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EFFECT OF LABOR PRODUCTIVITY ON POVERTY IN WEST KALIMANTAN

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Abstract

The purpose of this study was to determine the effect of labor productivity on poverty, economic growth and GDP per capita in West Kalimantan, and to determine the effect of economic growth and GDP per capita on poverty in West Kalimantan. The variables used are poverty level, labor productivity, economic growth and GDP per capita of 14 districts / cities in West Kalimantan from 2008-2017 sourced from the Central Statistics Agency of West Kalimantan. Analysis used by using path analysis. The results show that labor productivity has a negative and significant effect on poverty. Labor productivity partially has a positive and significant effect on economic growth and GDP per capita, while economic growth and GDP per capita have no partial effect on poverty, and a greater direct effect on labor productivity on poverty in West Kalimantan than indirect effects either through economic growth and GDP per capita.

INTRODUCTION

Poverty is one of the problems in every country both in developed and developing countries. Indonesia as a developing country and a country with a large enough population must be more active and serious in dealing with poverty. Increased levels of poverty include declining productivity, employment that is difficult to obtain, low levels of education of family heads, and limited access to capital or cash (Kaplale, 2012). The low Human Development Index (HDI) will result in low work productivity because labor productivity will have an impact on economic growth or GDP per capita of a region. Good economic growth is the main requirement to overcome prosperity, there are several factors that cause economic growth in different regions, including natural resources and human resources owned and the technology used by these regions is different. Speaking of output will not be separated from the production system sourced from 3 (three) components namely, natural resources, human resources and capital or factors of production, of the three factors will produce high economic growth, if supported by various factors such as productivity high, meaning that productivity is an important one for the economic activities of a region in the long run, because with low labor productivity will have an impact on income, low income will have an impact on purchasing power and welfare. Therefore high economic growth is one of the causes of high labor productivity (Asyad in the Measurement of Regional Sectoral National Productivity, 2016).

Poverty alleviation efforts must be carried out comprehensively, cover various aspects of community life, and be implemented in an integrated manner. One factor according to Kaplale (2012), increased poverty levels

include declining productivity, employment that is difficult to obtain, low levels of education of household heads, and limited access to capital (cash). Poverty alleviation has become a fundamental development goal so that it becomes a measurement tool to assess the effectiveness of various types of development programs. The West Kalimantan provincial government realizes that development is one of the efforts to become a just and prosperous community goal. Therefore, one of the main indicators of the success of national development is the rate of decline in the number of poor people. In West Kalimantan poverty is also one of the problems, according to the Central Statistics Agency (2018) the number of poor people or residents with per capita expenditure per month below poverty in West Kalimantan is 7.37%, although this figure has decreased from the previous year which is around 7.84%. But when compared to other Kalimantan islands, West Kalimantan is still the highest with its poor population, so this poverty problem for the West Kalimantan provincial government should be a top priority.

Productivity, economic growth, GDP per capita is one of the factors that have an impact on poverty and is interrelated in an area, as evidenced by Amera et al (2017) research, showing that agricultural productivity has a positive impact on welfare growth for non-poor households, it has a negative impact on poor households. Agustini & Kurniasih (2017) found that economic growth had a negative and significant effect on the number of poor people in 10 districts / cities in West Kalimantan. Emsina (2014) that economic growth in the period before the crisis and the first phase of the post-crisis period has a relationship but not strong. However, increased productivity during the crisis was the economic driver afterwards. According Siregar (2008) states that economic growth is a necessary condition (necessary conditions) for poverty reduction. Cholakkal (2013) says that productive labor is an important factor for a country's economic and social welfare. A productive workforce is an optimal population with well-integrated education and health, it is proven that this productive workforce is one of the answers why Kerala has achieved high social development and can reduce poverty.

Likewise, according to Schneider & Gugerty (2011), in his research suggested that there are several pathways through which increased agricultural productivity can reduce poverty. Yagi et al (2018) suggested that one of the reasons for the slowdown in TFP (Total Factor Productivity) was the technological stagnation that links the slowdown with the lack of creation of innovative technology as a source of economic growth. Owyong (2015) suggests that as countries become more advanced and move closer to the limits of accumulation of factors, they increasingly depend on increasing productivity to sustain the process of economic growth. Policy makers and economists alike have begun to recognize more fully the importance of technology and productivity in economic growth. Niyimbanira (2017), found that economic growth reduces poverty but not income inequality in South Africa. According to Mughal & Rehman (2016), in general poor people face many obstacles and

difficulties in dealing with the non-agricultural economy for employment. While Ebunowua and Yusuf's research (2018) found that GDP illustrates a negative relationship between economic growth and poverty incidents, while unemployment is related. In addition there are several studies on per capita GDP on poverty including the Sudiharta & Sutrisna (2014) study, which in his study found that per capita GDP variables affect poverty in the province of Bali. Likewise, Susanti's research (2013) found that GDP significantly affected poverty in West Java in 2009-2011. Giovani (2018) found that GDP had an effect on poverty in Java in 2009-2016.

Because of the background and some of the results of previous studies several studies have shown that examining the effect of labor productivity on poverty by using existing labor productivity values from the Central Statistics Agency, while in this study using data on development results between GDP per capita on the basis of price constant to the number of workers employed per district in West Kalimantan using 140 (time series) data with 4 (four) variables. In addition, some studies also use independent and dependent variables, but in this study add intermediate variables to find out how much influence the independent variable has on the dependent variable and also to find out the independent effect through the intermediate variables on the dependent variable. To determine the effect of labor productivity on West Kalimantan's per capita GDP. To find out the effect of labor productivity on West Kalimantan poverty. To find out the effect of economic growth on West Kalimantan's poverty. To find out the effect of per capita GDP on West Kalimantan poverty. With the aim of this research as a reference and consideration especially for the development of knowledge about labor productivity and poverty in the years ahead, besides that it is also a material for information, consideration and input for the government of West Kalimantan in making policies to reduce the number of poor people in West Kalimantan .

RESEARCH METHODS

Object of research

The location of this study takes research in the area of West Kalimantan Province with the consideration that the population growth of West Kalimantan is greater than the population on other Kalimantan Island. This research was conducted in 14 (fourteen) Regencies / Cities in West Kalimantan with data on the percentage of poor population, labor productivity, economic growth and GDP per capita.

Data Types and Sources

The type of data used in this study is secondary data sourced from the website of the Central Statistics Agency of West Kalimantan Province, the data consists of the percentage of poor population in regencies / cities in West Kalimantan, labor productivity in regencies / cities in West Kalimantan, economic growth in regencies / Cities in West Kalimantan and GDP per Capita based on constant prices of Regencies / Cities in West Kalimantan. The data used is time series data for 10 years from 2008-2017.

Data Analysis Technique

The analytical method used in this study is the path analysis method using the SPSS 18 program. To prove the hypothesis in this study, the form of the equation in this study is mathematically formulated as follows:

First substructure path equation:

$$Y_1 = \rho y_1 X_1 + \mathcal{E}_1 \quad (1)$$

Equation of the second sub-structure:

$$Y_2 = \rho y_2 X_1 + \mathcal{E}_2 \quad (2)$$

Third sub-structure path equation:

$$Z = \rho z X_1 + \rho z Y_1 + \rho z Y_2 + \mathcal{E}_3 \quad (3)$$

Dimana :

X_1 = Labor productivity
Y_1 = GDP per capita
Y_2 = Economist growth
Z = Poverty
$\rho y_1 X_1$ = Coefficient of productivity path to economic growth
$\rho y_2 X_1$ = Coefficient of productivity path to GDP per capita
$\rho z X_1$ = PDRB path coefficient per capita of poverty
$\rho z Y_2$ = The coefficient of economic growth pathway to poverty
$\rho z Y_2$ = Coefficient of productivity pathway to poverty
ε_{123} = Other factors that influence it

Classic Assumption Test

Normality test is conducted with the aim of whether the variables in the regression model are either confounding or residual variables that are normally distributed or not. How to determine whether the data is normally distributed or not using 1-Sample K-S. K-S stands for Kolmogorov-Smirnov. Then it will appear if Asymp.Sig. (2-tailed). If the probability value is> 0.05 then the data distribution is stated to meet the normality assumption, and if the probability value is <0.05 then it is interpreted as abnormal.

Multicollinearity test aims to test whether the regression model used has a correlation of independent variables and dependent variables. By seeing whether the VIF value for each variable is greater than 10 or not. If the VIF value <10, it is indicated that the model has no symptoms of multicollinearity and vice versa. The autocorrelation test uses the Durbin Watson (DW) value with a specified dL value or by looking at the classified Durbin Watson table to see the calculation obtained.

Table 1. Statistics of Durbin Watson

If	Hypothesis	Decision
$0 < d < dL$	There is a positive autocorrelation	Reject
$dL \leq 0 \leq dU$	There is no decision	Doubt
$dU < d < 4\text{-}dU$	There is no autocorrelation	Not declined
$4\text{-}dU \leq d \leq 4\text{-}dL$	There is no decision	Doubt
$4\text{-}dL < d < 4$	There is a positive autocorrelation	Reject

Source: Ghozali, 2009

Heteroscedasticity test is used to determine the presence or absence of heteroscedasticity by using the Spearman's rho correlation coefficient test technique. The test uses a significance level of 0.05, if the correlation between the independent variables and the residuals obtained significance> 0.05. This means that heteroskesdasticity does not occur.

Correlation Coefficient Test (r) and Determination Coefficient (R^2)

The correlation coefficient test (r) is done whether the variables studied have a relationship or not. If the value of r approaches -1 or +1 indicates a strong relationship between the two variables and if the value of r approaches 0 indicates a weak relationship between the two variables.

Determination test (R^2) is conducted to find out how much the contribution or contribution of the influence of independent variables on the rise and fall of the dependent variable. If the results are close to 1, the effect is very strong, if the value is close to 0, it means that the free variable is weaker in lifting the dependent variable.

Partial Test (t test)

At this stage, the influence of each independent variable is tested whether all the independent variables in the individual model have a significant influence on the dependent variable. If the calculation results show that the probability value (P-value) <alpha 0.05, then Ho is rejected and H1 is accepted and vice versa.

RESULT AND DISCUS

RESULTS

Classic assumption test

For normality test results in this test can be seen in the following table:

Table 2. Normality Test Results

Test Result	Score
N	140
Asymp. Sig. (2-tailed)	0,106

Source: SPSS Output 18. 2019

Based on the test output table above, it is known that the Asymp significance value. Sig. (2-tailed) of 0.106> 0.05, it can be concluded that the distribution is normal.

Table 3. Multicollinearity Test Results

Variabel	*Collinearity Statistics*	
	Tolerance	**VIF**
Labor Productivity	0,214	4,668
Economic growth	0,886	1,128
PDRB per Capita	0,227	4,414

Source: SPSS Output 18. 2019

The VIF value in the table above for all variables in the study is smaller than 10.00, namely labor productivity of 4.668 <10.00, economic growth of

1.128 <10.00 and GDP per Capita of 4.414 <10.00. This means that all the variables in this study did not occur multicollinearity.

Table 4. Autocorrelation Test Results

Test Result	Score
R-*Square*	0,166
Durbin Watson	0,327

Source: SPSS Output 18. 2019

From the test results in the above table it can be seen that the Durbin Watson (DW) value is 0.327. Then found dL value of 1,680 and dU of 1,767, 4-dU value = 2,232, 4-dL = 2,319. From the results above shows that the DW value of 0.327 which is between $0 \leq d \leq dL$, or $0 \leq 0.327 \leq 1.6804$, meaning that there is no autocorrelation in this study.

Table 5. Heteroscedasticity Test Results

Variable	Value Sig.
Produktivitas Tenaga Kerja	0,957
Pertumbuhan Ekonomi	0,281
PDRB Per Kapita	0,228

Source: SPSS Output 18. 2019

From the test results in the table above shows that the correlation between the variables of labor productivity, economic growth and GDP per capita is greater than 0.05. This means that this research did not occur heteroscedasticity.

Regression analysis can be regarded as a special form of path analysis. In addition, path analysis is a direct development of multiple regression forms with the aim of providing estimates of the importance and significance of hypothetical causal relationships and a set of variables. For the results of path analysis in this study can be presented in the following table:

Table 6. Path Analysis Test Results

Test Result	Value			
	Unstandardized Coefficients B	***Standardized Coefficients Beta***	***T***	***Sig***
Economic Growth (Dependent Variable)				
Constant	3,593		7,778	0,000
Labor Productivity	0,516	0,313	3,870	0,000
GDP Per Capita (Dependent Variable)				
Constant	13,379		95,031	0,000
Labor Productivity	0,872	0,877	21,459	0,000
Poverty (Dependent Variable)				
Constant	18,525		1,894	0,060
Labor Productivity	-1,519	-0,351	-2,077	0,040
Economic growth	-0,041	-0,016	-0,190	0,850
PDRB per Capita	-0,296	-0,068	-0,413	0,680

Source: SPSS Output 18. 2019

First Stage Pathway Coefficient Testing

The first testing phase is carried out on the variable labor productivity on economic growth. Obtained an equation with the value of the standardized coefficients beta as follows: X2 = 0.313 + Ɛ2

Partial Significance Test (t Test)

Based on the test results above, it is known that labor productivity has a significance value α = 0,000 <0.05. This means that labor productivity has a positive and significant effect on economic growth in West Kalimantan.

Correlation Coefficient Test (r) and Determination Coefficient (R^2)

For the results of the correlation coefficient and determination test are as follows:

Table 7. Correlation and Determination Coefficient Test Results

Hasil Pengujian	Nilai
Economic growth	
R	0,313
R-*Square*	0,098
Adjusted R-*Square*	0,091
PDRB per Capita	
R	0,877
R-*Square*	0,769
Adjusted R-*Square*	0,768
Poverty	
R	0,408
R *Square*	0,166
Adjusted R *Square*	0,148

Source: SPSS Output 18. 2019

R value of labor productivity on economic growth in the table above is equal to 0.313. This means that labor productivity and economic growth have a low relationship because the interval values are between 0.200 - 0.399.

Determination Coefficient Test (R^2 Test)

From the table above explains that the R-square value of 0.098. This means that the effect of labor productivity on economic growth is 9.8%, while the remaining 90.2% is influenced by other variables not examined in this study, such as investment.

Second Stage Pathway Coefficient Testing

The second testing phase is conducted on the variable labor productivity of West Kalimantan's per capita GDP. From the test results obtained standardized beta coefficients are as follows: X3 = 0.877 + Ɛ3

Partial Significance Test (t Test)

Based on the results of the significance test (t test) table 6 above, it is known that the significance value of labor productivity is 0,000 <0.05. This means that labor productivity has a positive and significant effect on West Kalimantan's per capita GDP.

Correlation Coefficient Test (Test r)

The value of R from table 7 above is 0.877, meaning that labor productivity and GDP per capita have a very strong relationship, because the interval value is between 0.800 - 1,000.

Determination Coefficient Test (R^2 Test)

The R-square value from table 7 above is 0.769, meaning that the effect of labor productivity on GDP per capita is equal to 76.9%, while the remaining 23.1% is influenced by other variables not examined in this study, namely technological progress .

Testing the Third Phase Path coefficient

The third testing phase is carried out on the variable labor productivity, economic growth and GDP per capita on poverty in West Kalimantan. From the test results obtained standardized coefficient beta values as follows: Z = -0,068 + -0,016 + -0,351 + Ɛ4

Partial Significance Test (t Test)

Based on the test results from table 6 above, it is known that labor productivity has a significance value α = 0.04 <0.05, with a coefficient value of -1.519, meaning that labor productivity has a negative and significant effect on poverty in West Kalimantan. Economic growth has a significance value α = 0.850> 0.05 with a coefficient value of 0.041, meaning that economic growth has no effect on poverty in West Kalimantan. GDP per capita has a significance value α = 0.680> 0.05 with a coefficient value of -0.296, meaning that GDP per capita has no effect on poverty in West Kalimantan.

Correlation Coefficient Test (Test r)

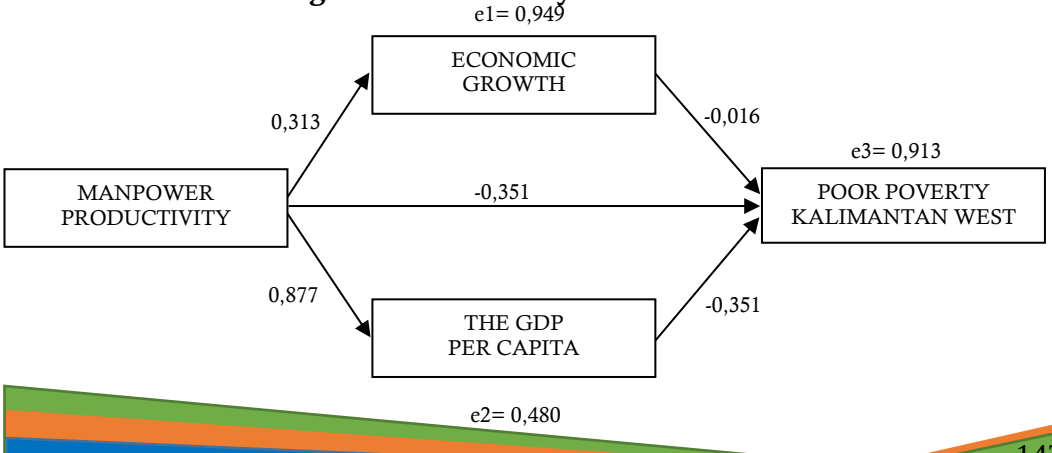
The R value from table 7 above is 0.408. This means that labor productivity, economic growth and GDP per capita have a strong enough relationship because the interval values are between 0.400 - 0.599.

Determination Coefficient Test (R^2 Test)

The R-square value from table 7 above is 0.166. This means that the effect of labor productivity, economic growth and GDP per capita on poverty in West Kalimantan is 16.6%, while the remaining 83.4% is influenced by other variables not examined in this study, namely education and health.

From the results of the above research can be presented in the following path diagram:

Figure 1. Path Analysis Test Results



Discussion

Effect of Labor Productivity on Economic Growth

The results of this study found that a significant value of 0,000 <0.05, with a coefficient value of 0.516. This means that labor productivity sung a positive and significant effect on economic growth in West Kalimantan, thus that an increase in labor productivity of Rp. 1 million rupiah will increase economic growth by 1%. Most of the regency / city economic growth in 2008-2017 was above the growth of West Kalimantan, such as Melawi Regency at 5.2%, Sintang Regency at 5.3%, Landak Regency at 5.2%, Bengkayang Regency at 5 , 1%, Mempawah Regency at 4.7%, and Sanggau Regency and Kapuas Hulu Regency with the lowest economic growth rate of 4.6%. Whereas the regions with the highest average economic growth are Kubu Raya Regency, which is 6.2%.

The growth was driven by increased labor productivity in four sectors with the largest contribution to economic growth in West Kalimantan (Series 2010), namely the agriculture, forestry and fisheries sectors, where in 2010 contributed 24.96% and decreased in 2017 by 22 , 81%, the manufacturing sector in 2010 amounted to 17.85% and in 2017 amounted to 16.16%, the wholesale and retail trade sector, and the repair of cars and motorbikes where in 2010 the contribution was 14.94% and in 2017 amounted to 14.90%, the distribution construction sector to economic growth in 2010 was 9.30% and in 2017 it was 11.29%. In addition, in terms of absorption of the largest workforce in West Kalimantan are the agriculture, plantation, forestry, hunting and fisheries sectors, where in 2011 the number of people working in the sector amounted to 1,294,481 people and in 2017 amounted to 1,192,196 people.

This research is in line with the results of Kurniasih's research (2016), which suggests that labor productivity has a positive and significant effect on economic growth. Because the increase in labor productivity gives a positive indication of the tendency for increased income and economic growth through additional output. Selian also in Korksaz & Korksaz (2017), suggested that productivity factors affect economic growth because productivity triggers economic growth in developing countries, and leads to sustainable economic growth in developed countries and in his research Ramyani (2017) that labor productivity work has an effect on economic growth in Indonesia.

Effect of Labor Productivity on GDP per Capita

Labor productivity has a positive and significant effect on West Kalimantan's GDP per capita. This means that an increase in labor productivity of Rp. 1 million rupiah will increase West Kalimantan's GDP per capita by 1%. Bank Indonesia Study of the West Kalimantan Region (2018), the agricultural sector is the dominant sector for the economy of West Kalimantan. This is shown by the large contribution of the agricultural sector to West Kalimantan's GDP and the uptake of workers working in the agricultural sector. The agricultural sector has the highest share of West Kalimantan's GDP in 2016, amounting to 22.60%. In addition, the agricultural sector is also the largest

labor absorption sector in West Kalimantan, reaching 48.63%. The increase in total GDP in 2016 was followed by an increase in per capita GDP. In 2016 West Kalimantan's GDP per capita reached Rp. 33.21 million, while in 2015 only Rp. 30.63 million (West Kalimantan in Figures, 2018).

When viewed from the West Kalimantan Province GDP Distribution (2010 series) according to business at current prices, in 2008-2017 the largest were the agriculture, forestry and fisheries sectors, where in 2017 it was 20.30%, and the smallest was the electricity procurement sector and gas that is equal to 0.11% and Population 15 years and over who work according to the main employment in 2011 - 2017 in West Kalimantan is still dominated by the agriculture, plantation, forestry, hunting and fisheries sectors, where in 2017 amounted to 1,192,196 inhabitants . There are several indicators that can see the economic development of an area, including PDRB per Capita.

According to Bariyah (2015), the success of the development needs to be measured, however, by using both social and economic indicators that are generally acceptable and able to describe the real conditions on the ground. Common indicators used to evaluate the success of economic development are GDP figures, per capita income, economic growth, employment, poverty, and social conditions in education and health. According to Ramayani (2012), if the government increases development in infrastructure, such as roads, access to workplaces does not require a long time. so that working hours are not wasted on the road and to complete the work do not require a lot of labor, and this means, there has been a efficiency of labor, with the reduction in labor to complete the same amount of work and the ease of society to carry out economic activities will increase productivity and contribute to GDP. The results of this study are in line with the research of Prastyadewi et al (2013), which found that an increase in labor absorption and worker productivity had a positive and significant effect on the GDP of the trade, hotel and restaurant sectors in Bali.

Economic Growth Against Poverty in West Kalimantan

Economic growth has a positive and not significant effect on poverty in West Kalimantan. This means that increasing economic growth by 1% will increase poverty rates in West Kalimantan, although not too much. High and quality economic growth will increase employment and reduce poverty, if poor people benefit from economic growth, although not so much, as with economic growth community income will increase.

West Kalimantan's economic growth in the fourth quarter of 2017 compared to the previous quarter (q-to-q) grew by 1.65%. The highest growth was achieved by financial services by 18.94%, followed by education services by 9.74% and construction by 7.55%. The poverty rate in West Kalimantan has decreased in number but in percentage has increased, where in 2017 the number of West Kalimantan poverty population was 387.43 thousand people with a percentage of poor population of 9.10% from 425.39 thousand people with a percentage of poor population of 7.88% in in 2010. Sanggau Regency is the

region with the smallest percentage of poor population in 2017 of 4.52%. Most of the percentage of poor population in the Regency / City is above the percentage of poor population of West Kalimantan, where in 2017 the region with the largest percentage of poor population is Melawi Regency, which is 12.54%, followed by Landak Regency (12.23%), Regency Ketapang (11.02%), Sintang Regency (10.20%), Kayong Utara Regency (9.89%), Kapuas Hulu Regency (9.45%) and Sambas Regency (8.59%). The trend to improve poverty that is quite good is Landak District where in 2017 the percentage of poor people in the Landak District was 12.23% from 15.48% in 2009.

According to his research Yulianto et al (2017), higher economic growth is generally felt by regions that are more advanced or that have abundant natural resource wealth, thus widening inequality in the area. While less developed regions also have low economic growth so that it has less impact on equity. According to Syafrizal in Andiny & Mandasari (2017), inequality between regions is one of the factors that causes regional poverty to still occur, which in his research found that some regions achieved rapid growth, while several other regions experienced slow growth. These regions did not experience the same progress due to several things, for example due to lack of resources owned, the tendency of investors (investors) to choose urban areas or areas that already have facilities such as transportation infrastructure, electricity networks, telecommunications networks, as well as labor. skilled.

Economic growth that occurs due to contributions to the sector that absorbs a small workforce, while the sector with a lot of labor is still not a contributor to economic growth. According to Pangkiro et al (2016), in his research found that the agricultural sector that absorbs the most labor in North Sulawesi Province and only relies on living as a livelihood has not contributed to farmers through income. The low exchange rate of farmers contributed significantly to poverty levels and disparity in economic development. Even though farmers in North Sulawesi Province had succeeded through the production of cloves which became a mainstay commodity, but the average who enjoyed the sale price of cloves was the land owner while the other farmers were only cultivators or workers so that it seemed quite biased. Therefore economic growth requires not only rapid growth, but also efforts to increase the ability of the poor to benefit from the opportunities created by economic growth.

Per capita GDP Against Poverty in West Kalimantan

Per capita GDP has no effect on poverty in West Kalimantan. Income or PDRB per capita should be the main and most effective requirement to reduce poverty, if the income is spread in each group, including the poor, if what happens is high income only owned by residents who have middle to upper income, so there is no equity income. If seen from the per capita income of West Kalimantan Province in 2010-2014 it has not increased significantly and is below the national per capita income. If in 2010 the ratio of GDP per capita of West Kalimantan Province and National GDP was 67.79%. Economic

disparity between cities and districts in West Kalimantan Province is quite high, as seen from the large per capita GDP gap between regencies / cities in West Kalimantan. Per capita income in West Kalimantan Province is relatively higher than Regency / City's per capita income. West Kalimantan has a low population density with a concentration of population spread in rural and rural areas. Per capita GDP Pontianak as the provincial capital has the highest per capita income in West Kalimantan because of the availability of infrastructure, education, health and employment that also supports economic activity in the area.

The GDP structure according to the business field or economic structure of West Kalimantan in 2017 is dominated by the agriculture, forestry and fisheries sectors based on constant prices (ADHK) of 22.81% and on the basis of prevailing measures (ADHB) of 20.30%, ADHK processing industries of 16, 16% and ADHB were 16.21%, and wholesale and retail trade, ADHK car and motorcycle repair were 14.90% and ADHB were 14.13% for the economic structure that gave the lowest contribution was electricity and gas procurement, which in the year 2017 distribution of ADHK electricity and gas procurement by 0.10% as well as ADHB by 0.10%. The role of the processing industry is increasing in the economy in West Kalimantan, but the supporting sectors of the industry are of low value, including electricity and gas procurement as well as water supply, waste management, waste.

Likewise with the main employment in West Kalimantan where in 2011-2017 the agricultural sector is the sector that absorbs the most labor compared to other sectors. Over the past 7 years the agricultural sector has been able to absorb 1,192,196 people. Although the agricultural sector experienced a decline from 2011-2017, the agricultural sector absorbed the most labor and was followed by the trade, restaurants and accommodation services sector, where in 2017 there were 362,134 workers absorbed. Whereas the lowest employment absorption is the electricity, gas and water employment sector, namely the employment of 9,612 people in 2017.

The results of this study are in line with the results of Ebunowua and Yusuf's (2018) research, which in his study found that the GDP coefficient illustrates that there is a negative relationship between economic growth and poverty incidence, while unemployment is related. Tahir et al (2014), in their research suggested that GDP has a relationship even though the level of GDP growth places a small change in poverty. Likewise in the study of Wirawan & Arka (2015), in the province of Bali, Dama et al (2016) in Manado City, and Wahyuningsih (2014) in Nagan Raya Regency, where in his research found that Gross Domestic Product (GDP) had a negative and significant effect towards poverty.

The decreasing GDP of an area is based on the quality and consumption of households, and if the level of income of the population is very limited, many poor households are forced to change their basic food patterns to the cheapest goods with a reduced amount of goods. According to Pratama & Arianti

(2012), the GDP growth rate shows an increase in national output, the output will increase if the forming factors of production also increase both in quality and quantity. Increased production means showing increased productivity in an economy, which is also expected to be able to increase its per capita income. The increase in income will increase purchasing power, so that it can be used to meet needs in order to prosper.

Labor Productivity Against Poverty in West Kalimantan

Labor productivity has a negative and significant effect on poverty in West Kalimantan. This means that an increase in labor productivity of Rp. 1 million rupiah will reduce the poverty level of West Kalimantan. In developing countries one of the barriers to development is population growth or explosion, because in developing countries it has little capital, so to manage its citizens both in quality and quantity is very difficult. West Kalimantan is an area on the island of Kalimantan with the largest population, where in 2017 the largest population was Pontianak, which amounted to 658,477 inhabitants, Sambas at 633,182 inhabitants and Kubu Raya at 602,306 inhabitants.

Some areas in West Kalimantan with relatively high poverty rates are in areas with high labor productivity, such as Sambas Regency with labor productivity of 33.45 million per workforce with a poverty rate of 9.5%, Landak District with productivity labor force of 26.33 million per workforce, poverty rate of 13.8%, Ketapang Regency with labor productivity which is 48.30 million per workforce, poverty rate of 12.4%, Sintang District with labor productivity ie of 29.92 million per workforce, poverty rate of 10.0%, Kapuas Hulu Regency with labor productivity of 32.33 million per workforce with a poverty rate of 10.2%, and Kayong Utara District with labor productivity namely at 33.26 million per workforce, the poverty rate is 10.8%. There are also some areas with low labor productivity with a relatively high percentage of the poor population such as Kabupaten Melawi (20.82 million per workforce and 12.8%).

The main cause of high productivity but is still followed by a high number of poor people, because the income in general is not enough to meet basic or basic needs because the price of a staple is increasingly increasing but not followed by a linearly increasing income. So that high labor productivity if not accompanied by income and high consumption increases, poverty is still there, in addition to income other things that can also cause high poverty with a high work productivity situation because people tend to choose to increase their savings rather than consumption their principal.

The level of open unemployment (TPT) of West Kalimantan from 2010-2017 experienced fluctuations, the biggest in 2015 which was 5.15% and in 2017 amounted to 4.36, the unemployment was dominated by the age of 15-19 years ie men by 18.53% and women 17.06%. The highest increase in unemployment during the last 7 years is Pontianak City, where in 2010 it was 7.79%, and in 2017 it was 9.36%. The labor force participation rate (TPAK) from 2010-2017 West Kalimantan has decreased, namely in 2010 amounted to 73.17% and in 2017 amounted to 68.63% and for districts / cities with the highest labor force

participation rate in 2017 was Sekadau Regency, which is 82.03% and the lowest is Singkawang City, which is 61.07%. For Population Aged 15 Years and Over Who Work for a Week According to Main Employment and Education in West Kalimantan, 2010-2017, the agricultural sector is the sector that absorbs the most labor and is dominated by workers with no / not yet complete elementary school which is 418 525 people in 2010 and in 2017 elementary schools which amounted to 459,956 inhabitants. This means that the average West Kalimantan worker by workers with primary school education is below.

This is in line with the results of his research Sutrisna & Sudiharta (2014), which in his research found that labor productivity partially affected but not significantly to poverty in the Province of Bali. This is due to an increase in labor productivity, which in turn will have implications for rising incomes, not enough to meet basic needs whose prices are also increasing or inflation is occurring. So an increase in productivity accompanied by an increase in prices of basic goods will not reduce the number of poor people. In addition, an increase in productivity does not directly raise people's real living standards if the increase in productivity is not accompanied by an increase in consumption. This can also be caused by several things, for example people who prefer to increase their savings.

Likewise in the Pratama & Arianti (2017) study in which the study found that industrial productivity had a negative and not significant effect on poverty levels in North Sumatra. Suwardi (2012) found in his research that agricultural productivity and the number of workers in the non-agricultural sector have a significant negative relationship with the number of poor people. Increased labor productivity provides a positive indication of the tendency for increased income and economic growth through additional output, (Kurniasih, 2016) and in the research of Thath (2016) and Ogundipe et al (2017) suggest that increasing agricultural labor productivity is the key to poverty reduction and agricultural value added per worker (labor productivity) contribute significantly to rural poverty reduction in Africa.

Labor Productivity Against Poverty Through Economic Growth in West Kalimantan

It is known that the direct effect of labor productivity on poverty in West Kalimantan, which amounted to -0,351, while the indirect effect of labor productivity through economic growth on poverty in West Kalimantan amounted to 0.005 (0.313 x -0.016 = 0.005). So it can be concluded that the greater direct effect of labor productivity on poverty in West Kalimantan than the indirect effect through economic growth on poverty in West Kalimantan.

The effect of labor productivity through per capita GDP on poverty in West Kalimantan.

The effect of labor productivity through GDP per capita It is known that the direct effect of labor productivity on poverty in West Kalimantan is -0,351, while the indirect effect of labor productivity through GDP per capita on

poverty in West Kalimantan is 0.307 (0.877 x-0.351 = 0.252) . So it can be concluded that the greater direct effect of labor productivity on poverty in West Kalimantan than the indirect effect through GDP per capita on poverty in West Kalimantan.

CONCLUSION

Based on the results of the research and discussion above, it can be concluded that the increase in labor productivity has a significant effect on economic growth and GDP per capita of West Kalimantan. Labor productivity has no effect on poverty in West Kalimantan and a greater direct effect on labor productivity in poverty in West Kalimantan than in the indirect effect either through economic growth and GDP per capita. This means that increasing labor productivity can increase the income per capita of the community, reducing inequality in regional development, employment that is increasingly accessible and low open unemployment.

REFERENCES

Agustini, Y & Kurniasih, E.P. (2017) Pengaruh Investasi PMDN, PMA, dan Penyerapan Tenaga Kerja Terhadap Pertumbuhan Ekonomi dan Jumlah Penduduk Miskin Kabupaten/Kota di Provinsi Kalimantan Barat. Jurnal Ekonomi Bisnis dan Kewirausahaan, Vol. 6 , No. 2

Amera, M. Jensen, N.D, Shiferaw, B.S, Cisse, J.D (2017) Rainfall Shocks And Agricultural Productivity: Implication For Rural Household Consumption. Sciende Direct. Vol. 166 Pages 79-89.

Andiny, P & Mandasari, P (2017) Analisis Pertumbuhan Ekonomi dan Kemiskinan Terhadap Ketimpangan Di Provinsi Aceh. Jurnal Penelitian Ekonomi Akuntansi (Jensi), Vol. 1, No. 2

Badan Pusat Statistik (2018) Provinsi Kalimantan Barat Dalam Angka

Bank Indonesia. (2018). Kajian Ekonomi Dan Keuangan Regional Provinsi Kalimantan Barat Februari 2018. Kantor Perwakilan Bank Indonesia Provinsi Kalimantan Barat.

Bariyah, N. (2015) Analisis Indikator Fundamental Ekonomi Daerah di Kalimatan Barat: Pertumbuhan Ekonomi, Pendapatan Perkapita dan HDI. Jurnal Ekonomi Bisnis dan Kewirausahaan, Vol. 4, No. 1, 72-93

Cholakkal, I. (2013). Productive Manpower And Its Impact On Poverty In Kerala. Int. J. Eco. Res. v4i5, 04 – 13

Dama, H.Y, Lapian, A.L.Ch. & Sumual, J.I (2016) Pengaruh Produk Domestik Bruto (PDRB) Terhadap Tingkat Kemiskinan Di Kota Manado Tahun 2005-2014. Jurnal Berkala Ilmiah Efisiensi. Vol. 16 No.03

Ebunoluwa, O.O & Yusuf, W.A (2018) Effects of Economic Growth on Poverty Reduction In Nigeria. IOSR Journal of Economics and Finance (IOSR-JEF). Volume 9, Issue 5 Ver.I

Emsina, A.A, (2014) Labour Productivity And Economic Growth In The Eu In Post-Crisis Period. Economics And Management.

Giovani, R (2018) Analisis Pengaruh PDRB, Pengangguran dan Pendidikan Terhadap Tingkat Kemiskinan di Pulau Jawa Tahun 2009-2016. Economics Development Analysis Journal 7

Kaplale, R. (2012) Faktor-Faktor Yang Mempengaruhi Tingkat Kemiskinan di Kota Ambon (Studi Kasus di Dusun Kranjang Desa Waiyame Kec. Teluk Ambon dan Desa Waiheru Kec. Telum Amban Baguala Kota Ambon. Jurnal Agribisnis Kepulauan 101-115.

Kementerian Ketenagakerjaan Republik Indonesia dan Badan Pusat Statistik. 2016. Pengukuran Produktivitas Nasional, Regional dan Sektoral. Direktorat Jenderal Pembinaan Pelatihan dan Produktivitas. Jakarta.

Kurniasih, E.P. (2016). Produktivitas Tenaga Kerja Dan Pertumbuhan Ekonomi Di Provinsi Kalimantan Barat. SEMNAS FEKON. Dipublikasikan di Website Universitas Terbuka (http://repository.ut.ac.id/6666/)

Korkmaz, O & Korkmaz, S. (2017). The Relationship Between Labor Productivity Adan Economic Growth in OECD Countries. International Journal of Economics and Finance; Vol. 9, No. 5

Mughal. K, & Rehman.A. (2013). Impact of Technical Education on the Labor Productivity. International Journal of Economics, Finance and Management. VOL. 2, NO. 7

Niyimbanira, F (2017) Analysis Of The Impact Of Economic Growth On Income Inequality And Poverty In South Africa: The Case Of Mpumalanga Province. International Journal Of Economics And Financial Issues. Vol. 7 No. 4

Owyong. D.T (2015). Productivity Growth: Theory and Measurement. APO Productivity Journal

Pangkiro, H.A.K, Rotinsulu, D.Ch. & Wauran, P (2016) Analisis Pertumbuhan Ekonomi Dan Kemiskinan terhadap Tingkat Ketimpangan Di Provinsi Sulawesi Utara. Jurnal Berkala Ilmiah Efisiensi. Vol. 16, No.01

Prastyadewi, M.I, Suman, A. Pratomo, D.S (2013) Labor Absorption and Its Impact on Gross Regional Domestic Product. Jurnal Ekonomi Pembangunan. Vol. 14. No. 2.

Pratama, A.Y & Arianti, F (2012) Analisis Pengaruh PDRB, Pengangguran, Pendidikan dan Kesehatan Terhadap Kemiskinan di Jawa Tengah Tahun 2004-2009. Diponegoro Journal Economics. Vol 1. No. 1

Ramayani, C. (2012) Analisis Produktivitas Tenaga Kerja dan Pertumbuhan Ekonomi Indonesia. Jurnal Kajian Ekonomi. Vol. 1, No. 1

Siregar, H. & Dwi W. (2008). Dampak Pertumbuhan Ekonomi Terhadap Penurunan Jumlah Penduduk Miskin. Dikutip dari http://pse.litbang.deptan.go.id/ind/pdffiles/PROS_2008_MAK3.pdf

Sutrisna. K, & Sudiharta. P.S.P (2014) Pengaruh Pdrb Per Kapita, Pendidikan, Dan Produktivitas Tenaga Kerja Terhadap Kemiskinan Di Provinsi Bali. E-Jurnal Ekonomi Pembangunan Universitas Udayana Vol. 3, No. 10

Susanti, S. (2013) Pengaruh Produk Domestik Regional Bruto, Pengangguran dan Indeks Pembangunan Manusia Terhadap Kemiskinan di Jawa Barat dengan Menggunakan Analisis Panel. Jurnal Matematika Integratif. Vol.9 No. 1

Suwardi, A. (2012). Pengeluaran Pemerintah Daerah, Produktivitas Pertanian, dan Kemiskinan di Indonesia. Jurnal Ekonomi dan Pembangunan Indonesia Vol. 12 No. 1

Tahir, S.H, Perven, N. Ismail, A & Sabir, H,M. (2014) Impact of GDP Growth Rate on Poverty of Pakistan: A quantitative Approach. Euro-Asian Journal of Economics and Finance. Volume: 2, Issue: 2

Thath, R. (2016). The Impact of Agricultural Land and Labor Productivity on Poverty: The Case of Rice Farming Households in Cambodia. MPRA (Munich Personal RePEc Archive). Paper No. 70920, posted 27 April 2016 14:06 UTC

Ogundipe, A.A, Oduntan, E.A, Adebayo, I, Ogunniyi & Olagunju. K,O. (2017). Agricultural Productivity, Poverty Reduction and Inclusive Growth in Africa: Linkages and Pathways. Ogundipe et al.; AJAEES, 18(1): 1-15; Article no.AJAEES.32427

Wahyuningsih, Y.E & Zamzami (2014) Analisis Pengaruh Produk Domestik Regional Bruto dan Jumlah Penduduk Terhadap Tingkat Kemiskinan di Kabupaten Nagan Raya. Jurnal Ekonomi dan Kebijakan Publik Indonesia. Vol. 1 No. 1

Wirawan, I.M.T & Arka, S. (2015) Analisis Pengaruh Pendidikan, PDRB per Kapita dan Tingkat Pengangguran Terhadap Jumlah Penduduk Miskin Provinsi Bali. E-Jurnal EP Unud Vol. 4, No. 5.

Yagi. T, Nakamura.K, & Kaihatsu.S. (2018) Productivity Improvement and Economic Growth. Bank of Japan 2-1-1 Nihonbashi-Hongokucho, Chuo-ku, Tokyo 103-0021.