Ports as A Supporting Factor of Economic Development in Central Kalimantan Province

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A B S T R A C T

This study aims to determine partially and simultaneously the effect of export value seen from several loading ports on economic growth in the province of Central Kalimantan. This method is explanatory research to test the hypothesis between the hypothesized variables. This study uses secondary data, namely: Export Value through the Port of Kumai, Sampit, Pulang Pisau, and Pangkalan Bun, and Economic Growth in Central Kalimantan Province during 2007-2021. The results of the Multiple Linear Regression analysis of the Semi Logarithma Model partially show that the Export Value through the Port of Loading at the Ports of Kumai and Sampit has a significant and positive influence on Economic Growth in Central Kalimantan Province. In contrast, the Export Value through the Port of Loading Pulang Pisau and Pangkalan Bun has no effect but is positive on Economic Growth in Central Kalimantan Province. However, simultaneously the export value through the loading ports at the ports of Kumai, Sampit, Pulang Pisau, and Pangkalan Bun has a significant influence on economic growth in the province of Central Kalimantan.

Keywords: ***Export Value, Loading Port, Economic Growth, Central Kalimantan Province***

Introduction

The global economy is a process of economic activity and trade where countries worldwide become a market power increasingly integrated with no barriers to national territorial boundaries. The globalization of the economy requires eliminating all barriers to the flow of capital, goods, and services.

Export is the sale of goods abroad using the payment system, quality, quantity, and other terms of sale approved by the exporter and importer. The export process generally removes goods or commodities from within the country to import them to other countries. Exports of goods on a large scale generally require customs intervention in sending and receiving countries.

The effect of exports on economic growth is the total goods and services sold by a country to other countries, including goods, insurance, and services in a given year. Exports are an important factor in stimulating a country's economic growth.

Exports can also assist all countries in carrying out their development efforts by promoting and strengthening economic sectors that contain comparative advantages, whether in the form of the availability of certain production factors in abundance, efficiency advantages, or labor productivity. Exports have a positive relationship with economic growth, meaning that when exports increase, economic growth also increases and vice versa. If exports decline, economic growth decreases. Exports are one of the sources of foreign exchange that are needed by countries or regions whose economies are open, such as in Indonesia, because exports widely to various countries allow an increase in the amount of production that encourages economic growth so that it is expected to contribute greatly to economic growth and stability.

Economic growth is one indicator of a country's economic development progress. According to Kuznets, economic growth is an increase in the country's long-term capacity to provide various economic goods to its population (Todaro, 2000 Smith, 2003).

The existence of a port of loading for goods in international trade activities, especially export activities, is very decisive, both in the form of infrastructure and facilities available at the port from and to the port, because this is one of the things that determines the smoothness and size of loading and unloading activities, especially for the port of loading and unloading goods exports from Central Kalimantan Province. Furthermore, it is realized that the volume of activities at the loading port for export goods will influence regional economic growth through increased production and community economic activities.

As an illustration of the state of export volume according to several potential loading ports, including the loading ports of Kumai, Sampit, Pulang Pisau, and Pangkalan Bun as well as Economic Growth in Central Kalimantan Province for the last 5 (five) years obtained from data from the Provincial Central Statistics Agency (BPS) Central Kalimantan are as follows:

Table 1. Export Value by Port of Muat Kumai, Sampit, Pulang Pisau and Pangkalan Bun and Economic Growth in Central Kalimantan Province during 2017-2021

Year	Kumai Port (US$)	Sampit Port (US$)	Pulau Pisau Port (US$)	Pangkalan Bun Port (US$)	Economic Growth (%)
2017	220.844.916	274.400.096	10.640.665	48.612.056	6,74
2018	247.138.756	174.428.036	15.304.299	37.605.138	5,64
2019	356.554.147	119.557.006	16.411.259	17.190.307	6,20
2020	394.443.349	76.179.086	12.320.201	35.092.823	-1,41
2021	661.815.566	64.881.120	12.467.211	28.775.650	3,40

Source: BPS, Central Kalimantan Province in 2022

Based on some of the descriptions and data on the background above, it can be seen that the export value by port of loading indicates that it affects the economic growth of Central Kalimantan Province. However, how big the effect, according to the author, has never been studied before. Therefore, the authors are interested in further observing and studying this problem contained in a study titled: "Ports as a Supporting Factor for Economic Development in Central Kalimantan Province".

Literature Review and Hypotheses

1. Economic Growth

Economic growth is a long-term macroeconomic problem where in every period, the people of a country will try to increase their ability to produce goods and services. The target is an increase in the level of actual production (national income) and standard of living (real income per capita) through the provision and mobilization of production factors. With the increase in factors of production such as an increasing number of workers, past investments, and new investments that add to capital goods and present production capacity, which is usually followed by technological developments in the means of production, all of which will accelerate the addition of production capabilities.

Economic growth is the average increase in the output produced by each person in the production of goods and services, which is the real per capita growth rate for each person (Shone R, 1989). With this increase, it is hoped that it will increase each worker's capital and production or, in other words, increase foreign exchange reserves.

In addition, economic growth can be said as an increase in the real GDP of a country in a certain year which shows an increase in the income per capita of everyone in the economy and a country in a certain year (Mankiw, 2003). There are three main factors in economic growth (Todaro, 2000), namely: First, capital accumulation, which includes all forms or types of new investments invested, physical equipment, and capital or human resources. Second population growth, which in the next few years will increase the number of the workforce. Third, technological progress.

Economic growth is developing rapidly, influenced by several factors (Sukirno, 2004), including political stability, government economic policies, the natural wealth owned, and the number and ability of the workforce. The role of entrepreneurs who will innovate and invest is vital to realize economic growth (Sukirno, 2004) suggesting that the Harrod-Domar theory emphasizes that the role of investment is a factor that causes an increase in aggregate expenditure in developing economic growth. This theory emphasizes the role of the demand side in realizing growth. Increased economic growth is determined, among others, by grouping production factors such as labor, capital, natural resources, technology, and social factors (Suparmoko, 2002).

2. Export

The definition of export, according to the Minister of Trade and Industry Decree of Minister No. 182/MPP/KEP/4/1998 concerning general provisions in the field of exports, states that export is the activity of removing goods and services from the customs area of a country. The customs area is defined as the territory of the Republic of Indonesia, which includes land, water, and air areas as well as certain places in the exclusive economic zone and continental shelf in which Law No. 10 of 1995 concerning Customs applies. The definition of export is all shipments of merchandise abroad through ports throughout the Republic of Indonesia, both commercial and non-commercial. Export value is the transaction value of exported goods arriving on a loading port ship in a free-on-board (FOB) state. So the results obtained from export activities are in the form of the value of a sum of money in the form of a foreign currency or commonly referred to as a foreign exchange, which is one of the sources of state income. Thus, export is a trading activity that provides a stimulus to generate domestic demand, leading to the emergence of large manufacturing industries and a stable positive structure and efficient social institutions.

Export is one of the economic sectors that play an important role and the expansion of the industrial sector market will encourage other industrial sectors and the economy. In conclusion, exports are a source of foreign exchange plus market expansion for the production of domestic goods and workforce expansion.

There needs to be an expansion of exports by a country because this export component is a source of our country's foreign exchange of approximately 70%. In the beginning, a country's commitment to be open to international trade encourages a country's export behavior. In theory, Thomas Munn (classical economic figure) states that international trade will benefit a country's balance of payments as long as it reaches conditions X>M (Exports are greater than Imports). Through this assumption, many countries are interested in conducting international trade by opening themselves up to international affairs and even targeting an increase in exports.

3. Export Relations and Economic Growth

In macroeconomic theory, the relationship between exports and the level of economic growth or national income is an identity equation because exports are part of the level of national income (Oiconita, 2006). In terms of expenditure, exports are one of the most important factors of Gross National Product (GNP), so with changes in the value of exports, people's income will also directly experience changes. On the other hand, the high exports of a country will cause the economy to be susceptible to shocks or fluctuations in the international market and the world economy (Irham & Yogi, 2003).

In economic development theory, the relationship between the two variables (exports and economic growth) is an interesting special case to be discussed, especially in the empirical field. From the perspective of economic development theory, the problem of the relationship between the two variables is not focused on the problem of identity equality itself. However, it is more focused on the problem of whether exports for a country can move the economy as a whole and ultimately produce prosperity for the community (Oiconita, 2006).

Export is the simplest form of the international trade system and is a strategy for marketing production abroad. Factors such as the target country's income and population are the basis

for consideration in export development (Kotler & Armstrong, 2001).

Export activity is a trading system that releases goods from within the country to abroad by fulfilling the applicable provisions. Exports are the total goods and services a country sells to other countries, including goods, insurance, and services in a given year (Utomo, 2000). An essential function of the export component of foreign trade is that the country gains profits and increases national income, which increases the output and the rate of economic growth. With a higher output level, the vicious circle of poverty can be broken and economic development can be increased (Jhingan, 2000).

Theoretically, the export of an item is influenced by supply and demand. The theory of International Trade (Global Trade) states that the factors that affect exports can be seen from the demand and supply sides (Krugman & Obstfeld, 2000). From the demand side, exports are influenced by export prices, actual exchange rates, world income, and devaluation policies. On the supply side, exports are influenced by export prices, domestic prices, real exchange rates, and production capacity, which can be proxied through investment, imports of raw materials, and deregulation policies.

Exports can affect economic growth in several ways. First, the direct influence of exports, namely by improving technology for each country that carries out foreign trade activities. Second, exports can help overcome exchange rate constraints. This then becomes the impetus for a country to import, including imports of capital goods. Third, based on research by Levine and Renelt (1992) in Alam (2003), evidence is obtained that the comparison between exports and GDP has a very strong relationship with the ratio between investment and GDP. Third, an indirect relationship exists between exports and economic growth (GDP) through investment.

Regarding the relationship between exports and economic growth, Jung and Marshall (1985) suggested that in the relationship between exports and economic growth, there are at least four hypotheses or views that are both plausible and acceptable. First, the export-led growth hypothesis is a driving force for economic growth (export-led growth hypothesis). Second, the export-reducing hypothesis is the cause of the decline in economic growth (export-reducing growth hypothesis). Third, the hypothesis states that exports are not the driving force for domestic economic growth. However, on the contrary, domestic economic growth is the driving force for exports (internally generated export hypothesis). Fourth is the hypothesis that economic growth is a factor causing the decline in exports (the growth-reducing export hypothesis).

Research Variable Relationship

Economic growth is the process of an increase in real gross national product or real national income. So the economy is said to grow or develop if there is real output growth. The actual total output of an economy can either remain constant or decrease over time. This means the economy is static or experiencing a decline (stagnation). Economic changes include either growth, static, or stagnation of real national income. The decrease is a negative change, while growth is a positive change (Wijaya, 1990 p. 262).

There is a need for exports in a country's economy. Because exports are a source of foreign exchange, to be able to export, the country must produce goods and services on the international market. This competitive ability is primarily determined by various factors, including natural resources, human resources, technology, management, and even socio-culture (Supriyanto, in Sariningrum: 2010). Exports carried out by a country will have a positive impact on the economic growth of a country, including the province of Central Kalimantan, where most of its exports are in the form of non-oil and gas exports, especially from the agricultural, plantation, fishery, forestry, mining, and other processing industries, which are exported through several ports. These study's export goods were loaded from 4 (four) loading ports, each of Kumai, Sampit, Pulang Pisau, and Pangkalan Bun to export destination countries.
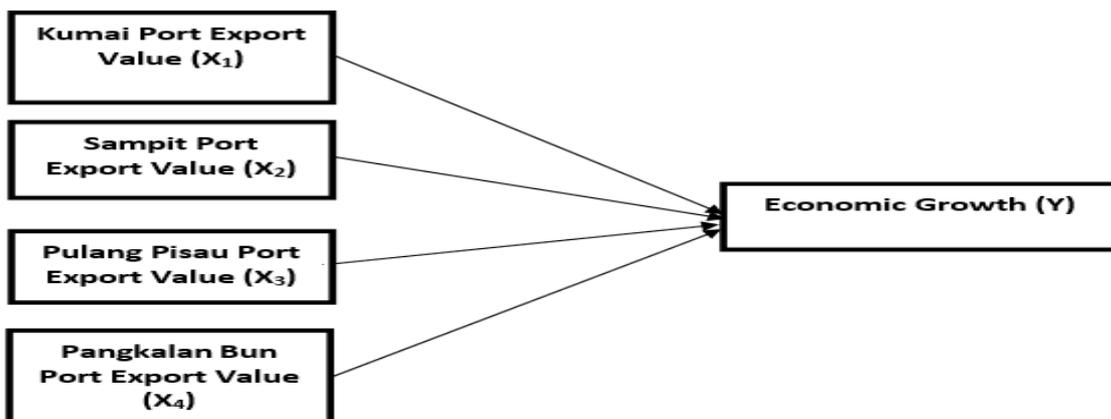
Figure 1. Research Design

Research Hypothesis

1. It is suspected that the export value seen from several loading ports partially influences economic growth in the province of Central Kalimantan.

2. It is assumed that the export value seen from several loading ports simultaneously influences Economic Growth in the Province of Central Kalimantan.

Research Method

The research method used in this research is descriptive and quantitative analysis. Descriptive analysis is used to describe

phenomena related to the problem under study. At the same time, quantitative analysis is used to analyze quantitative information. The research location was conducted in Central Kalimantan Province. The research period was 15 years, namely from 2007-2021.

The data collection technique in this study uses the library search method, namely research conducted with library materials in the form of scientific writings and scientific research reports related to the topic under study.

To prove the truth of the hypothesis in this study, the Multiple Linear Regression analysis model is used, which aims to measure the strength of the relationship between two or more variables. In addition, the results of this regression analysis indicate the direction of the relationship between the dependent variable and the independent variable. Regression analysis is a study of the dependence of the dependent variable (bound) with one or more independent variables (explanatory/independent variables), intending to estimate and/or predict the population means or the average value of the dependent variable based on the value of the independent variable. (Gujarati, 2003).

This study uses the Multiple Linear Regression (OLS) analysis models in the form of Semi-Log or Lin-Log, according to Nachrowi, et. al (2006:70), namely:

$$Y = \alpha + \beta_1 \, LnX_1 + \beta_2 \, LnX_2 + \beta_3 \, LnX_3 + \beta_4 \, LnX_4 + e$$

Information:
Y = Economic Growth per year (%)
X1 = Kumai Port Export Value per year (tons)
X2 = Sampit Port Export Value, per year (tons)
X3 = Export Value of Pulang Pisau Port, per year (tons)
X4 = Export Value of Pangkalan Bun Port, per year (tons)
α = Constant
β1β2β3β4 = Regression Coefficient
e = error terms (interference variable)
Ln = Natural Logarithm

For the truth of the hypothesis in this study, using a statistical t-test (partial test) and F statistical test (simultaneous test), with a confidence level of 95% or (α) = 0,05 d.f = n-k-1.

Result and Discussion

1. Multiple Linear Regression Analysis

Multiple Linear Regression Analysis is used to determine the effect of the export value of Kumai, Sampit, Pulang Pisau, and Pangkalan Bun ports on the economic growth of Central Kalimantan Province during 2007-2021. By using the Multiple Linear Regression analysis tools, where to test the effect of these variables used t statistical test (partial test) and F statistical test (simultaneous test) using SPSS version 25 statistical program, as the calculation obtained the results of regression analysis with the significance of 5% or (α) = 0.05 as follows:

Table 2. Results of Multiple Linear Regression Analysis (Effect of Export Value of Kumai, Sampit, Pulang Pisau and Pangkalan Bun Ports on Economic Growth) in Central Kalimantan Province During 2007-2021

Independent Variable	Coefficients B	Std. Error	t	Sig.	Remark
Kumai Port Export Value (LnX₁)	0,176	0,076	2,315	0,025	Significant
Sampit Port Export Value (LnX₂)	0,102	0,049	2,085	0,042	Significant
Pulang Pisau Port Export Value (LnX₃)	0,067	0,055	1,218	0,229	No Significant
Pangkalan Bun Port Export Value (LnX₄)	0,155	0,101	1,539	0,130	No Significant
Constant					
Multiple R = 0,592 R Square = 0,350 N = 60 (Interpolated Data) (α) = 0,05 *Level of Sig.* F = 0,000					

Source: Results of Data Analysis

Furthermore, to clarify the regression coefficients in the results of multiple linear regression analysis in Table 2, mentioned above, it can be explained as follows:

1. Regression Coefficient

a. The value of the Regression Coefficient of the Kumai Port Export Value variable (B₁) of 0.176 is significant at (α) = 0.05 this means that if there is an increase in the Export Value through the Kumai Port (LnX₁) by 1%, it can increase Economic Growth (Y) in the Province Central Kalimantan by 0.176%, assuming other factors are constant.

b. The value of the Regression Coefficient of the Sampit Port Export Value variable (B₂) of 0.102 is significant at (α) = 0.05, this means that if there is an increase in the Export Value through the Sampit Port (LnX₂) by 1%, it can increase Economic Growth (Y) in the Province Central Kalimantan by 0.102%, assuming other factors are constant.

c. The value of the Regression Coefficient of the Export Value of Pulang Pisau Port (B₃) is 0.067, which is not significant at (α) = 0.05. This means that at the 95% confidence level, the Export Value through the Pulang Pisau Port (LnX₃) does not affect increasing Economic Growth (Y) in Central Kalimantan Province.

d. The Regression Coefficient Value of the Pangkalan Bun Port Export Value (B₄) of 0.155 is not significant at (α) = 0.05 this means that at a 95% confidence level the Export Value through the Pangkalan Bun Port (LnX₄) does not affect increasing Economic Growth (Y) in Central Kalimantan Province.

1. The Multiple Regression (R) value of 0.592 indicates that the magnitude of the influence of the Export Value through the Ports of Kumai, Sampit, Pulang Pisau, and Pangkalan Bun on Economic Growth in Central Kalimantan Province during 2007-2021 is quite strong or 59.20%.

2. The value of R Square (R2) or the so-called coefficient of determination of 0.350 shows the contribution of the variable Export Value through the Ports of Kumai, Sampit, Pulang Pisau, and Pangkalan Bun together to Economic Growth in Central Kalimantan Province during 2007-2021 is 35 0.00% and the remaining 65.00% is influenced by other variables outside the analysis which are incorporated in the confounding variable (*disturbance error*), e_i

Hypothesis Test

Testing the hypothesis of the Multiple Linear Regression analysis model using the t-test (partial test) and F-test (simultaneous test), as follows:

1. Results of Partial Hypothesis Testing (t-test)

To find out whether or not there is an individual influence of all independent variables (X_1, X_2, X_3, X_4) on the dependent variable (Y) is done by comparing the value of t count with the t table or comparing the significance value with the error rate or (α) = 0.05 at the level of confidence of 95%, with the significance level of each variable where the level of sig. for LnX_1 of 0.025 <0.05 or significant at (α) = 0.05 and level of sig. for LnX_2 of 0.042 <0.05 or significant at (α) = 0.05. Based on the provisions of this test, it is stated that the independent variables of Kumai Port Export Value (LnX_1) and Sampit Port Export Value (LnX_2) affect the dependent variable of Economic Growth (Y) in Central Kalimantan Province so that H0 is rejected and accepting Ha means that the hypothesis is accepted. Meanwhile, each level of sig. for LnX_3 of 0.229 > 0.05 or not significant at (α) = 0.05 and level of sig. for LnX_4 of 0.130 > 0.05 or not significant at (α) = 0.05. Based on the provisions of this test, it means that the Export Value of Pulang Pisau Port (LnX_3) and the Export Value of Pangkalan Bun Port (LnX_4) do not affect the Economic Growth variable (Y) in Central Kalimantan Province, so H0 is accepted and Ha rejects means the hypothesis is rejected. From the results of partial hypothesis testing, it can be concluded that some of the hypotheses are accepted and some are rejected. Overall, the results of multiple linear regression calculations using the t-test (partial test) can be explained as follows:

a. The Effect of Kumai Port's Export Value on Economic Growth.

The significance level of the Kumai Port Export Value variable (LnX_1) where the level of sig. for LnX_1 of 0.025 significant at (α) = 0.05. This means that partially the Export Value through Kumai Port significantly influences Economic Growth in Central Kalimantan Province.

b. The Effect of Sampit Port's Export Value on Economic Growth.

The significance level of the Sampit Port Export Value variable (LnX_2) where the level of sig. for LnX_2 of 0.042 significant at (α) = 0.05. This means that partially the Export Value through Sampit Port has a significant influence on Economic Growth in Central Kalimantan Province.

c. The Effect of Export Value of Pulang Pisau Port on Economic Growth.

The significance level of the Pulang Pisau Port Export Value variable (LnX_3) where the level of sig. for LnX_3 0.229 is not significant at (α) = 0.05. This means that partially the Export Value through Pulang Pisau Port has no significant effect on Economic Growth in Central Kalimantan Province.

d. The Effect of Export Value of Pangkalan Bun Port on Economic Growth.

The significance level of the Pangkalan Bun Port Export Value variable (LnX_4) where the level of sig. for LnX_4 of 0.130 is not significant at (α) = 0.05. This means that partially the Export Value through the Port of Pangkalan Bun does not have a significant effect on Economic Growth in the Province of Central Kalimantan.

2. Simultaneous Hypothesis Testing Results (Test F)

Based on the results of multiple linear regression analysis as shown in the table above, it can be concluded that the variables of Export Value through the Ports of Kumai, Sampit, Pulang Pisau, and Pangkalan Bun together (simultaneously) influence Economic Growth in Central Kalimantan Province. This is based on the results of the F statistical test (simultaneous test), which is significant at (α) = 0.05, where the level of sig. F of 0.000 <0.05 or significant at (α)=0.05. Thus, it can be stated that all independent variables simultaneously have a significant effect on the dependent variable so H0 is rejected, and accepting Ha means that the hypothesis can be accepted because it is proven true.

a. Classic assumption test

To find out whether there is a violation of the classical assumptions, the regression model with Ordinary Least Square (OLS) in this study was tested for violation of assumptions, namely:

1. Normality Test

The normality test aims to test whether residual or confounding variables have a normal distribution in the regression model. According to Ghozali (2006), graphical analysis and statistical tests are used to detect whether the residuals are normally distributed or not.

This study uses graph analysis with a scatterplot or P-Plot. In principle, normality can be known from the spread of data (points). The basis for making decisions using scatterplot graph analysis are:

a. If the data is spread around the diagonal line and follows the direction of the diagonal line, then the regression model meets the assumption of normality.
b. If the data spreads far from the diagonal and/or does not follow the diagonal line, then the regression model does not meet the normality assumption.

Based on the results of the P-Plot analysis, to obtain the normality test of the Plot on Economic Growth (Y_1) in Central Kalimantan Province during 2007-2021, it has fulfilled the normality requirements because the distribution of the points is mostly spread along a diagonal line as shown by the analysis of the result which graphically uses the P-Plot of Y analysis model, has met the normality requirements, as shown in the following figure:
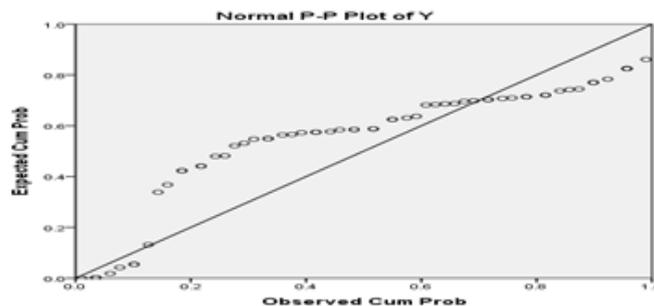
Figure 2. Normality Test Results, P-Plot Y

2. Multicollinearity Test

The multicollinearity test aims to test whether in the Regression Model there is a correlation between the independent variables (Ghozali, 2006). A good regression model should not correlate with the independent variables. Multicollinearity can be detected from the value of Tolerance and its opposite Variance Inflation Factor (VIF). These two measures indicate which of each independent variable is explained by the other Independent Variables. Tolerance measures the variability of the selected independent variables that are not explained by other independent variables. So a low tolerance value is the same as a high VIF value (because VIF = 1/Tolerance). The cutoff value that is commonly used to indicate the presence of multicollinearity is the Tolerance value of 0.10 or the same as the VIF value of 10.

Table 3. Multicollinearity Test Results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.240	3.380		.367	.715		
	LnX1	.176	.076	.321	2.315	.025	.636	1.571
	LnX2	.102	.049	.250	2.085	.042	.853	1.173
	LnX3	.067	.055	.155	1.218	.229	.759	1.318
	LnX4	.155	.101	.231	1.539	.130	.542	1.844
a. Dependent Variable: Y								

Source: Results of Data Analysis

Based on the results of the Multicollinearity Test Regression analysis in table 3 above, the Tolerance value for the variables $X_1 = 0.636$, $X_2 = 0.853$ $X_3 = 0.759$, and $X_4 = 0.542$ each is close to 1 and the VIF value for the variables $X_1 = 1.571$, $X_2 = 1.173$, $X_3 = 1.318$, and $X_4 = 1.844$ each are smaller than 10, this means that there is no violation of the classical assumption in the form of multicollinearity as shown by the results of the SPSS analysis.

3. Heteroscedasticity Test

The heteroscedasticity test aims to test whether there is an inequality of variance in the regression model from the residuals of one observation to another. If the variance of the residuals from one observation to another is fixed, then it is called homoscedasticity; if it is different, it is called heteroscedasticity. To detect the presence or absence of heteroscedasticity, the Glejtser test can be used. The main assumption of the Glejtser test is to perform regression of the independent variables on the residuals (Gujarati, 2003).

Testing the violation of the classical Heteroscedasticity assumption with the Glejtser Test is carried out by regressing between the independent variable (Xi) and the residual dependent variable (YResid), where if the beta parameter coefficient (Bi) of the regression equation is statistically significant, this shows that in the model data empirically estimated that there is heteroscedasticity and vice versa if the parameter is not statistically significant, then it does not happen.

Based on the results of the Glejtser test analysis in table 3, below, it was found that from the regression results between YResid and the variables LnX_1, LnX_2, LnX_3, and LnX_4, based on the t-test, all of them were not significant where the level of sig. each greater than 0.05. Thus, it can be concluded that the resulting regression does not violate the classical assumption of heteroscedasticity.

Table 4. Heteroscedasticity Test Results (Glejser Test)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.000	3.380		.000	1.000
	LnX1	.000	.076	.000	-.003	.998
	LnX2	9.735E-5	.049	.000	.002	.998
	LnX3	4.613E-5	.055	.000	.001	.999
	LnX4	5.746E-5	.101	.000	.001	1.000
a. Dependent Variable: YResid						

Source: Results of Data Analysis

4. Autocorrelation Test

The autocorrelation test is used to test whether in the linear regression model there is a correlation between the confounding error in period t and the confounding error in period t-1 (previous). This study uses the value of Durbin Watson (DW) to determine whether there is autocorrelation or not.

Symptoms of autocorrelation in multiple linear regression are usually detected using the Durbin-Watson (DW) test. According to Santoso (2002:241), in Noorliana (2010) it is stated that: to detect the presence or absence of autocorrelation, the Durbin-Watson test is carried out, where the calculated d value is compared with d table at a significance level of 5% or (α) = 0.05 with d.f = n-k-1. To determine the existence of autocorrelation, the criteria according to Santoso (2002: 242) are used by looking at the Durbin-Watson quantity, as follows:

- D-W numbers below -2, means that there is a positive autocorrelation;
- D-W numbers are between -2 to +2, meaning that there is no autocorrelation;
- D-W numbers number above +2 means that there is a negative autocorrelation.

Table 5. Autocorrelation Test Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.592[a]	.350	.301	.32303	.494
a. Predictors: (Constant), LnX_2, LnX_1, LnX_3, LnX_4					
b. Dependent Variable: Y					

Source: Results of Data Analysis

Based on the test results as shown by the results of the autocorrelation test analysis in table 5, the Durbin-Watson value of 0.494 which lies in the D-W number between -2 to +2, means that there is no autocorrelation. Thus it can be concluded that the obtained regression model does not occur autocorrelation.

Conclusion, Limitations, and Suggestions

1. Partially the Export Value through the Port of Loading at the Ports of Kumai and Sampit has a significant and positive influence on Economic Growth in the Province of Central Kalimantan, meanwhile, the Export Value through the Port of Loading Pulang Pisau and Pangkalan Bun has no effect but is optimistic on Economic Growth in the Province of Kalimantan Middle.

2. Simultaneously the Export Value through the Port of Loading at the Ports of Kumai Sampit, Pulang Pisau, and Pangkalan Bun has a significant influence on Economic Growth in the Province of Central Kalimantan.

Theoretically and research results show that exports have a significant and positive influence on economic growth. However, in this study, 2 variables show insignificant but positive results, namely the value of exports made through Pulang Pisau and Pangkalan Bun ports. Submit recommendations in the form of policies that can be carried out by the regional governments of Pulang Pisau and Pangkalan Bun districts and related agencies, namely:

1. Judging from the export value at the two ports of loading for export goods (Pulang Pisau and Pangkalan Bun) it is relatively small compared to the other loading ports in this study (Kumai and Sampit) so the effect is small so it is not significant on Economic Growth.

2. Can increase capacity, expand and equip adequate facilities and infrastructure at ports, to facilitate loading and unloading activities of export goods, it is hoped that the value of exports through this port can increase.

3. Good service is needed to exporters so that they are interested in sending their goods through these two ports, providing security guarantees and the smooth process of loading exported goods.

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