

THE EFFECT OF GROSS REGIONAL DOMESTIC PRODUCT AND THE RATE OF OPEN UNEMPLOYMENT

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Abstract: *This research aims to determine the effect of (1) Gross Regional Domestic Product and the rate of open unemployment to poverty level, (2) Gross Regional Domestic Product to poverty level, (3) the rate of open unemployment to poverty level, and (4) Gross Regional Domestic Product on the rate of open unemployment in Banyuasin Regency, South Sumatra Province, Indonesia. The objective of this research is to investigate the gross regional domestic product influenced the poverty and unemployment in Banyuasin Regency. This research uses a causal quantitative research design. The subjects of this research are Banyuasin Regency, and the object are Gross Regional Domestic Product, the rate of open unemployment, and poverty level. The time series data from 2010-2015 using monthly data. The data collected is using document recording technique. The data were analysed by using path analysis by SPSS. The results of this research showed that (1) there was an effect of Gross Regional Domestic Product and the rate of open unemployment to poverty level is 64.4 percent contribution, (2) there is influence from Gross Regional Domestic Product to poverty level is 47.1 percent contribution, (3) the influence from rate of open unemployment to poverty level is 7.0 percent contribution, and (4) there is a negative influence of Gross Regional Domestic Product on the rate of open unemployment in Banyuasin Regency is 7.4 percent contribution.*

Keywords: *Gross Regional Domestic Product, the rate of open unemployment, and poverty level.*

Introduction

The name of poverty arises when a person or group of people are unable to sufficient their economic level that is considered minimum requirements of a certain standard. Poverty is closer to the limited employment where normally people who do not have jobs are categorized as poor people (Central Bureau of Indonesia's Statistics or BPS, 2016). To solve poverty problem is can't be apart from education and unemployment problems. Name of poverty arises

when a person or group of people cannot afford to fulfil their daily needs during their lifetime. Poverty can also be said to be a lack of money and goods to ensure survival. Many factors such as investment, economic growth, unemployment, education, and poverty are intertwined with each other where poverty has been a major concern in the development of social policy (Alcock, 2014). According to Galor (2011), poverty will be the opposite of individual's ability to stay healthy and develop their skills. Poverty problem is prolonged problem until now. The causes of poverty from the economic side are the poor people have limited resources and low quality, differences of human resources quality, low quality means that productivity is low so that it affects the wages received, and there is a difference in access to capital.

According to Todaro (2014), the problem of poverty actually can be solved through development to reach the better and equitable economic growth. Economic growth is the key to poverty reduction in a region. With the increase from economic growth indicates an increase in the welfare of the community so as to reduce poverty levels. One of the indicators in the level of economic growth in a region is the level of Gross Regional Domestic Product which is the net value of goods and services produced by various economic activities in an area within a period. The higher of Gross Regional Domestic Product in the region, the greater revenue sources potential in that area. The reality is Gross Regional Domestic Product has an effect on the number of the workforce working with Gross Regional Domestic Product growth rate increases, then the amount of added output in the overall economic unit in a region will increase. The increased output will cause an increase in the number of employees demanded (unemployment decreased) and can reduce poverty.

Banyuasin Regency is one of the districts located in South Sumatra Province, Indonesia. Number of Population and Population Density by Subdistricts in Banyuasin Regency was 799.998 peoples in year 2014 and increase 811.501 peolpes in year 2015. The poverty line and number of poor people in Banyuasin Regency in the year 2010 to 2015 is always changing (see table 1).

Table 1. The Poverty Line and Number of Poor People in Banyuasin Regency, 2010–2015

Year	Poverty Line (Rupiah)	Number of Poor People	
		Total	Percentage
2010	235,431	93,014	12.40
2011	256,821	89,300	11.70
2012	267,600	87,900	11.27
2013	281,336	97,100	12.28
2014	287,842	95,380	11.88
2015	311,716	100,640	12.45

(Source: BPS-Statistic Banyuasin Regency, 2016)

Development that has been implemented in Banyuasin Regency during this time is actually not much different from the development of other areas implemented in the entire territory of the Republic of Indonesia. The expectations that want be achieved, is able to improve the standard of living and create a more equitable income of the community and expand employment opportunities. The Government of Banyuasin Regency has been working to create and implement various policies and programs for poverty reduction. However, the policies and programs implemented have not shown optimal results. Therefore, it needs countermeasure strategy integrated poverty, integrated and synergistic so that it can solve the problem. Based on Central Bureau of Indonesia's Statistics (2016), poverty rate, Gross Regional Domestic

Product growth, and the rate of open unemployment in Banyuasin Regency fluctuated. The poverty rate in 2014 is 5.19 percent increased to 6.31 percent in 2015. But on the other side, the GRDP growth rate in 2014 is 6.52 percent increased to 6.71 percent in 2015. The increase in Gross Regional Domestic Product growth rate is accompanied by a decrease in the open unemployment rate in 2014 is 3.15 percent to 2.13 percent in 2015.

The objective of this research is to investigate the gross regional domestic product influenced the poverty and unemployment in Banyuasin Regency.

Literature Review

Gross Regional Domestic Product is the net value of goods and services produced by various economic activities in an area in the period. Gross Regional Domestic Product is the total of the net economic output value generated by all economic activities in a particular region and within a certain period of time. Gross Regional Domestic Product is also defined as the amount of added value generated by all business units within a given area or represents the sum total of all goods and services end produced by all economic units in an area. Gross Regional Domestic Product at current prices represents the value added of goods and services calculated using the prevailing prices every year, while GRDP on constant prices shows the added value of the goods and services calculated using the prevailing price at one particular time as the base price (Stimson et.,al, 2002).

There are two methods that can be used for count Gross Regional Domestic Product, first, the Direct Method is a calculation based entirely on regional data. The calculation results cover all products and final services produced by the area, which are made through the production approach. Second, the Indirect Method is calculating the added value of an economic group by allocating national added value to each economic activity group at the regional level.

Gross Regional Domestic Product at constant prices shows the added value of goods and services calculated using prices in a given year. In the calculation of Gross Regional Domestic Product on the basis of constant price factor price in the current year / pertinent has been issued first, in other words, all production and cost between in the current year are calculated by using the price in the base year. With this base year can be seen the result of the production in a region that is the production of goods and services from sectors that play a role in the economy. Economic growth is shown by the growth rate of Gross Regional Domestic Product at constant prices which represents the growth of goods and services produced by all sectors that play a role in economic activity. Gross Regional Domestic Product growth rate is the average growth rate calculated from all sectoral growth. Gross Regional Domestic Product at current prices is used to indicate the size of the economic structure and the role of economic sector (BPS, 2016). This research used Gross Regional Domestic Product data for 2010 constant price based on secondary data from BPS. According to Todaro (2014), unemployment is a condition where a person belonging to the workforce wants to get a job but they cannot get it. Unemployment might be caused by imbalances in the labor market. This thing shows that workforces offered to exceed the amount of labor demanded. According to BPS (2016), Unemployment is a person who in the labor force (15 to 64 years) that do not have a job and they are actively looking for jobs. If there is a person who does not have a job, but that person is not actively looking for a job, the person cannot be said as unemployment. International Labor Organization (2012) defined understanding standards, unemployment is someone who has been classified in the

labor force who is actively looking for jobs at a certain wage level, but they can Gross Regional Domestic Product not get a job like what they want.

Open unemployment is a part from workforce that is not working or looking for a job, both for those who have never worked or who have ever worked, or is preparing for a business, those who are not looking for a job because they feel it is impossible to get job, or those who already have a job but they have not started to work. Unemployment is related to poverty where many people are unemployed (do not have income; job) and then many people or society become a low economic. The definition of poverty according to According to Duflo & Abhijit (2011) is the inability to have choice of life choices, among others, by incorporating non-existent assessments in public policy determined as an indicator of poverty. Poverty is a problem in all countries, such as in developing countries like Indonesia. This is because poverty is multidimensional which is means there are various of human needs, poverty also has many primary aspects of poor assets, socio-political organizations, knowledge, and experience and secondary networks of social networks, financial resources, and information. These dimensions of poverty are manifested in the form of malnutrition water healthy housing poor health care, and low levels of education. Economically poverty can be seen from the level of lack resources that can be used to meet the needs of life and improve the welfare of a group of people. Politically, poverty can be seen from the level of access to power that has an understanding of the political system that can determine the ability of a group of people in reaching and using resources. Socially, psychology, poverty can be seen from the lack of networks and social structures that support the opportunity to increase productivity.

A research that related to the effect of Gross Regional Domestic Product, education, and unemployment on poverty in Bali Province, Indonesia is done by Made Astrini and Putu (2013). By using multiple linear regression methods showed that rate of GRDP growth, literacy rate, and unemployment rate simultaneously have a significant effect on poverty level in Bali Province. Partial testing shows negative and insignificant Gross Regional Domestic Product results on poverty levels in Bali Province, it is because most of the economic growth in Bali is supported by the tertiary sector, while the population in Bali mostly working in the agricultural sector, so the entire population of Bali increasingly lame most enjoyed by tourist. The literacy rate partial test has a negative and significant effect on poverty Bali Province. This is because the higher literacy rate will reduce the illiteracy rate. The partial test of the open unemployment rate has a positive and significant effect on the poverty level in Bali Province. This is because the lower unemployment, then the poverty will decrease. Kurniawan (2013) do a research related to the gross domestic product, minimum wage, and inflation of open unemployment rate in Malang City 1980-2011. The result of multiple linear regression analysis shows Gross Regional Domestic Product and inflation have a negative effect with open unemployment in Malang City, it means an increase of Gross Regional Domestic Product and Inflation in Malang have an effect to the decrease in a number of open unemployed. While minimum wage city or district has a positive effect on open unemployment in Malang, it means an increase of minimum wage in Malang make a number of open unemployment become higher. Based on literature review and previous research, the conceptual framework in this research is about poverty by two variables, economic development such as GRDP and unemployment rate. Then those variables as independent variables and together with the dependent variable poverty measured by means of regression analysis to obtain the level of significance. With the regression, the result is expected to get the level of significance of each independent variable in affecting poverty. Furthermore, the significance level of each independent variable is expected to provide an overview to the government and related parties about the causes of

poverty in Banyuasin Regency to be able to formulate a relevant policy in efforts to alleviate poverty.

Mosikari (2013) do a research the effect of unemployment rate on gross domestic product in South Africa. This study investigates the effect of unemployment on gross domestic product in South Africa. The annual time series used for the estimation cover the period 1980-2011. Using Augmented Dickey-Fuller (ADF) stationarity test, the variables proved to be integrated of order one. Johansen cointegration test was applied to determine the presence of cointegrating vectors in the variables. Also, Granger causality test was applied, it was found that there is no causality found between unemployment rate and GDP growth. Finally, this study encourages all policies on economic growth with the idea that growth will bring employment in South African economy.

Meidani and Zabihi (2011) study the dynamic effect of unemployment rate on per capita real GDP in Iran. The study intends to offer a thorough statistical investigation of the joint dynamics of output and unemployment rate. Their study covered the period 1971 to 2006, using Auto-regressive Distribution lag (ARDL). The results of ARDL long run coefficients reveal that unemployment rate is statistically significant in determining per capita real GDP in the long-run. Based on the results of short run and long run, unemployment rate is positively related with per capita real GDP.

Methodology

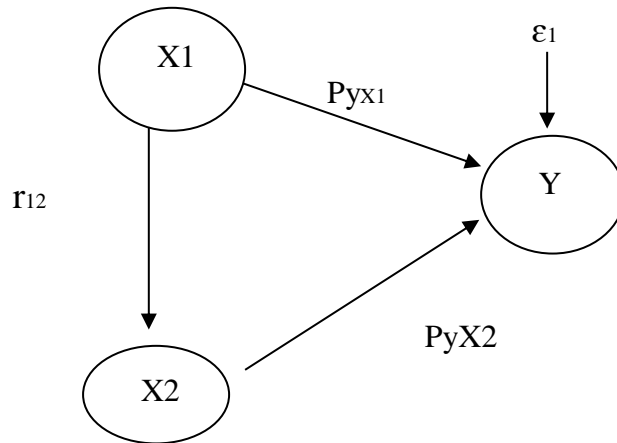
The location of this research is in Banyuasin Regency, South Sumatera Province. The focus of this research is Gross Regional Domestic Product (X_1), open unemployment rate (X_2) and poverty level (Y). In this research, the research design uses a causal research design that describes a generalization or explains the causal relation and the influence of Gross Regional Domestic Product and the unemployment rate the poverty level. The type of data in this research is secondary data, it is the monthly data from 2010 until 2015 that covers Gross Regional Domestic Product growth rate data, the rate of open unemployment, and poverty level from Central Bureau of Indonesia's Statistic. The data is collected by using document recording technique. The analytical tool that uses in this research is path analysis. Path analysis result with Statistical Package help for Social Science (SPSS). Path analysis basically examines the direction of relation through the postulation of some theoretical relationship between variables and then a test to see if the direction of these relationships is substantiated by the data (Salkind & Samuel, 2011). Especially for the SPSS program regression analysis menu, the part coefficient is shown by output called Coefficient which is declared as Standardized Coefficient known as Beta value. If there is a simple path diagram containing an element of the relationship between exogenous variables and endogenous variables, then the part coefficient is the same as the simple r correlation coefficient.

There are some rules in SPSS testing:

- If probability value is bigger at 0.05 point or same with sig. probability value [$0.05 \geq \text{Sig}$], so H_0 will be rejected and H_a be accepted, and it means significant.
- If probability value is smaller 0.05 point or same with Sig probability value [$0.05 \leq \text{Sig}$], so H_0 will be accepted and H_a be rejected, and it means not significant.

In the model below, two exogenous variables of gross domestic product (X_1) and open unemployment rate (X_2) in the model are correlated and have a direct or indirect impact on

endogenous variables (Y). Endogenous variables are also influenced by factors outside the model (including measurement error) denoted by "e".



Picture 1. Path Analysis model

Findings and Discussion

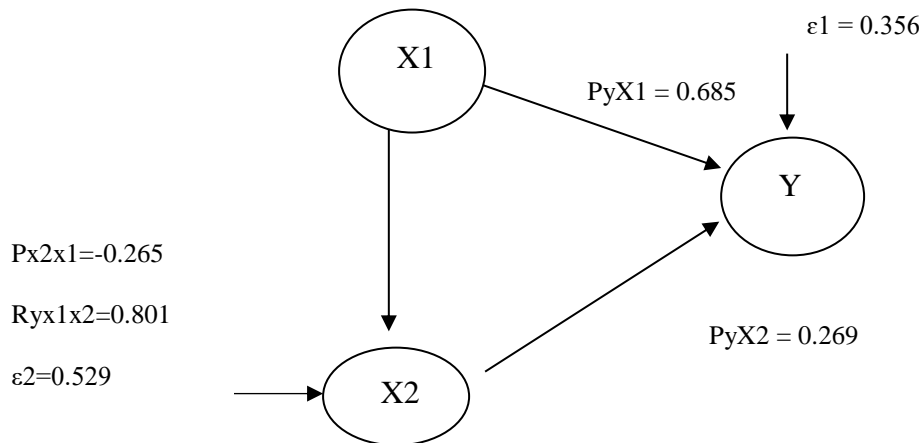
This is the result of Path analysis:

Table 2. The Result of Statistical Path Analysis Test

Parameter	Coefficient	P-Value	Alpha (λ)
RyX1X2	0.801	0.000	0.05
R2yX1X2	0.644	0.000	0.05
PyX1	0.685	0.000	0.05
P2yX1	0.471	0.000	0.05
PyX2	0.269	0.002	0.05
P2yX2	0.070	0.000	0.05
PX2X1	0.265	0.040	0.05
P2X2X1	0.074	0.040	0.05
ϵ_1	0.529		
ϵ_2	0.356		

(Source: SPSS output results of research data 2017)

Based on the results of processing data in table 2, it can be made a path analysis chart like below:



Picture 2. Path Analysis

The results of this research can be analyzed as below:

- (1). There is an influence of Gross Regional Domestic Product and the rate of open unemployment to poverty level in Banyuasin Regency in 2010 until 2015. This is seen from the coefficient $R_{yx1x2} = 0.801$ with p-value $(0,000) < \alpha (0.05)$. The effect of Gross Regional Domestic Product and the rate of open unemployment to the poverty level in Banyuasin is shown by the coefficient of determination (R^2_{yx1x2}) of 0.644. This result means that 64.4 percent of poverty level in Banyuasin is simultaneously influenced by Gross Regional Domestic Product (GRDP) and The Rate of Open Unemployment, while the rest of 0.356 or 35.6 percent is influenced by the other variables that not examined in this research.
- (2). Gross Regional Domestic Product effect to poverty rate at Banyuasin Regency in 2010 until 2015 which can be known from $P_{yX1} = -0,685$ with p-value $(0.000) < \alpha (0.05)$. The total effect of Gross Regional Domestic Product on the poverty level is 0.471 or 47.1 percent.
- (3). There is an influence on the rate of open unemployment to the poverty level in Banyuasin Regency in 2010 until 2015. The result of data processing shows the calculation of $P_{yX2} = 0,272$ with p-value value $(0.002) < \alpha (0.05)$. The total effect of the open unemployment rate to poverty level is equal to 0.070 or 7.0 percent.
- (4). There is an effect of Gross Regional Domestic Product to the rate of open unemployment at Banyuasin in 2010 until 2015 where in the Table 1 is obtained the result of $P_{x2x1} = 0.265$ with a p-value $(0.000) < \alpha (0.05)$. The total effect of Gross Regional Domestic Product on the open unemployment rate is 0.074 or 7.4 percent.

Conclusions and Managerial Implications

Based on the results of research and discussion in the previous chapter, it can be concluded as below:

1. Gross Regional Domestic Product and the open unemployment rate to the poverty level in Banyuasin Regency from 2010 until 2015.
2. Gross Regional Domestic Product has an effect on the poverty level in Banyuasin Regency from 2010 until 2015.

3. The rate of the open unemployment has an effect on the poverty level in Banyuasin Regency from 2010 until 2015.
4. Gross Regional Domestic Product has an effect on the open unemployment rate in Banyuasin Regency from 201 until 2015.

The results of this research is giving contribution to the managerial implications of Banyuasin Government in order to optimize 10 sectors in Gross Regional Domestic Product, they are (a) Agriculture, Forestry and Fisheries (b) Mining and Quarrying (c) Manufacturing Industry (d) Electricity and Gas Utilization, (e) Water Supply, Waste Management, Recycling Waste (f) Construction (g) Large and Retail Trade; Car and Motorcycle Repair (h) Transportation and Warehousing (i) Provision of Accommodation, food and beverage (j) Information and communication. These ten sectors of Gross regional Domestic Product can be optimized for example providing training to become self-employed and creative entrepreneurs. The government of Banyuasin Regency is expected to increase labor productivity through skills training and expand employment opportunities so that the number of open unemployment can be reduced and impact on the decreasing of the poverty level in Banyuasin Regency.

References

- Alcock, Pete & Margaret May. (2014). *Social Policy in Britain* (4th edition). England: Falgrave Macmillan Publisher.
- Astrini, Ni Made Myanti & Ida Bagus Putu Purbadharmaja. (2013). Pengaruh PDRB, Pendidikan dan Pengangguran terhadap Kemiskinan di Provinsi Bali, Indonesia. *E-Jurnal EP Unud*, 2 [8] :384-392 ISSN: 2303-0178.
- Badan Pusat Statistik. (2016). Kabupaten Banyuasin Dalam Angka. Badan Pusat Statistik Kabupaten Banyuasin, Katalog BPS: 1102001.1607
- Blades, François Lequiller, Derek (2006). *Understanding national accounts* (Reprint. ed.). Paris: OECD. p. 112. ISBN 978-92-64-02566-0.
- Dawson, Graham (2006). *Economics and Economic Change*. FT / Prentice Hall. p. 205. ISBN 0-273-69351-4.
- Duflo, Esther & Abhijit Banarjee. (2011). *Poor Economics*. US: PublicAffairs Publisher.
- Galor, O. (2011). *Unified Growth Theory*. Princeton, New Jersey: Princeton University Press.
- International Labor Organization. (2012). *World of Work Report 2012*. Retrieved 2012, from: http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_179453.pdf
- Kurniawan, Roby Cahyadi. (2013). Analisis Pengaruh PDRB, UMK dan Inflasi Terhadap Tingkat Pengangguran Terbuka di Kota Malang Tahun 1980-2011. Retrieved from: <http://download.portalgaruda.org/article.php?article=188813&val=6467&title=Analisis%20Pengaruh%20PDRB,%20UMK,%20dan%20Inflasi%20Terhadap%20Tingkat%20Pengangguran%20Terbuka%20di%20Kota%20Malang%20Tahun%201980-2011>
- Levinsohn J. (2008) "Two Policies to Alleviate Unemployment in South Africa", CID Working Paper No. 166, Center for International Development, at Harvard University.
- Mankiw, N. G.; Taylor, M. P. (2011). *Economics* (2nd, revised ed.). Andover: Cengage Learning. ISBN 978-1-84480-870-0.
- Meidani A.N and Zabihi M. (2011). The Dynamic Effect of Unemployment Rate on Per Capita Real GDP in Iran. *International Journal of Economics and Finance* Vol. 3, No. 5; October 2011.

- Mosikari, Teboho. (2013). The Effect of Unemployment Rate on Gross Domestic Product in South Africa. *Mediterranean Journal of Social Sciences* with 537 Reads DOI: 10.5901/mjss.2013.v4n6p429
- Salkind, Neil J. & Samuel Green. (2011). *SPSS QuickStarts*. Britannia: London. Pearson Publishing Ltd.
- Stimpson, Robert J., Stough, Roger R., Roberts, Brian H. (2006). *Regional economic development: Analysis and Planning Strategy*. Berlin: German. Springer-Verlag Berlin Heidelberg.
- Todaro, Michael P. (2014). *Economic Development*. (12th edition). London: Trans-Atlantic Publications.