on the percentage of the poor from 17,47 percent to be 23,43 percent in the same period. In the period of 2000-2005, there was a tendency of decrease on the number of the poor from 38,70 million in 2000 to be 35,10 million in 2005. Relatively, there was a decrease on the percentage of the poor from 19,14 percent in 2000 to be 15,97 percent in 2005. However, in 2006, there was a quite drastic increase on the number of the poor, namely from 35,10 million people (15,97 percent) in February 2005 in to 39,30 million (17,75 percent) in March 2006. There was an increase on the poor in the urban area by 2,11 million, meanwhile in the rural area by 2,09 million (Bappenas, 2007).

Related to the data above, then the issue of poverty is one of the central issues by the Government of SBY-JK. Therefore, one of the main agenda in its government (2004-2009) was a willingness to eradicate poverty either in national, provincial, regency/city or urban level. Such government seriousness could also be seen in the government participation in the declaration of Millennium Development Goals (MDGs), as an effort to decrease the number of the poor in 2015. Before, government of Indonesia has also participated in High Level Conference of Human Development International conducted by United Nation in Copenhagen in 1995. The High Level Conference has issued 10 recommendations and agreement on the main principals in the field of human development signed by 117 presidents and head of government including the President of the Republic of Indonesia. Indonesia has also issued two Acts concerning the endorsement of International Covenant concerning Civil and Political Rights and International Covenant concerning Economic, Social, and Cultural Rights. However, the achievement of human development in Indonesia was still left behind than neighboring countries in ASEAN such as Malaysia, Thailand and Philippines. In the recent *Human Development Report 2005*, Indonesia was in the *Medium Human Development*, namely in the level of 110 out 177 countries.

The description above puts an indication that the government has worked to erase the poverty in Indonesia. Even in 2001, there was conducted Indonesia Human Development Congress to consolidate a national consensus in order to ensure the fulfillment of basic human rights.

However, in its reality, erasing the poverty is not as easy as turning hands. It is not easy and clear to describe various factors causing the poverty. For example, limitation in the work opportunity can be solved by creating work opportunity. However, creating the work opportunity is not that easy to be done, for example by getting loans from foreign financing sources. In fact, Indonesian foreign loans currently have reached more than US$140 billion, but it is not easy for many people, particularly ones without any skills to obtain work opportunity.

According to Akhmad Firman et al (2007), the main cause of poverty in Indonesia should not only be sought in the culture of lazy hard work. It should also consider the whole situ-

ation causing not productive person. The factors of poverty are a combination of internal and external factors. Incorrect development policies are included in the external factors. Meanwhile, limited insight, lack of skills, poor health, and a low work ethic are the internal factors. Internal factors can also be caused by external factors. Poor public health is a sign of poor nutrition. Poor community nutrition is the result of low income. Furthermore, low mastery of science and technology is the result of lack of education. The latter is also in turn the result of lack of income. Lack of income is a direct result of limited employment and so on there are interlinked processes.
Studies by Ravallion and Chen (1997) using data from family income and expenditure surveys in 67 developing countries and transition countries for the 1981-1994 period showed that poverty reduction almost always coincided with an increase in per capita income. Meanwhile, results of Mills and Pernia (1993) study with the same method indicated that there will be lover level of poverty in a country if the economic growth level in previous years is high and higher GDP growth rate will lead to higher decrease on the poverty rate. The same situation was also put forward by Wodon (1999) using regional panel data in Bangladesh; he found out that economic growth reduced poverty rate both in urban and rural areas.

Southeast Sulawesi Province is located in the southeastern island of Sulawesi. Most of the mainland areas are located on the mainland of Sulawesi Island and other islands. The land area of Southeast Sulawesi Province is 38,140 km2 or 25% of the entire Southeast Sulawesi region scattered in several mainland and island areas. While the sea area is 114.879 km2 or 75% of the entire Southeast Sulawesi region. The population of Southeast Sulawesi Province in 2007 was 1,919,273. While the economic growth rate of Southeast Sulawesi Province during in the period of 2005 - 2007 was in the average of 7.31 percent per year. Per capita GRDP based on the current price in 2005 was Rp. 6.62 million, per capita GRDP based on the constant price was Rp. 4.5 million. In 2007, the per capita GRDP increased based on current price by Rp. 8.41 million while the based on the constant price by Rp. 4.58 million. The average rate of economic growth was still high when compared with the average national economic growth rate. Along with the high rate of economic growth, Southeast Sulawesi Province has an inequality of income distribution based on the Gini index by 0.27, which means there was quite inequality of income distribution. (BPS Southeast Sulawesi Province 2007).
This study aims to determine the level of economic growth in Southeast Sulawesi Province, and also to analyze the effects of economic growth on the poverty in Southeast Sulawesi.

## 2.2 Causes of Poverty

As mentioned before, poverty currently is caused of inability to meet minimum standard of living. According to Ginanjar (1996), there are two main factors leading to poverty, namely: cultural poverty and structural poverty. The cultural poverty refers to one or community attitude caused by lifestyle, life habits and culture. Such community group is not easy to participate in the development, has no maximum works to improve their life level so that they obtain low level of income according to the common measure. Through absolute measures, for example minimum income level, they can be said to be poor. But they do not think that they are poor and they do not want to be called as poor. In such conditions, various development policy benchmarks can not easily applied to them. The structural poverty is the poverty caused by imbalance development and distribution inequality. Such poverty can be caused by inequality in production factor ownership and community inability.

According to Sunyoto (2004), sociologically, the dimensions of structural poverty can be traced through institutional arrangements in the community. Its basic assumption is that the poverty can be merely caused by "self-weakness", as known in the cultural perspective. Such poverty is even a consequence of current economic development strategy options and also government policies in the economic development planning and implementation.

## 2.3 Growth and Gap

At the beginning of the development process, there was greater level of income inequality as a result of the urbanization and industrialization process, but subsequently at higher development level of final decreasing inequality development process, namely in rural industrial sector, it can absorb most of labors coming from rural area or there is smaller agricultural target than the production and income creation. From the 1970s to the present, there have been many empirical studies testing on the Kuznes hypothesis by using aggregate data from a number of countries. Among of which were Kravis (1970, 1973), Watkins (1995), Adelman and Morris (1973), Barro (1999) etc. Some important notes from the findings of these studies include: First, most of the studies support the hypothesis of Kuznes while others reject or do not find any correlation. Secondly, although in general the hypothesis is accepted, but most previous studies have shown that the relation between economic growth and equity in the distribution of national income over the long-term period can only be seen in developed or high-income groups. Third, the Kuznes Curve gap tends to be more unstable than the decreased portion of the gap.

## 2.4 Growth and Poverty

There are many studies trying to prove the effects of sectoral output growth on the decreased number of poor. With other words, poverty is not only related to aggregate output growth or GDB or National Income, but it also relates to output growth in economic sectors in individual level. The studies among of which is one by Kakwani (2001). The study is conducted in Philippine and found out that 1 percent output increase in agricultural sector can decrease more than 1 percent number of poor living beyond the poverty line; the same percentage of output growth in industrial and service sectors can only cause decreased poverty in a quarter or third percent. This is different to result of the research by Hasan and Quibria (2002) in 45 countries in east and Southeast Asia, Latin America and Caribbean, as well as Sub-Sahara Africa. The results show higher per capita income level will lead to lower poverty rate. The measurement of poverty rate according to the Central Bureau of Statistics (1994) uses the poor limit of rupiah spent per capita in a month to meet the minimum needs for

food and non-food. For minimum needs for food, it used benchmark of 2100 calories per day. The needs for non-food include expenditures for housing, clothing, and various goods and services. The limit of this poverty line is different between urban and rural areas (Kuncoro, 2000: 116)

## 3 Framework

Economic development is generally defined as a process that will lead to increasing GDP growth of a country / region in a long term manner. Therefore, the indicators of GDP growth success can be seen based on the high increase of sectoral growth and income per capita of the population. Another thing to note is how to reduce poverty levels. Based on the view of the experts above, this research is based on a framework that sectoral growth rate and income increase per capita can increase the growth of GRDP which affects on the reduction of poverty level in an area.

Figure 2. shows that sectoral Growth and Income per capita levels can increase GDP growth that affects on poverty reduction. It is analyzed by using econometric approach. To determine the effects of economic growth on the poverty reduction, it is panel data regression. Regression for panel data is a regression with a combination of time series using regular temporal observation on a unit of analysis at a given point in time with cross-linked place or a unit of analysis at a given point in time with observations over a number of variables. The framework can be presented in a figure below:

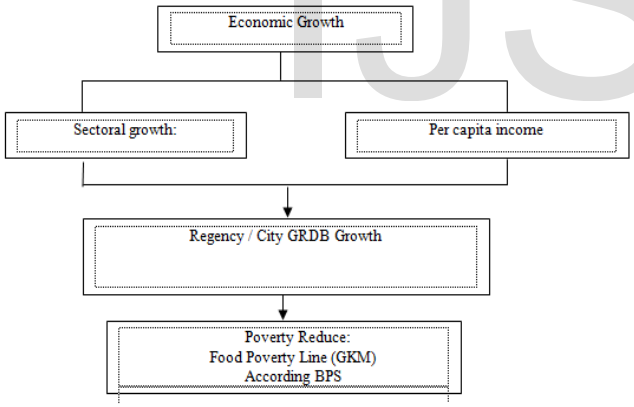


Figure 2. Framework

Notes:

: Classification Relation
: Asymmetry Relation (effects)

## 4 Methodology

This research will be conducted in 8 regencies / cities from 12 regencies in Southeast Sulawesi. in Southeast Sulawesi Province. With the consideration that there are 4 new regencies facing exploitation. The city regencies in question are Buton, Muna, Konawe, Kolaka, South Konawe, North Kolaka, Wakatobi and Bombana while the other two cities are Kendari City and Bau-Bau City.

The data panel regression equation:

$$LogP_{it} = \alpha_{it} + \alpha_2 Log\Delta PDRB_{it} + u_{it}$$

In which:

P = The number of population with consumption level beyond certain minimum expenditure determine central Statistic Bureau
PDRB = Economic Growth
U = Error Value

Subscript i in the intercept indicates that the intercept for some Regencies or cities in Southeast Sulawesi. Subscript t indicates the period of 2003 – 2007

This study uses secondary data namely series data and cross section data obtained from several publication sources. The required data are: (1) the number of poor people with consumption expenditure below the minimum level of minimum expenditure set by the Central Bureau of Statistics of regencies / cities in Southeast Sulawesi (2) Per Capita income by the people in the regencies or cities in Southeast Sulawesi, (3) Growth of agricultural sector in the regencies or cities in Southeast Sulawesi (4) Growth of Industry Sector in regencies or cities in Southeast Sulawesi, (5) Growth of Industrial Sector in the regencies or cities Southeast Sulawesi, (6) Growth of service sector in regencies or cities in Southeast Sulawesi,

Generally by using panel data we will generate the same or different intercepts and slopes of coefficients in each individual, either company, country, or region and every time period. Therefore, in estimating the panel data regression equation, it is highly dependent on the assumptions we make about intercepts, slope coefficients and disturbance variables. (Hsiao, Cheng in Agus Widarjono, 2007: 251).

## 5 Analysis and Results

Data panel regression is a regression with combination of time series data and cross section data. Reason in using this data panel is to increase the number of observation (to solve problems of limited number of time series data). In this study, the analyzed data is economic growth data with GRDB of poverty rate in an area using indicator of the number of the poor in Southeast Sulawesi in 2003 until 2007. In this research, if the estimation indicates an autocorrelation, then it is estimated by transforming dependent and independent variables in the form of first defferent by using eviews 4.0 data processing program. As expressed before, to know the effects of economic growth on the poverty rate in Southeast Sulawesi Province, it is used data panel regression equation model. In this model, there are three methods to be used to estimate the model, namely common effect, fixed effect and random effect. To select which model to be used, it depends on the test results. The intended test is F test to select which common effect or random effect method to be selected. Hausman test is used to determine whether fixed effect or random effect to be selected. In the regression equation based on the model using eviews data processing program, there is estimation or prediction on the mean of required Y on fixed value of X variable based on casual relation in such model from X to Y.

By using the data panel, we will create the same or different intercept and coefficient slope in each individual and regency / city area in Southeast Sulawesi Province and each period of time since 2003 – 2007. Therefore, in estimating the data panel regression equation, it greatly depends on our assumption

about intercept, slope coefficient and nuisance variables (Hsiao, Cheng in Agus Widarjono, 2007:251).

There are some possibilities namely: (1). It is assumed that the interception and slope are fixed during the period of individual and different interception and slope will be described by the nuisance variable. (2). It is assumed that the slope is fixed but the intercept is different among individuals. (3). It is assumed that the slope is fixed but the interception is different both between time and between individuals. (4). It is assumed that the interception and slope differ between individuals. (5). It is assumed that interception and slopes differ between time and between individuals. Based on these assumptions, then there are three methods to be used to estimate the regression model with panel data, namely common effect, fixed effect and random effect methods. The best method for estimating the panel data regression is determined by the testing techniques performed to select the most suitable method on the basis of the model used. The tests are F-statistic test, Langrange Multiplier (LM) test and Hausman test.

**F-statistic Test**

The F-test is used to select between the method, common effect (OLS), dummy variable or fixed effect with dummy variable. Before testing, it previously conduct the regression of two models with assumption that the slope and interception are the same and the model is assumed that the slope is the same but the interception is different. From the two regression models, it will obtain Residual Sum of Squares (RSS). Then, the F-statistic test can be calculated as follow:

$$F = \frac{(RSS_1 - RSS_2)/m}{(RSS_2)/(n-k)} \quad \text{.....5.1}$$

In which:
RSS1 = Residual Sum of Squares without dummy variable
RSS2 = Residual Sum of Squares with dummy variable

The F-statistic value will follow the F statistical distribution with degrees of freedom by m for the numerator and by n-k for the denumerator. M is the number of restrictions or limitation in the model without the dummy variable.

**Langrange Multiplier (LM) test**

The test used in this model in the panel data regression is to find out whether the Random Effect model is better than the common effect model (OLS). This test is based on the residual value of the OLS method. The Langrange Multiplier (LM) statistic value is calculated based on the following formula. :

$$LM = \frac{nT}{2(T-1)}\left[\frac{\sum_{i=1}^{n}\left[\sum_{t=1}^{T}\hat{e}_{it}\right]}{\sum_{i=1}^{n}\sum_{t=1}^{T}\hat{e}_{it}^2} - 1\right]^2 \quad \text{..... 5.2}$$

$$= \frac{nT}{2(T-1)}\left[\frac{\sum_{i=1}^{n}(T\bar{e}_i)^2}{\sum_{i=1}^{n}\sum_{t=1}^{T}\hat{e}_{it}^2} - 1\right]^2 \quad \text{..... 5.3}$$

This test is based on the distribution of *chi-squares* with *degree of freedom* by the number of independent variables. If the LM statistic value is greater than the *chi squares* critical value, then the appropriate estimation for the panel data regression is *random effect* method than the *common effect*. In other way, if the LM statistic value is smaller than the *Chi squares* critical value, then the appropriate estimation for the data regression.

The following test results F to determine the method selected commond effect or fixed effect using the program if the data eviews 4.0 based on estimation with the commond effect to get the value of Sum Sguared resid as follows:

Table 5.1 : F test data with Eviews 4.0

| Dependent Variable: LOG(PEND?) | | | | |
|---|---|---|---|---|
| Total panel (balanced) observations: 40 | | | | |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
| C | 11,572273 | 0.620879 | 18,63928 | 0.0000 |
| LOG(PDB?) | 0.102942 | 0.045460 | 2,264441 | 0,0333 |
| R-squared | 0.994780 | Mean dependent var | | 12,97867 |
| Adjusted R-squared | 0.992284 | S.D. dependent var | | 0,475230 |
| S.E. of regression | 0.041744 | Sum squared resid | | 0.101756 |
| F-statistic | 398,5024 | Durbin-Watson stat | | 1,926940 |
| Prob(F-statistic) | 0.000000 | | | |

While estimation with fixed effect to get Sum sguared resid value obtained by result of data as follows:

Table 5.2: Result of Estimation Data with Fixed Effect

| Dependent Variable: LOG(PEND?) | | | | |
|---|---|---|---|---|
| Total panel (balanced) observations: 40 | | | | |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
| LOG(PDB?) | 0.102942 | 0,045460 | 2,264441 | 0.0333 |
| Fixed Effects | | | | |
| _BAUS--C | -0,602032 | | | |
| _BUTON--C | 0,477999 | | | |
| _KENDARI--C | -0,436229 | | | |
| _KOLAKA--C | 0,450208 | | | |
| _KOLUT--C | -0,450376 | | | |
| _KONAWE--C | 0,442352 | | | |
| _KONSEL--C | 0,118078 | | | |
| _MUNA--C | -0,049080 | | | |
| R-squared | 0.695523 | Mean dependent var | | 4.201820 |
| Adjusted R-squared | 0.604180 | S.D. dependent var | | 0.053250 |
| S.E. of regression | 0.033502 | Sum squared resid | | 0.033671 |
| F-statistic | 7.614398 | Durbin-Watson stat | | 1.108631 |
| Prob(F-statistic) | 0.000010 | | | |

$$F = \frac{(0.101756 - 0.033671/3}{0.033671/37} = 24.93882$$

The F critical value in α = 5 % is 2.86. if the value is compared with the F-count value, then the F count value is greater than its F critical value. It means that the appropriate model to estimate the data panel is the fixed effect model.

Based on the above criteria, then results of F test show that the F statistic value by 24.93882 is greater than the F-table in α 1% or in α 5 %, each of which is 1.60 and 7,61. It means that the H zero hypothesis is rejected. It means that the assumption that interception coefficient, and slope are the same is not applied in this equation. Thus, the appropriate panel data model to analyze the attitude of eight regencies or cities in Southeast Sulawesi is fixed effect model.

Then, to determine whether to use random effect model or model fixed effect model, it depends on results of Hausman test.

From the calculation results using E-Views, it is obtained the Hausman Test value as follow:

$$h = \hat{q}'Var(\hat{q})^{-1}\hat{q} = \text{-10.6896377018}$$

$X^2$ value in α = 5 % with degree of freedom by 2 is 5,99. It means that the random effect model is more efficient than the fixed effect model. The result of estimation with Random ef-

fect is as follows:

Table 5.3. Estimation Results with Random Effect

| | | | | |
|---|---|---|---|---|
| Dependent Variable: LOG(PEND?) | | | | |
| Method: GLS (Variance Components) | | | | |
| Date: 06/26/09 Time: 07:36 | | | | |
| Sample: 2003 2007 | | | | |
| Included observations: 5 | | | | |
| Number of cross-sections used: 8 | | | | |
| Total panel (balanced) observations: 40 | | | | |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
| C | 3.786124 | 0.503777 | 7.515484 | 0.0000 |
| LOG(PDB?) | -0.144916 | 0.081097 | -1.786952 | 0.0821 |
| Random Effects | | | | |
| _BAUS--C | 0.046998 | | | |
| _BUTON--C | 0.000740 | | | |
| _KENDARI--C | 0.046993 | | | |
| _KOLAKA--C | -0.037620 | | | |
| _KOLUT--C | -0.032782 | | | |
| _KONAWE--C | -0.013710 | | | |
| _KONSEL--C | 0.038460 | | | |
| _MUNA--C | -0.049080 | | | |
| GLS Transformed Regression | | | | |
| R-squared | 0.559469 | Mean dependent var | | 4.201820 |
| Adjusted R-squared | 0.535656 | S.D. dependent var | | 0.053250 |
| S.E. of regression | 0.036286 | Sum squared resid | | 0.048717 |
| Durbin-Watson stat | 0.718519 | | | |
| Unweighted Statistics including Random Effects | | | | |
| R-squared | 0.662545 | Mean dependent var | | 4.201820 |
| Adjusted R-squared | 0.644304 | S.D. dependent var | | 0.053250 |
| S.E. of regression | 0.031758 | Sum squared resid | | 0.037318 |
| Durbin-Watson stat | 0.937991 | | | |

Hausman test indicates that the H zero value by 0,50377 is smaller than the chi-squares value at α 5% by 5.99. This means that the appropriate model for analysis is the Random effect model. Based on the F-test and Hausman test above, it can be concluded that the appropriate model to estimate panel data equation in this research is Random effect model.

Before panel data analysis with Random Effect, it previously conducted the classical assumption test. There are three tests performed in this model namely multicolinear test, heteroscedasticity test, and serial correlation test. From the multicollinear test results, it indicates that there are several areas with correlation such as ratio of GDP Bau-Bau city with PDRB Buton regency by 0.051. Similarly, the GRDP of Buton Regency with Kendari City reached 0,038 and then PDRB Kendari with Kolaka Regency by 0.11. GRDP Kolaka with North Kolaka regencies is 0,013. GRDB Konawe with southern Konawe is 0.69 and then GRDB South Konawe with Muna Regency is 0.115 and so on as seen in the estimation result with fixed effect. However, for the purposes of analysis, the multicollinear problem will not interfere with estimation results including for forecasting. This is since the estimation result is not biased (BLUE) because it still produces the minimum variant (Agus Widarjono, 2005: 112).

The second stage test is heteroscedasticity test. In this test, it is assumed that since the behavior between regencies / cities is considered different then it is assumed there is a problem of heteroscedastisitas in the panel data regression model. To overcome this problem, in the estimation, it is used GLS method. In this method, the panel data regression model will be used panel weighted panel data regression (cross section weighted). Thus, the problem of heteroscedasticity can be resolved.

The third stage test is a correlation serial test. In this test, we will know Durbin-Watson value. From the estimation results, it is obtained Durbin-Watson statistical value by 1.926940. Based on the above statistical DW then the equation is in the range not to reject Ho. This means no deviations or serial correlation issues.

Based on the above test results it can be concluded that the model presented is free of any deviations from classical assumptions. Thus, the statistical analysis and hypothesis testing can be done. From result of coefficient substitution using fixed effect model, it is obtained panel data regression equation model as follows:

Coefficient substitutions:

| | |
|---|---|
| LOG(PEND_BAUS) | = 0.04699834883 + 0.1449158341 * LOG PDB_BAUS) |
| LOG(PEND_BUTON) | = 0.0007402070869 + 0.1449158341 *LOG(PDB_BUTON) |
| LOG(PEND_KENDARI) | = 0.0469930107 + 0.1449158341 *LOG(PDB_KENDARI) |
| LOG(PEND_KOLAKA) | = -0.03761980685 + 0.1449158341 *LOG(PDB_KOLAKA) |
| LOG(PEND_KOLUT) | = -0.03278168554 + 0.1449158341 LOG(PDB_KOLUT) |
| LOG(PEND_KONAWE) | = -0.01371007656 + 0.1449158341 LOG(PDB_KONAWE) |
| LOG(PEND_KONSEL) | = 0.0384619523 + 0.1449158341 *LOG(PDB_KONSEL) |
| LOG(PEND_MUNA ) | = -0.04908019289 + 0.1449158341 *LOG(PDB_MUNA) |

The estimation results above indicate that the interception value for regencies / cities in Southeast Sulawesi is different. This situation indicates that there is an initial difference of the growth value of each regency / city in Southeast Sulawesi. The difference can be seen for example between Bau-Bau city and Buton Regency namely by 0.04625 percent, Buton and Kendari City by 0.04616 percent, Kendari City and Kolaka Regency by 0.00928 and so on with other regencies / cities in Southeast Sulawesi. When it is seen from the coefficient value, it appears that each regency / city in Southeast Sulawesi has the same coefficient value. This also indicates that the behavior among regencies / cities in Southeast Sulawesi is assumed to be the same. Based on this, for statistical analysis, the table of regression panel data estimation results is presented below

The estimation result using fixed effect in table 5.4 as follows :

Table 5.4 Panel Data Regression Estimation Results with Fixed Effect Model

| | | | | |
|---|---|---|---|---|
| Dependent Variable: LOG(PEND?) | | | | |
| Method: Pooled Least Squares | | | | |
| Date: 02/24/10 Time: 20:57 | | | | |
| Sample: 2003 2007 | | | | |
| Included observations: 5 | | | | |
| Cross-sections included: 7 | | | | |
| Total pool (balanced) observations: 35 | | | | |
| White cross-section standard errors & covariance (no d.f. correction) | | | | |
| WARNING: estimated coefficient covariance matrix is of reduced rank | | | | |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
| C | 11.57273 | 0.620879 | 18.63928 | 0.0030 |
| LOG(PDB?) | 0.102942 | 0.045460 | 2.264441 | 0.0333 |
| Fixed Effects (Cross) | | | | |
| _KONAWE--C | 0.442352 | | | |
| _KOLAKA--C | 0.450208 | | | |
| _KONSEL--C | 0.118078 | | | |
| _BUTON--C | 0.477999 | | | |
| _KOLUT--C | -0.450376 | | | |
| _KENDARI--C | -0.436229 | | | |
| _BAUS--C | -0.602032 | | | |
| _MUNA--C | -0.049080 | | | |
| Fixed Effects (Period) | | | | |
| 2003--C | 0.056232 | | | |
| 2004--C | 0.005915 | | | |
| 2005--C | -0.038394 | | | |
| 2006--C | 0.011498 | | | |
| 2007--C | -0.035251 | | | |
| Effects Specification | | | | |
| Cross-section fixed (dummy variables) | | | | |
| Period fixed (dummy variables) | | | | |
| R-squared | 0.504780 | Mean dependent var | | 12.92867 |

The table above shows that statistically the ratio of GRDP increase in regency / city has a significant effect on the decrease of the number of poor people in the regencies / cities throughout Southeast Sulawesi. This is indicated by the probability value (F-Statistic) by 0.000030 which is smaller than α 5 percent and α 1 percent.

The contribution of GRDP ratio value increase of regencies / cities to the decrease of the poor population in the regency / city in Southeast Sulawesi can be seen in the Adjusted R-squared value. From the estimation result, it shows that the value of Adjusted R-squared is 0.482299. This number implies that. 48.22 percent decrease in the number of poor districts / municipalities in Southeast Sulawesi is determined by the GDP growth ratio of the regencies /cities. In other words, the effect of GDP growth on the decrease of the poor in Southeast Sulawesi is 48.22 percent. The remaining of 51.78 percent is determined by other variables beyond the model.

When it is seen partially, it appears also that the independent variable (growth ratio of regencies / city GRDB) has a significant effect on the decrease of the number of poor people in the regency / city of Southeast Sulawesi. This can be seen from the variable probability value. Probability of GDP growth ratio of regency / city to the decrease of number of poor population by 0,000030 is smaller α 5 percent (0,005) and α 1 percent (0,001).

The effects of independent variables on the dependent variable can be seen from the sign and the amount of variable regression coefficients. GDP growth ratio of regency / city to the poor has a negative sign, meaning that increasing GRDP growth will reduce the number of poor people. This effect can be seen from the GDP growth regression coefficient by 0.102942 meaning that, if the GDP growth ratio of regency / city increases by 1 percent, it will decrease the number of poor people in the regency / city of Southeast Sulawesi by 0.1029 percent.

Theoretically, this can be b based on estimation results as the parameters of economic growth for each research area that has a positive sign (direction) and a negative (direction). This means that the logarithm of economic growth (logarithmic GRDP) has a negative correlation with the logarithm of the number of poor people. Therefore, overall both for urban and rural areas, the economic growth will decrease the number of poor people.

This research studies on the decrease of the number of the poor caused by the economic growth results based on the GRDB. If the economic growth is distributed to the poor then there will decrease the number of the poor.

Each regional government of regency / city in Southeast Sulawesi Province in general gives much attention to the poverty faced in each area. But, the poverty rate is caused by lack of resource and production factor ownership mainly in capital stock. One with more capital will obtain more income than one with less capital. Income difference is caused by different initial production factor ownership according to the Neoclassic theory that it can be eliminated by an automatic adjustment process. Through the process, the development outcomes will be trickle down and distributed in order to create new balance. If the process still has quite imbalance income difference, then it can conduct the Keynesian approach by tax and subsidy system for the poor.

Tax and subsidy can be used as a tool for income redistribution and decreasing poverty. Though the determination of substantial scope to reduce the poor is not easy, but initial research on the poverty rate of the population simply uses the output of economic growth as a proxy for poverty reduction. In further developments, the output of economic growth is measured by the amount of GRDP. However, to measure the relevance of economic growth to the decrease of the poor, there are other more comprehensive indicators.

On the promotion by the United Nations, the current index of consumption, health, and public education is widely used to measure the development of poverty levels. As the definition of economic development as a process to cause the GRDP of an area increases in the long run over a period of time. Therefore, the indicators of economic development success can also be seen based on the amount of increase in economic growth that can decrease the number of poor people.

The economic development in Southeast Sulawesi Province based on vision and mission aims to achieve a fair and prosperous society. To achieve this goal, it is desired a high economic growth and can be perceived by all levels of society so that the income distribution is not merely in certain layer of community, but also throughout levels; as presented in the Trilogy of development that makes equity and poverty alleviation as the priority.

## 6 Conclusion

From the research on the effect of economic growth on the community prosperity level in Southeast Sulawesi Province during the period of 2003 – 2007, it can draw an conclusion as follow:

1. There is a tendency of increase on the economic growth in Southeast Sulawesi Province in 2003 – 2007.
2. There is a tendency of decrease on the community poverty level in Southeast Sulawesi Province in 2003 – 2007 based on the decrease on the number of the poor from year to year in each regency or city.
3. The increase of economic growth measured based on the amount of GRDB provides negative and significant effects on the decrease of the number of the poor in Southeast Sulawesi Province.

## 7 Suggestion

Based on results of the research, it can deliver the suggestion as follow:

1. Regional Government in regional development policy, not only pay attention to economic growth but also should pay attention to the poverty problem.
2. To reduce the number of the poor in Southeast Sulawesi Province, there should be a continuous work by increasing the per capita income of the population from time to time. To achieve this goal, it is necessary for the community participation in the planning process by accommodating the aspirations of the community through the Regional Representatives Council. This is necessary because the community is the subject as well as the object of the policy to be taken.
3. Other important efforts that can be undertaken by the regional government include increasing the level and degree of public health and providing access to sources of economic progress, such as capital, employment for every member of the community through democratic competition.
4. In order to improve the public welfare in Southeast Sulawesi Province, the government should pay attention to the increase of income per capita and income distribution especially for the poor by providing business facilities, utilizing family labor, providing business capital, education for head of household and giving free treatment to the poor.
5. In order to improve the public welfare in Southeast Sulawesi province in the future is not followed by the decreased number of the poor, the government should make work to provide business capital that is focused to small enterprises, development of family labor, and education of the poor.
6. It is expected to take more in-depth research on any matters relevant to this analysis, particularly on the issue of the effects of economic growth on the decreased poverty in Southeast Sulawesi.

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