

## Effect of Exchange Rupiahs, Inflation and interest Rates on Credit Value of Non Oil Exports province of Bali

Elgina Selvia Hutagaol, A.A.I.N Marhaeni<sup>2</sup>

*Faculty of Economics and Business, Udayana University, Bali, Indonesia*

**ABSTRACT:** Export is one source of income to increase foreign exchange countries. Bali Province is one of the provinces that have no resources oil and gas in it. This has resulted in the importance of exports non-oil and gas in Bali Province. The purpose of this study is to analyze the simultaneous and partial influence of the rupiah exchange rate, inflation and lending rates to the value of non-oil exports of the Province of Bali. Test results in this study indicate that the rupiah exchange rate, inflation and credit interest rates simultaneously have a significant effect on the value of non-exports oil and gas Province of Bali. Partially, the rupiah exchange rate, inflation and interest rates credit has a negative and significant effect on the value of non-oil exports in the Province of Bali.

**KEYWORDS:** *rupiah exchange rate, inflation, lending rates, non-oil exports*

### I. INTRODUCTION

International trade has grown rapidly so far able to provide a significant role in the world economy (Gururaj et al., 2016). Various cooperation or trade agreements between the existing countries show that trade between countries is good imports and exports have an important role in the growth and economic development of a country. The more open a country the flow of international trade will further open up export opportunities the country's commodities to other countries to increase income country. A country will export products whose production costs are cheaper and with abundant raw materials. This endeavor provides a purpose in strengthening economic sectors that contain comparative power.

Bali Province is one of the provinces in Indonesia which can only be exporting the non-oil sector because the province of Bali does not have a source of oil and gas in it. The Province of Bali has a strategic role in national economic development. Non-oil exports are divided into several sub-sectors including the industrial sector, the agricultural products sector, fishery products sector, plantation products sector, and handicraft sector.

According to data taken from the Central Statistics Agency (BPS), it illustrates that exports in the Province of Bali tend to experience fluctuating movements every year. In the first 10 years of exports in the Province of Bali has an average of US \$ 256,560,997. In 2010 exports increased by US \$ 372,118,905 or by 31.9 percent when compared with the year 2009 which only reached the US \$ 253,559,874. Bali's highest exports were in 2011 which reached the US \$ 608,065,641 which is where it is is the highest demand for the period 2000-2017. According to data from the BPS, the export goods market from Bali Province is in great demand by various countries, namely the United States, Australia, Japan, Singapore, and China.

Three other Bali mainstay commodities that penetrate the foreign market consist of jewelry products (gems) 15.88 percent, apparel products not knitted 15.16 percent and furniture products, and home lighting by 5.45 percent. The United States market absorbs the most handicraft sculpture, namely 18.33 percent, followed by Spain 8.77 percent, France 8.61 percent, Japan 4.69 percent, and Australia 3.74 percent. It also penetrated the Chinese market 1.07 percent, Hong Kong 0.07 percent, Singapore 1.57 percent, Germany 3.69 percent and the remaining 46.01 percent to various other countries.

The main thing that wants to be highlighted more sharply is exports as one facility in national development. Faced with these problems, the government has continuously made several efforts to increase the role of exports, especially in the non-oil sector to reduce dependency in the oil and gas sector. The policy of developing non-oil and gas exports is enforced to reduce the decline in the growth of oil and gas commodity exports. This matter copes to earn foreign exchange and support economic productivity and opportunities for work. The relationship of exchange rates to foreign exchange reserves is more and more foreign exchange or foreign exchange owned by the government and residents of a country is meant the greater the country's ability to conduct economic transactions and international finance and stronger currency values (Mohammadi et al., 2011).

Also, with the increasingly high exchange rate of the country's currency itself, shows that the stronger economy of the country concerned, so you can get more foreign exchange.

Besides exchange rates that can affect foreign exchange reserves, exchange rates are strengthening can also suppress the rate of inflation. If the prices of goods and the service sector tends to increase, or called inflation, it will cause economic activity in the country to be hampered. So the country needs more foreign exchange to be able to transact outside the country. Therefore, to prevent increasing inflation, the amount the currency in circulation must be following needs, so that the stability of the value exchange can be maintained.

Credit becomes working capital that can encourage the smooth production of a commodity including an export-oriented commodity. Happen an increase in loan interest causes less working capital, because the addition of debt repayment costs, making it difficult for exporters to get more funds, this disrupts production, due to reduced capital and the impact on the weakening export value. Interest rates fall causing people to borrow credit at the bank and use the credit for investment so that production will increase and exports will also increase.

Based on the background of the problems, and theories that have been explained above, this research will focus on an analysis of the value of Non-Oil and Gas exports in Province of Bali, namely the Rupiah Exchange Rate, Inflation, and Credit Interest Rates.

International trade is a reflection of countries that embrace an open economic system. Today, there is hardly a single country in the world that adopts a closed economic system, this is because each country cannot meet all the needs of its own population. Differences in endowment resources and various other differences cause a country to require an exchange or trade with another country (Boediono, 1998). International trade itself can be interpreted as cross-border trade which refers to exports and imports (Tambunan, 2001). International trade is divided into two categories, namely trade in goods and services trade. International trade activities carried out aiming to improve the country's living standards (Schumacher, 2013).

The pattern of trade in a country is influenced by the economic conditions of a country, the economic conditions include state income, the level of industry owned by a country, the economic system adopted by a country, and the country's trade balance (Rudy, 2002: 15). There are five theories of international trade (Rudy, 2002) including:

1) Absolute Theory of Excellence

This theory was put forward by Adam Smith in 1776 in his book *The Wealth of Nations*, stating that free trade is the best policy for countries in the world. Smith argues that a country will produce and export goods where the country has an absolute advantage over other countries. On the contrary, the country will import goods if the country has an absolute loss in producing its goods. Absolute profit is defined as profit expressed by the number of hours per workday needed to make goods.

2) Theory of Comparative Excellence

Ricardo's comparative advantage theory makes improvements to the theory of absolute excellence that has not been able to answer the problem that is if there are countries that do not have an absolute advantage can trade. So, according to Ricardo, the superiority of each country that trades in the concept is relative, not absolute as stated by Smith so that countries that do not have absolute advantage can trade.

3) Theory of Mercantilism

This theory developed in the 1500 to 1800 centuries, based on the assumption that the wealth and prosperity of a country depend on foreign exchange it has. In achieving this prosperity, the country must trade with other countries, which means that its exports must be greater than imports. Therefore the need for government intervention in international trade by providing subsidies and restrictions on imports.

4) Theory of Factor Propose

This theory emphasizes that the products produced by a country for export are adjusted to the proportion of resource factors in that country (Todaro, 2000). Conversely, if a country does not have or lacks certain factors of resources, it is better to import it. Where this theory consists of a Land-labor relationship which is the relationship between natural resources and human resources, labor relations capital where there is a relationship between human resources and capital resources and the third is the Production method.

Export is the outflow of several goods and services from a country to international markets. While imports are the opposite of exports, namely the inflow of several goods and services into a country. Exports occur mainly because the needs for goods and services are fulfilled domestically or because the goods and services have competitiveness both in price and quality with similar products on the international market. Thus exports provide foreign exchange income for the country concerned which will then be used to finance the needs of imports and financing development programs at in the country (Mankiw, 2013). Exports can be interpreted as activities involving the production of goods and services produced in a country for consumption outside the country's borders (Rejekiingsih, 2012).

Many factors can affect exports in a country (Mankiw, 2013: 184-185) in the following context: 1) Consumer tastes for domestic and foreign manufactured goods. 2) Prices of goods at home and abroad. 3) The exchange rate at which people can use currency domestic to buy foreign currencies 4) Consumer income at home and abroad, and 5) The cost of transportation of goods from one country to another.

Changes in exchange rates are a source of exchange rate risk and have several implications on the volume of international trade. Some newly developed theories suggest that changes in exchange rates can have both positive and negative effects on trading volume. Research conducted by Bourdon & Korinek (2012) on the effect of exchange rates on trade between Chile and New Zealand countries shows that changes in exchange rates affect the trade balance in an open economy. Samuelson and Nordhaus (1996: 450) interpret the exchange rate (exchange rate) of foreign exchange, namely the price of a foreign country's currency in domestic currency units. So the exchange rate can be interpreted as the amount or value of a currency with other currencies.

Exchange rates play a very important role in translating prices from various countries into the same language (Krugman, and Obstfeld, 2004). Mankiw (2003) explained that the exchange rate is one of the economic factors that influence the increase or decrease in export activities. If the weakening of the domestic currency against foreign currencies or the exchange rate depreciates, it will cause exports to increase and imports will decline (Juliantari and Setiawina, 2015). The use of foreign exchange rates as a means of international trade transactions is certainly influenced by the country's bank interest rates (Magmmal, 2012).

### 1.3 Describe Relevant Scholarship

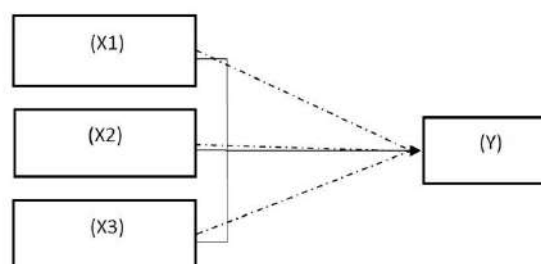
The results of Ginting's research (2013) which sought to find out the effect of the exchange rate on Indonesian exports using the exchange rate as an independent variable and the results of the study proved that in the short and long term the exchange rate had a negative and significant effect on export volume, *ceteris paribus*. The existence of a negative value on the exchange rate variable shows that the relationship between the exchange rate with the export volume is the inversely proportional or opposite direction.

Mankiw (2003) explains the correlation between exchange rates with the volume of international trade using the Mundell Fleming Model. This model assumes that the price level is fixed and shows the causes of short-term fluctuations in a small open economy with perfect capital mobility. The Mundell Fleming model shows that depreciation or appreciation in the value of a currency will result in changes in exports and imports. If the exchange rate depreciates, ie the value of the domestic currency relative to foreign currencies decreases, the volume of exports will increase. The research of Juliantari and Setiawan (2015) states that the exchange rate has an effect on exports in a country, the exchange rate has a dominant influence on doing international trade.

Yee (2016) research that inflation has a negative relationship due to the increase in aggregate prices which is higher than the cost of production and a decrease in the competitiveness of export prices. Tandelilin (2010) argues that inflation has a wide influence on exports in a country. Increased prices can motivate producers to increase output so that producers encourage maximizing production and creating new employment opportunities.

### 1.4 State Hypotheses and Their Correspondence to Research Design

Based on the theoretical studies and previous research that have been described, then the outline can be explained as factors that affect non-oil exports in the Province of Bali. The relationship between non-oil exports in Bali Province with influencing variables is made into a conceptual framework as follows:



Descriptions:

Y : Dependent Variable (Non-Oil and Gas Exports Province of Bali)

X1, X2, X3 : Independent Variable (Rupiah Exchange Rate, Inflation, and Credit Interest Rates)

-.-.-.- : partial influence

———— : simultaneous influence

Based on the above framework, the hypotheses raised in this study are as follows: 1) Rupiah exchange rate, inflation, and credit interest rates simultaneously affect the value of non-oil exports in the Province of Bali. 2) Rupiah exchange rate, inflation, and credit interest rates partially negatively affect the value of non-oil exports in Bali Province.

**II. METHOD**

The research method is a scientific technique to obtain data with specific purposes and uses (Sugiyono, 2013). This type of research is quantitative research because it is based on quantitative data or findings achieved using statistical procedures or other methods of quantification (Sugiyono, 2013). This research is associative. Associative research is research that aims to determine the effect or the relationship between two or more variables (Sugiyono, 2016) Where this research aims to determine the effect of the rupiah exchange rate, inflation and credit interest rates on the value of non-oil exports in Bali Province in 2000 - 2017.

*2.1 The Location of Study*

The location of this study was carried out in the Province of Bali, where Bali is one of the provinces that conducts non-oil and gas exports in Indonesia. Data examined on the rupiah exchange rate, inflation, lending rates, and the value of non-oil exports in Bali Province were taken from the official website of BPS and Bank Indonesia. Reader with irrelevant information. Consider using appendices and/or a supplemental website for more detailed information.

*2.2 Object of Research*

The object of this research includes three independent variables and one dependent variable. The object of research in this study is the influence of the rupiah exchange rate, inflation, lending rates, and the value of non-oil exports in the Province of Bali.

*2.3 Method of Collecting Data*

The data collection method used in this study is the observation method, which is carried out without involving oneself as part of the social or corporate environment but only as an independent observer (Sugiyono, 2014). Data is obtained by observing and recording and studying descriptions from journals, theses, theses, and accessing the BPS, Bank Indonesia, and World Bank websites.

*2.3.1 Data Analysis Technique*

In this study, the analysis technique used is the Imitative analysis technique, namely multiple regression analysis. The method of multiple linear analysis is used to detect the relationship of several independent variables used in research with the dependent variable (Widarjono, 2007). The selection of the use of this analysis technique aims to find out or get a picture of the effect of the influence of the rupiah exchange rate, inflation, and credit interest issues on the value of non-oil exports in the Province of Bali. The regression model used is using the regression model as follows:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + e_{it} \dots\dots\dots(1)$$

Descriptions:

- Y : Non-Oil Export Variables in Bali Province
- a : A constant
- X1 : Rupiah Exchange Rate Variable
- X2 : Inflation Variable
- X3 : Credit Interest Variable
- β1, β2, β3 : The coefficients of each regression X
- e<sub>it</sub> : error

For the estimation results of the regression models that are built or compiled to be accurate that is BLUE (Best Linear Unlimited Estimator) then this model must meet the classical assumptions. Then we need to detect data normality, detect autocorrelation of data, detect multicollinearity of data, and detect heteroscedasticity of data. A good model is a model that meets normality and is free from autocorrelation, multicollinearity, and heteroscedasticity.

**III. RESULTS**

*3.1 Descriptive Analysis*

Descriptive analysis is a statistic used to analyze data by describing or describing data that has been collected as it is without intending to make conclusions that apply to the public or generalizations. Descriptive statistics are used to describe the research variables as seen from the mean, standard deviation, maximum, and minimum. In detail, the characteristics are presented in Table 3.1

Table 3.1 Descriptive Statistics

<b>Descriptive Statistics</b>					
	N	Minimum	Maximum	Mean	Std. Deviation
Rupiah Exchange Rate	69	.000072	.000120	.00009920	.000014427
Inflation	69	1.78	12.49	6.2346	2.98087
Loan Interest Rates	69	12.03	27.30	17.3313	3.72661
Non Oil and Gas Exports	69	102345892	608065641	359320374.43	139206769.267

Valid N (listwise)	69			
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(Source: Secondary data processed, 2020)

Based on the results of the descriptive statistical analysis the data shown in Table 3.1 shows that 69 samples are elaborated as follows;

- 1) The Rupiah exchange rate has a minimum value of 0.000072. The maximum value is 0,000120 and the average is 0.00009920 with a standard deviation of 0.000014427.
- 2) Inflation has a minimum value of 1.78. The maximum value is 12.49 and the average is 6.2346 with a standard deviation of 2.98087.
- 3) Loan Interest Rates have a minimum value of 12.03. The maximum value of 27.30 and an average of 17.3313 with a standard deviation amounted to 3.72661.
- 4) Non-Oil and Gas Exports have a minimum value of 102345892. The maximum value is 608065641 and the average is 359320374.43 with a standard deviation of 139206769.267.

### 3.2 Multiple Linear Regression Analysis

The analysis technique used is the Imitative analysis technique, namely multiple regression analysis (regression analysis model). The selection of the use of this analysis technique aims to find out or get a picture of the effect of the Rupiah Exchange Rate, Inflation, and Credit Interest Rates affecting Non-Oil and Gas Exports in Bali Province.

Table 3.2 Results of Multiple Linear Regression Analysis

Model		Coefficients <sup>a</sup>				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	9.334	2.770		3.370	.001
	Rupiah Exchange Rate	-2.708	.667	-.436	-4.062	.000
	Inflation	-.030	.013	-.220	-2.309	.024
	Loan Interest Rates	-.024	.011	-.234	-2.196	.032

a. Dependent Variable: Ekspor Non Migas

(Source: Secondary data processed, 2020)

Based on the results of the regression analysis as presented in Table 3.2, the multiple regression equation is as follows:

$$Y = 9,334 - 2,708 X_1 - 0,030X_2 - 0,024 X_3$$

For the estimation results of the regression models that are built or compiled to be accurate that is BLUE (Best Linear Unlimited Estimator) then this model must meet the classical assumptions. Then we need to detect data normality, detect autocorrelation of data, detect multicollinearity of data, and detect heteroscedasticity of data. A good model is a model that meets normality and is free from autocorrelation, multicollinearity and heteroscedasticity.

#### 3.2.1 Data Normality Test

The normality test aims to test whether Unstandardized Residuals of the regression model are normally distributed or not. The test statistic used is the One-Sample Kolmogorov-Smirnov Test. With the following criteria: If the sig (2-tailed) value is an independent variable greater than  $\alpha$  (0.05) then the regression model residual is normally distributed.

Table 3.3 Results of Normality Test

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		69
Normal Parameters <sup>a,b</sup>	Mean	.0000000
	Std. Deviation	.29542680
Most Extreme Differences	Absolute	.099
	Positive	.099
	Negative	-.093
Test Statistic		.099
Asymp. Sig. (2-tailed)		.093 <sup>c</sup>

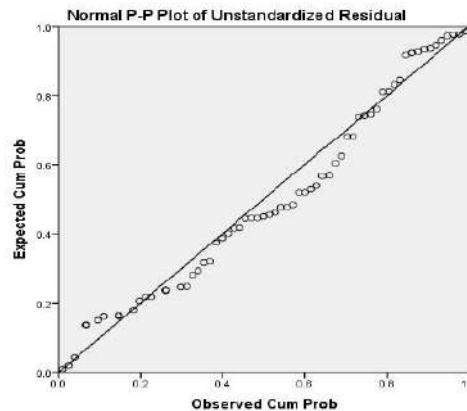
a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

(Source: Secondary data processed, 2020)

Based on Table 3.3 it can be seen that the Kolmogorov Smirnov (K-S) value is 0.099 and the Asymp value. Sig. (2-tailed) of 0.093. These results indicate that the regression equation model is normally distributed because of the Asymp value. Sig. (2-tailed) is bigger of an alpha value of 0.05 ( $0.093 > 0.05$ ). Besides, the normality test can be seen in the graph below.



(Source: Secondary data processed, 2020)  
Picture 3.1 P-P Plot Chart

Based on the results of the p-p plot chart obtained that the data spread around the diagonal line or histogram graph shows a normal distribution pattern, then the regression model meets the assumption of normality.

3.2.2 Autocorrelation Test

A regression model contains symptoms of autocorrelation, so the predictions made with that model will not be good, or can give a distorted prediction result. Therefore, to detect the presence or absence of autocorrelation, the Durbin Watson statistical test can be used. If  $du < d < 4-du$ : No autocorrelation is positive or negative.

Table 3.4 Results of Autocorrelation Test

Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.651 <sup>a</sup>	.424	.397	.30217	1.975

- a. Predictors: (Constant), Rupiah Exchange Rate, Inflation, loan interest rates
- b. Dependent Variable: Non oil and gas exports

(Source: Secondary data processed, 2020)

In Table 3.4 it can be seen that the Durbin Watson (count) value is 1.975. With a significant value of 0.05 and  $N = 69$  and the number of independent variables  $k = 3$ , the value of  $du = 1.7015$  is obtained ( $4 - du$ ) of  $4 - 1.7015 = 2.2985$ . Therefore the Durbin Watson value (d-count) of 1.975 is between 1.7015 and 2.2985, so it can be concluded that there is no positive and negative autocorrelation.

3.2.2 Multicollinearity Test

Multicollinearity test aims to test whether the regression model found a correlation between independent variables. A good regression model should not occur the correlation between independent variables. To detect the presence or absence of multicollinearity problems in the regression can be seen from the value of VIF (Variance Inflation Factor) and tolerance of each independent variable, with the following criteria: If the VIF value of each independent variable is less than 10, then there is no multicollinearity problem or not multicollinearity occurs in the model. If the tolerance value is more than 10 percent, there will be no multicollinearity problem in the model.

Table 3.4 Results of Multicollinearity Test

Coefficients<sup>a</sup>

Model		Collinearity Statistics	
		Tolerance	VIF
1	Rupiah Exchange Rate	.770	1.299
	Inflation	.979	1.021
	loan interest rates	.782	1.279

- a. Dependent Variable: Non oil and gas exports
- (Source: Secondary data processed, 2020)

Based on Table 3.4 it can be seen that the tolerance and VIF values of the Rupiah exchange rate variables are 0.770 and 1.299, the tolerance values and VIF of the Inflation variables are 0.979 and 1.021 and the tolerance and VIF values of the Interest Rate Credit are 0.782 and 1.227, respectively all show the tolerance value for each variable is greater than 0.1 and the VIF value is smaller than 10 which means the regression equation model is free from multicollinearity.

3.2.2 Heteroscedasticity Test

Detecting the problem of heteroscedasticity is one way by using the Glejser test. The Glejser Test is carried out by regressing the independent variable with its absolute residual value. If the significance value between the independent variable and the absolute residual is more than 0.05, then there is no heteroscedasticity problem.

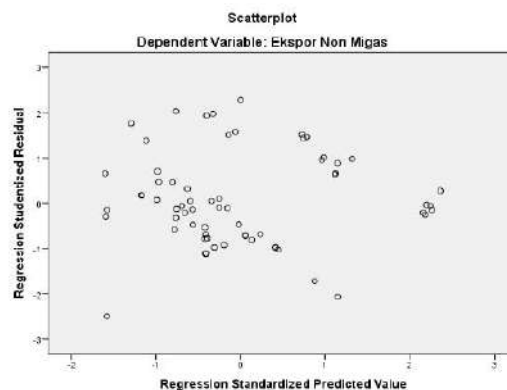
Table 3.5 Results of Heteroscedasticity Test

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.705	1.619		1.053	.296
	Rupiah Exchange Rate	.356	.390	.124	.913	.364
	Inflation	-.016	.008	-.244	-1.029	.147
	loan interest rates	.003	.006	.067	.494	.623

a. Dependent Variable: ABS\_RES1

(Source: Secondary data processed, 2020)

In Table 3.5 it can be seen that the significance value of the Rupiah exchange rate variable is 0.364, the significant value of the Inflation variable is 0.147 and the significance value of the variable Credit Interest Rate is 0.623. This value is greater than 0.05 which means there are no symptoms of heteroscedasticity. Heteroscedasticity test results can also be seen based on scatterplot charts in figure 2 follows.



(Source: Secondary data processed, 2020)

Picture 3.2 Scatterplot Chart

Based on the scatterplot output in Figure 4.6, it appears that there is no clear pattern, and the points spread above and below the number 0 on the Y-axis. So it can be concluded that there is no heteroscedasticity problem.

3.3 Test the Significance of Regression Coefficient Simultaneously (Test F)

To test the significance of the influence of independent variables, namely regarding the rupiah exchange rate (X1), inflation (X2) and Credit Interest Variable (X3) simultaneously or simultaneously on the dependent variable, namely Non-Oil and Gas Exports in Bali Province (Y), ANOVA (Test F).

Table 3.6 Results of Significance of Regression Coefficient Simultaneously (Test F)

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.361	3	1.454	15.921	.000 <sup>b</sup>
	Residual	5.935	65	.091		
	Total	10.296	68			

a. Dependent Variable: Non oil and gas exports

b. Predictors: (Constant), Rupiah Exchange Rate, Inflation, loan interest rates

(Source: Secondary data processed, 2020)

Effects of Rupiah Exchange Rates, Inflation, and Credit Interest Rates on Non-Exports Oil and Gas in Bali Province; with the following hypothesis:

H0:  $\beta_1 = \beta_2 = \beta_3 = 0$ , Means Rupiah Exchange Rate (X1), Inflation (X2) and Variables Loan Interest Rates (X3) do not affect simultaneously or in unison with Bali Province Non-Oil and Gas Exports (Y)

H1: At least one of  $\beta_i \neq 0$  ( $i = 1,2,3$ ), means Rupiah exchange rate (X1), Inflation (X2) and Credit Interest Variable (X3) are influential Simultaneous or simultaneous to Bali Province Non-Oil and Gas Exports (Y)

### 3.4 Test the Significance of Beta Regression Coefficients Partially (t-Test)

Table 3.7 Results of Test the Significance of Beta Regression Coefficients Partially (t-Test)

Model		Coefficients <sup>a</sup>				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	9.334	2.770		3.370	.001
	Rupiah Exchange Rate	-2.708	.667	-.436	-4.062	.000
	Inflation,	-.030	.013	-.220	-2.309	.024
	loan interest rates	-.024	.011	-.234	-2.196	.032

a. Dependent Variable: Non oil and gas exports

(Source: Secondary data processed, 2020)

#### 3.4.1 Testing the Effect of Rupiah Exchange Rate (X1) on Non-Oil and Gas Exports of Bali Province (Y)

H0:  $\beta_1 = 0$ , means that the exchange rate of the rupiah has no effect on the Non-Oil and Gas Exports of Bali Province.

H1:  $\beta_1 < 0$ , means that the Rupiah exchange rate has a negative and significant effect on the Non-Oil and Gas Exports of Bali Province.

With a significant level of  $\alpha = 0.05$  and sig. b1 of 0,000; thus eating sig = 0,000 <  $\alpha = 0.05$  then H0 is rejected which means H1 is accepted with b1 of -2.708 which means that if the exchange rate (X1) increases 1 thousand rupiahs then the non-oil and gas export of the Province of Bali (Y) will decrease by 2.708 million USD if variables X2 and X3 are assumed to be Constant.

#### 3.4.2 Testing the Effect of Inflation (X2) on Non-Oil and Gas Exports of Bali Province (Y)

H0:  $\beta_2 = 0$ , means that Inflation does not affect the Non-Oil and Gas Exports of Bali Province.

H1:  $\beta_2 < 0$ , means that Inflation has a negative and significant effect on the Non-Oil and Gas Exports of Bali Province.

With a significant level of  $\alpha = 0.05$  and sig. b2 of 0.024; thus eating sig = 0.024 <  $\alpha = 0.05$  then H0 is rejected, which means H1 is accepted with b2 of -0.30 which means that if inflation (X2) increases 1 percent then non-oil exports (Y) will decrease 0.30 million USD when variables X1 and X3 are assumed to be Constant.

#### 3.4.3 Testing the Effect of Interest Rates (X3) on Non-Oil Exports Bali Province (Y)

H0:  $\beta_3 = 0$ , it means that the loan interest rate has no effect on the Non-Oil and Gas Exports of Bali Province.

H1:  $\beta_3 < 0$ , means that the loan interest rate has a negative and significant effect on the Non-Oil and Gas Exports of Bali Province.

With a significant level of  $\alpha = 0.05$  and sig. b3 of 0.032; thus sig = 0.032 <  $\alpha = 0.05$  then H0 is rejected, which means H1 is accepted with b3 of -0.024 which means that if the lending rate (X3) increases 1 percent then the non-oil and gas export of the Province of Bali (Y) will decrease by 0.024 million USD if the variables X1 and X2 were assumed to be Constant.

#### 3.4.4 Free Variable Test that Has Dominant Influence

To determine the effect of the dominant independent variable on the dependent variable can be seen from the absolute value of Standardized coefficients Beta. The independent variable with the absolute value of the Beta Standardized coefficients is the largest variable whose influence is dominant on the dependent variable.

Table 3.8 Free Variable Test Results that Have Dominant Influence

No	Variable	Betta Coefficient	Ranking
1	Loan Interest Rates	-0,234	2
2	Inflation	-0,220	3
3	Rupiah Exchange Rates	-0,436	1

(Source: Secondary data processed, 2020)

Based on Table 3.8, the regression coefficient of the Rupiah exchange rate of -0.436 is the biggest compared to the regression coefficient of the loan interest rate of -0.234 and the inflation regression coefficient



of -0.220 so that it can be concluded that the Rupiah variable whose influence is dominant towards Bali Province Non-Oil and Gas Exports.

#### IV. DISCUSSION

After describing the results of the study, a comprehensive discussion can be made. With significant level  $\alpha = 0.05$  and Fcount of 15.921 with Sig = 0.000  $\leq \alpha = 0.05$ , it can be concluded that rejecting H0 and accepting H1 means that the Rupiah Exchange Rate, Inflation, and Credit Interest Rates simultaneously have a significant effect on the Provincial Non-Oil Exports Bali. This can be shown by R Square = 0.424, which means 42.40% variation of the rise and fall of Y or Non-Oil Exports of the Province of Bali is influenced by the rise and fall of the independent variables namely the exchange rate of rupiah (X1), inflation (X2) and lending rates (X3), while the remaining 57.6% is influenced by other factors not included in the research model. The results are in agreement with the research of Hidayat et al (2017) were in his research there was a significant negative effect of the Rupiah Exchange Rate against the US Rupiah on the Value of Indonesia's Non-Oil and Gas Exports. Fluctuations in exchange rates can affect product prices in foreign markets. When the value of the Rupiah strengthens, product prices in foreign markets will also increase. This research is supported by research conducted by Widhi Ari (2014) which states that inflation has a negative and significant effect on exports of Indonesian wood carving handicrafts to the United States.

Based on the results of testing the effect of the Rupiah Exchange Rate (X1) on Non-Exports Bali Oil and Gas Province (Y), the results obtained agree with the results of Ginting's research (2013) who sought to determine the effect of the exchange rate on Indonesian exports using the exchange rate as an independent variable and the results of the study prove that in the short and long term the value exchange rates have a negative and significant effect on export volumes, *ceteris paribus*. These results are consistent with research conducted by Sounders and Liliana (2002) which states that if the foreign exchange rate increases against the domestic currency, this can increase exports and vice versa if the foreign exchange rate experiences depreciation of the domestic currency, this can reduce exports. The results of this study are also in line with research conducted by Hidayat et al. (2017) where exchange rate fluctuations can affect.

Based on the results of testing the effect of Inflation (X2) on Non-Oil and Gas Exports Bali Province (Y), the results obtained concur with the results of ErlinaMarpaung's research (2017) inflation rate also causes the ups and downs of the value of non-oil and gas exports in Indonesia. The price increase also triggers the community to carry out the production process so that the economy can be spurred to increase national production activities. But this can also reduce power competitiveness thereby causing a decline in exports. And Yee's (2016) study that inflation has a negative relationship due to the increase in aggregate prices which is higher than the cost of production and a decrease in price competitiveness export. Inneke and Sudirman's research results (2014) which concluded that inflation has a negative and significant effect on handicraft exports in the province of Bali.

Based on the results of testing the influence of Credit Interest Rates (X3) on Non-Exports Bali Oil and Gas Province (Y), the results obtained concur with the results of research Research conducted by Sulaiman et al (2014) states that the influence of credit interest rates on non-oil exports in Riau Province has a negative effect. Increased lending rates mean working capital becomes less. This causes the amount of production to decline, which in turn affects the decline in export volume so that it will automatically affect the value of exports which are getting smaller. Research conducted by Edward (2001) states the size of working capital what exporters want to earn depends on the level of loan interest rates, high loan interest rates cause the entrepreneur will reduce the amount of the loan, so the amount of production will go down and this will affect the value of exports. The study is in line with research conducted by Kayika Putri (2011) which concluded that the interest rate on credit had a negative and significant effect on the coffee exports of Bali Province. Research conducted by Wirahasta (2011) concluded that credit interest rates had a negative and significant effect on handicraft exports in Bali Province.

Based on the results of tests conducted in the previous chapters, it is hoped that this research can be used as a reference for further researchers relating to non-oil exports in Bali Province with the factors that influence it. From the results of this study, it can be seen that non-oil exports in the Province of Bali experienced a positive trend and significant. This research can also have implications for this policy aimed at the provincial government of Bali in making decisions on developing strategies for developing non-oil and gas exports based on the results of research that have been made and exploring the potentials of non-oil exports in the Province of Bali.

#### V. CONCLUSION

Based on the results of the research analysis and the results of the discussion in the previous chapter, the conclusions of this study are as follows:

- 1) Based on the results of data processing and testing simultaneously at the level significant 0.05 indicates that the Rupiah Exchange Rate, Inflation, and Credit Interest Rates simultaneously affect the Non-Oil and Gas Exports of Bali Province.

- 2) Partially, the Rupiah Exchange Rate has a negative and significant effect on the Non-Oil and Gas Exports of Bali Province.
- 3) Partially, inflation has a negative and significant effect on Bali's Non-Oil and Gas Exports.
- 4) Partially the Credit Interest Rate has a negative and significant effect on Bali's Non-Oil and Gas Exports.

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