

Factor Analysis Affecting the Level of Poverty in the District of Batu Bara

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Abstract The purpose of this study was to determine the effect of economic growth, the unemployment rate, and length of education simultaneously and partially on the number of poor people. This study uses secondary data from the years 2007-2016 using eviews program 7. The analysis technique used is multiple linear regression. Based on the analysis found that economic growth, unemployment, and the length of education simultaneously significant effect on the number of poor people. Economic growth is partially a significant negative effect on the number of poor people, the average length of education is partially a significant negative effect on the number of poor people, while the unemployment rate is partially positive and significant impact on the number of poor people.

Keywords: poverty, economic growth, unemployment, average education

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1. Introduction

Poverty is not a new phenomenon in the economy of a country. It is a social phenomenon which has always been an attribute of developing countries. This phenomenon is also a reversal of the conditions experienced by the developed countries that have the attributes of a modern state. If observed, as if poverty is identical and is always inherent in the structure of the developing countries and become a serious enough problem to get treatment from government officials. And although it has a lot of efforts by government officials to alleviate poverty, but the issue of poverty like to unravel the elusive solution completion.

Admittedly, the government has a great attention to this issue, as evidenced by the various poverty reduction programs that have been run. Apart from the matter agree or not, we can not deny that the problem of poverty does exist around us. Every natural disaster that occurs constantly unmasked persistence of poverty in the urban villages nor the villages affected by the disaster. Every matter of policy "price adjustment" vital needs such as basic electricity tariff increase and the rise in fuel prices, always followed the phenomenon of urban poverty.

In essence, economic inequality or inequality in income distribution between high-income groups and low-income groups and poverty levels or poverty line numbers are two major problems in many developing countries Not least in Indonesia as in [16]. Therefore. It is not surprising that such inequality must always exist in the poor, the developing countries, even the developed countries. It's just what distinguishes from all that is how big the level of inequality that occurs in each country. An indisputable

evidence of the socio-economic level of rural communities in Indonesia is still relatively low, whereas rural areas contribute substantially to the national economy through the contribution of the rural economy sector.

Poverty is the inability of the economy to meet basic needs of food and non-food as measured by expenditure as in [4]. Poverty can be caused by the scarcity of basic needs fulfillment tools, or the difficulty of access to education and employment. The population is said to be poor if it has an average per capita expenditure per month below the poverty line. The poverty line represents the minimum food expenditure needs equivalent to 2100 calories per capita per day plus the minimum non-food requirement that includes housing, clothing, education and health.

In Batu Bara District, the poverty rate of the 2007-2016 decline, but in 2013 increased again in the amount of 468 600 people or 11.92 percent of the state is considered still too high so it is necessary to find the right solution to tackle the problem of poverty. The development of poor people in the district of Batu Bara can be seen in Figure 1.

From the picture above appears that during the period 2007 to 2016 the percentage of poor people in the district of Batu Bara relatively steadily declining, even in the year 2008 a considerable decline of 17.89 per cent which in 2007 amounted to 13.64 percent in 2008. in 2009 through 2012 decline amounted to 11.24 percent in 2012, but the increase was increased to 11.92 percent in 2013.

Several other poverty-causing factors: low local and global economic growth, low level of education and technology mastery, limited natural resources, high population growth, and unfavorable political stability as in [9]. The following is the development of economic growth in Batu Bara Regency.

From Figure 2 shows that the rate of economic growth which increased not by the declining number of poor

people disproportionately. This means that it does not automatically rise with economic growth will impact reduction in the number of poor people in the District of Batu Bara. As happened in 2016 where economic growth rising poverty levels also rose.

Another factor that also affects the level of poverty is unemployment. One of the elements that determine the prosperity of a society is the level of income. The public acceptance is maximized if full employment conditions can be realized. Unemployment will have the effect of reducing people's income, and that will reduce the level of prosperity that has been achieved. The decline in the level of prosperity will lead to other problems of poverty as in [17]. Below is the data on the unemployment rate in Batu Bara Regency.

Based on Figure 3, the unemployment rate in the District of Batu Bara in 2007 until the year 2009

decreased, but increased in 2010. Thus the unemployment rate in the district of Batu Bara is still a problem because it still experiencing fluctuation.

Another factor affecting the poverty rate is the average length of education. The new growth theory emphasizes the importance of the government's role especially in increasing human capital and encouraging research and development to improve human productivity. The reality can be seen by investing in education will be able to improve the quality of human resources shown by improving one's knowledge and skills. The higher a person's level of education, the knowledge and skills will also increase so that will encourage increased productivity work. The low productivity of the poor can be attributed to their low access to education as in [16]. Here is the average state of education in the district of Batu Bara.

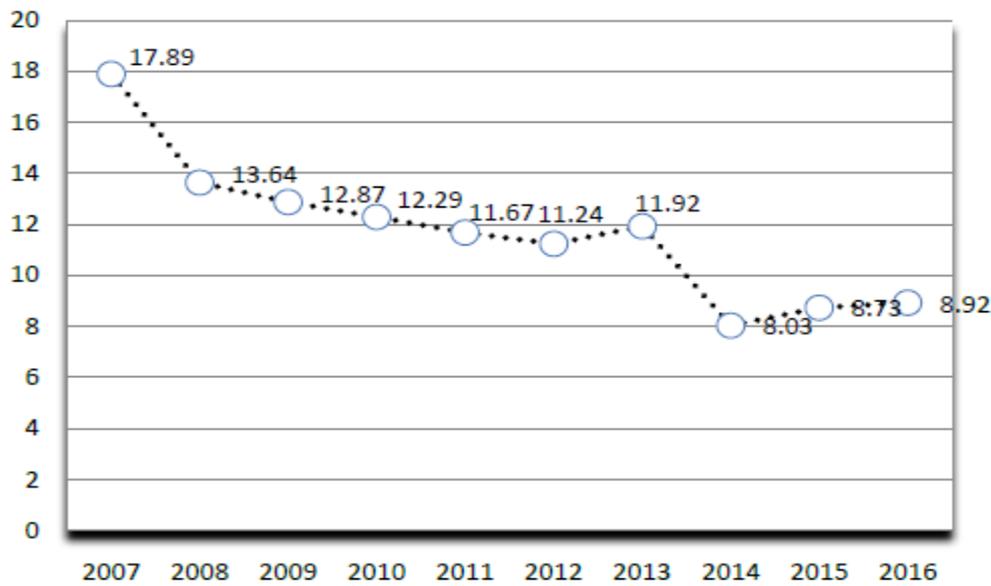


Figure 1. Percentage of Poor People Batu Bara Regency Year 2007-2016 (Source: BPS SUMUT 2007-2016)

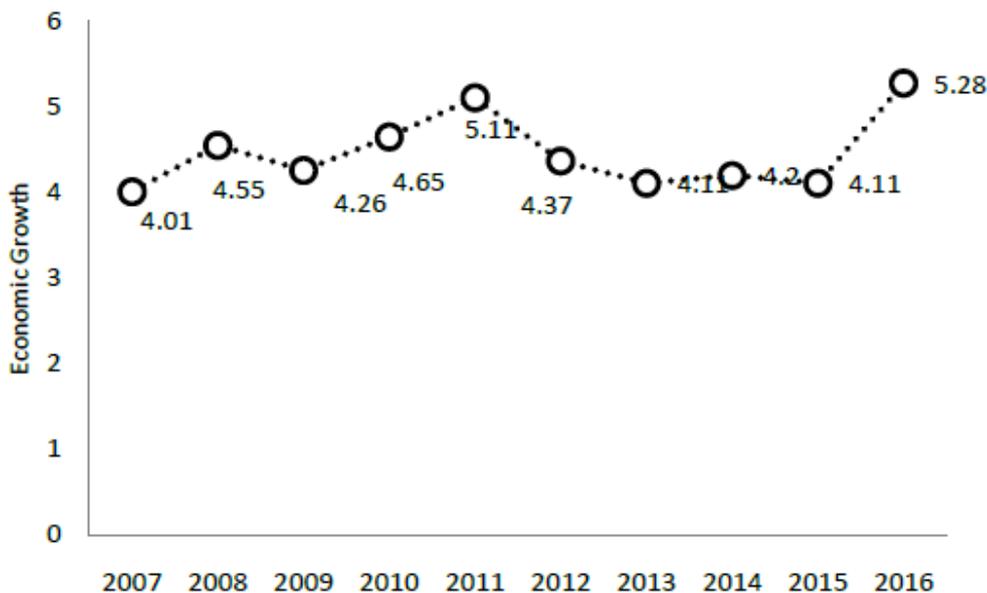


Figure 2. Conditions of Economic Growth in Batu Bara 2007-2016 (Source: BPS SUMUT 2007-2016)

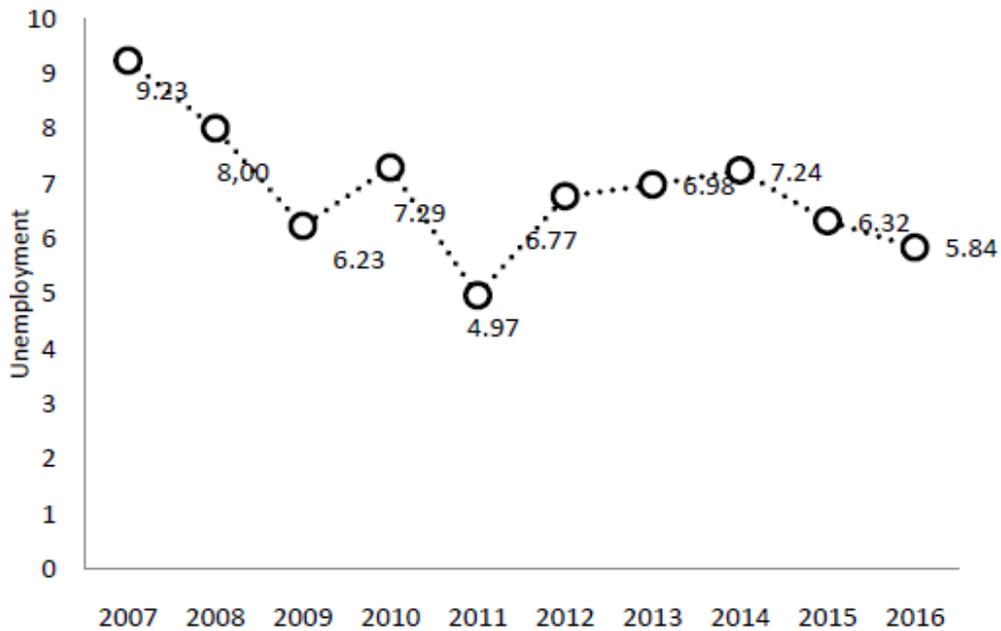


Figure 3. Unemployment in the District circumstances Batu Bara 2007-2016 (Source: BPS SUMUT 2007-2016)

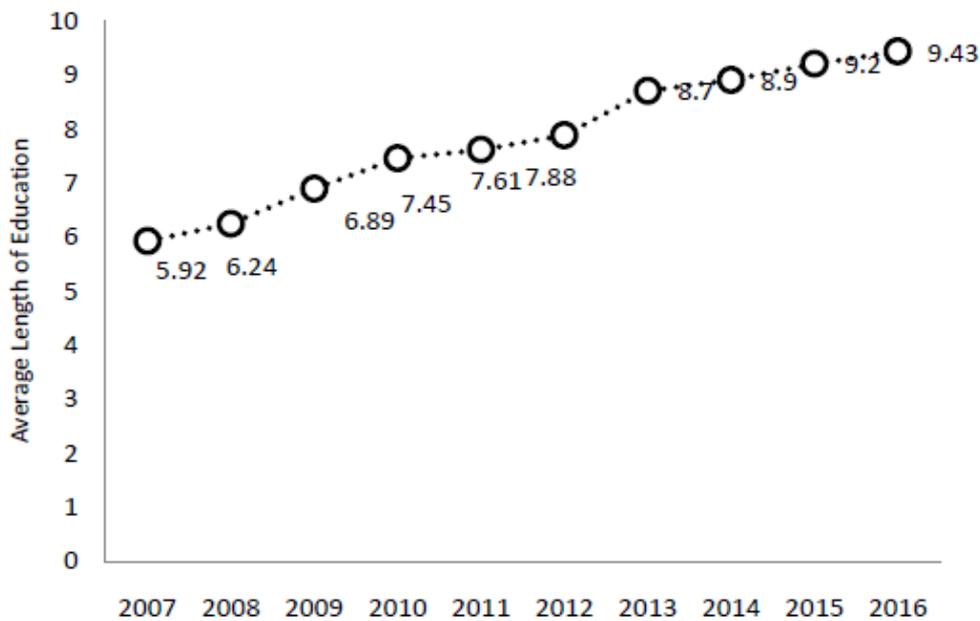


Figure 4. Circumstances Average Length of Education in Batu Bara 2007-2016 (Source: BPS SUMUT 2007-2016)

From Figure 4 we can see that although the quality of education of the population in Batu Bara district during the period 2007-2013 every year continues to increase, but in certain year showed the level of poverty actually increased as in the year 2013 where the percentage of poor people increased from 11.24% in In 2012 to 11.92 percent in 2013. The cause of poverty in economic terms is a result of low-quality source human power as in [8].

2. Theoretical Basis

2.1. Understanding Poverty

Poverty is seen as an economic inability to meet the basic needs of food and non-food which is measured from the expenditure side as in [4]. Poverty according to the

World Bank in 2000 is defined as a condition of deficiency at the level of human life in the form of physical and social as in [21].

Poverty is an integrated concept that has five dimensions: (1) poverty itself (proper), (2) powerlessness, (3) vulnerability to emergency situations Emergency). (4) dependence, and (5) isolation both geographically and sociologically as in [5].

Economic growth is the development of activities in the economy that cause goods and services produced in the community to grow in the long term as in [16]. The use of economic growth indicators will be seen over a considerable period of time, for example, ten, twenty, fifty years or even more. Economic growth will occur if there is a tendency that occurs from the internal process of the economy, that is, it must come from the power that exists within the economy itself. Measures for the advancement

of an economy require appropriate measuring tools, some economic growth measuring tools, among others: (1) Gross Regional Domestic Product and (2) Revenue per Capita as in [17].

2.1.1. Relationship between Economic Growth and Poverty

National economic growth is closely linked to the problem of poverty as national economic growth is said to increase if poverty can be effectively addressed. No one doubts the importance of growth for the reduction of poverty. As in [13,14] reviewing the relationship between growth, inequality, and poverty, note that the impact of growth on poverty reduction occurs only when inequality is high (high inequality). These results can also be interpreted that for any growth rate, the more down the imbalance, the greater the decrease in poverty.

There is no strong empirical evidence to suggest that growth is parallel with improving income distribution. On average, the income of the poorest people increased in proportion to the average income. Yet other studies show that changes in income and changes in inequality have absolutely no relevance as in [6]. They say growth is good for the poor, or at least good for everyone in society.

2.2. Understanding Unemployment

In an internationally defined standard of understanding, what is meant by unemployment is a person who has been classified into a workforce who is actively seeking a job at a certain wage level but can not get the job he wants as in [16].

The number of unemployed according to BPS is the number of people entering the labor force (aged 15 years over) who are looking for work and have not got it. People who are not seeking work, for example, as a housewife, junior high school students, high school, college students, and others who for some reason did not / do not need a job as in [4].

2.2.1. Unemployment Rate Relationship with Poverty Level

Open Unemployment Rate is a number that shows the number of unemployed to 100 population in the labor force category (BPS, 2008). There is a very close relationship between high levels of unemployment and poverty as in [2]. For most societies, those who have no permanent or part-time jobs are among the very poor. Meanwhile, high unemployment rate causes low income which then triggers the emergence of poverty. The loss of employment causes a reduction in most of the revenue used to buy daily necessities as in [22].

2.3. Understanding Education

Based on the Law of the Republic of Indonesia Number 20 The year 2003 on System Education, education is a conscious and deliberate effort to consummate atmosphere of learning and the learning process so that learners are actively developing the potential for him to have a religious spiritual strength, self-control, personality, intelligence, character, and skills required of him. society, nation, and state.

The average length indicated by the higher education formal education achieved by the people of a region. The higher the average length of school means higher levels of education were undertaken. The average length of the school which is the average number of years spent by the population aged 15 years and over in all levels of formal education that followed.

2.3.1. Relationship between Average Length of Education by Poverty

Education serves as a driving force or the driving force of community transformation to break the poverty chain. Education helps reduce poverty through its effects on labor productivity and through social benefit channels, education is an important development goal for the nation as in [21]. Education as a means to gain insight, knowledge, and skills so that job opportunities are more open and wages earned also higher. A low level of education causes a person lacking certain skills necessary in his life. Limitations of education or skills possessed by a person cause the limited ability of a person to enter the world of work as in as in [1].

Someone with a higher education typically has greater access to higher paid jobs, compared to individuals with lower levels of education as in [20]. The same thing is also said by Anderson as in [20] through adequate education, the poor will get a better chance to get out of poverty status in the future. If education investment is conducted equally, including in low-income society then poverty will decrease. Education, in this case, is a proxy with the average length of school as in [10].

3. Research Methods

The type of data used in this research is secondary data is the data that the information obtained indirectly. Secondary data used in this research is time series data (data periodically) in the observation period of 2007 half of 2016 half 1- 2. Sources of data obtained from BPS and Planning Agency.

3.1. Data Analysis Method

This Research Type is Descriptive Research and Causal Research. Descriptive research is a form of research that is intended to describe the phenomena that exist, both natural phenomena and man-made phenomena. Causal research can be used to prove empirically the influence of economic growth, unemployment rate and the average length of education. Causal design is useful for analyzing how a variable affects other variables, and is also useful in experimental studies, where the independent variables are treated in a controlled manner by the researchers to see their effects on their dependent variables directly as in [19].

In this study, the data collected is the GDP, unemployment, education, labor force data, and the poverty data in addition to other relevant data. Data collection is through the study of the documentation, using and studying the data through search through various documents that already exist as well as other documents related to this research.

In this study will explain the effect of economic growth, unemployment, education, poverty in the district of Batu Bara formulated in function:

$$PVTY = \alpha_0 + ECOG^{\alpha_1} + UNPLY^{\alpha_2} + EDCTN^{\alpha_3} + \mu.$$

Furthermore, the function is transformed into ekonometrikanya models are as follows:

$$\log PVTY = \alpha_0 + \alpha_1 \log ECOG + \alpha_2 \log UNPLY + \alpha_3 \log EDCTN + \mu$$

Where:

PVTY = Poverty (percent)

ECOG = Economic growth (percent)

UNPLY = Unemployment (percent)

EDCTN = Education (years)

$\alpha_1, \alpha_2, \alpha_3$ = coefficient of regression

μ = error term.

4. Discussion

4.1. Multiple Linear Regression Analysis

Based on the analysis, regression model is obtained as follows:

$$\begin{aligned} \text{Log PVTY} &= 12.266 - 4.473 \log ECOG + 0.476 \log \\ &\quad UNPLY - 1.703 \log EDCTN \\ \text{Se} &= (1.047) (0.857) (0.083) (0.272) \\ t &= (0.255) (-1.719) (5.689) (-6.258) \\ \text{Sig} &= (0.002) (0.041) (0.001) (0.002) \\ R^2 &= 0.810 \\ F &= 22.86. \end{aligned}$$

4.2. Significance Partial Regression Coefficients (t-test)

4.2.1. Impact on Growth Economic

The value of economic growth coefficient is 4.473 which means that the increase of economic growth by 1 percent can be based on the number of poor people 4,473 percent. The results of this study are not different from the results of a study conducted as in [12] which concluded that there is a strong negative relationship between economic growth and poverty. The relationship between poverty and economic growth shows a negative relationship as in [15].

4.2.2. Impacts on Unemployment Rate Changes

Based on estimates indicate that the unemployment rate has a positive relationship to the level of poverty in the district of Batu Bara. This means that the higher the unemployment rate, it will increase poverty in the district. The regression coefficient variable unemployment rate of 0.476. This implies that if happen 1 percent rise in the unemployment rate will increase poverty 1.467 persen.

The unemployment rate partially positively affects the number of poor people as in [20]. The adverse effect of unemployment is to reduce the income of society which ultimately reduces the level of prosperity one has achieved as in [16]. That there is a very close relationship between high levels of unemployment and poverty as in [2].

4.2.3. Impacts on Old Change Education

The estimation results indicate that long education negatively correlated to the level of poverty in the district of Batu Bara. This means that increasing the length of education population Batu Bara District, the District of Batu Bara level poverty has declined. The regression coefficient obtained for a study period -1 703 where this figure can be interpreted that an increase of 1-year study period will reduce amount population living below the poverty line of 1,703 percent.

In multiple linear regression tests toward the educational variables proxy with the mean school length indicates that education is partially negatively and significantly affect the poverty in Bali Province as in [11]. If in a region or country wants to save itself from the poverty epidemic, then the solution by increasing the level of education as in [18].

5. Conclusions and Suggestions

5.1. Conclusion

Based on regression analysis has been done, it can be concluded as follows: Variable economic growth and the average length of education is partially a significant negative effect on poverty levels in the district of Batu Bara, while the unemployment rate is partially positive and significant impact on the level poverty in the district of Batu Bara.

5.2. Suggestion

Based on the results of the discussion and conclusions that have been given, it can be given some suggestions as follows:

1. Batu Bara District Government must promote economic growth by empowering people with the expertise to provide capital assistance to SMEs in Batu Bara.
2. Batu Bara District Government must establish the obligation to learn 12 years for public education improved Batu Bara District. Due to the increased length of education will reduce the level of poverty in the district of Batu Bara.

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