# EFFECT OF OVERSEAS DEBT AND INTEREST RATE RATE OF EXCHANGE RATE RATE (EXCHANGE RATE)

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#### **ABSTRAK**

Perdagangan internasional melibatkan suatu negara dengan negara lain dan menjadikan negara-negara di dunia menjadi lebih terikat.Oleh karena itu, interaksi dengan dunia luar negeri merupakan hal yang tidak bisa dihindari oleh negara manapun, termasuk Indonesia.Memperlancar transaksi perdagangan internasional, penggunaan uang dalam perekonomian terbuka tersebut ditetapkan dengan menggunakan mata uang yang telah disepakati.Tujuan dari penelitian ini untuk mengetahui Utang Luar Negeri dan Tingkat Suku Bunga berpengaruh terhadap Nilai Tukar Rupiah periode 2017-2018.Jenis data dalam penelitian ini adalah data sekunder. Data yang digunakan berupa data runtut waktu (time series) dengan rentang waktu 30 tahun.Data diperoleh dari Bursa Efek Indonesia dan Badan Statistik Provinsi Jawa Timur. Teknik analisis data yang digunakan adalah analisis triangulasi regresi linear berganda.Berdasarkan hasil penelitian menunjukkan bahwa: (1) utang luar negeri berpengaruh positif terhadap kurs rupiah; (2) suku bunga tidak berpengaruh terhadap kurs rupiah.Hal ini dapat menyebabkan terjadinya risiko perubahan nilai tukar mata uang yang timbul karena adanya ketidakpastian nilai tukar itu sendiri.Adanya perubahan nilai tukar mata uang juga berdampak pada apresiasi dan depresiasi mata uang.

Kata Kunci: kurs rupiah,utang luar negeri, suku bunga

#### ABSTRACT

International trade involves a country with another country and making the countries of the world become more bounded. Therefore, interaction with the foreign world is something that can not be avoided by any country, including Indonesia. Facilitate international trade transactions, the use of money in the open economy is set by using a currency that agreed. The purpose of this study to determine the Foreign Debt and Interest Rate effect on the Rupiah Exchange Rate 2017-2018 period. The type of data in this study is secondary data. The data used in the form of time series data (time series) with a span of 30 years. Data obtained from Bursa Efect Indonesia and Central Bureau of Statistics Jawa Timur Province. Data analysis technique used is multiple linear regression analysis. Based on the result of research indicate that: (1) foreign debt have positive effect on rupiah exchange rate; (2) the interest rate does not affect the rupiah exchange rate. This can cause the risk of changes in currency exchange rates arising from the uncertainty of the exchange rate itself. The change in currency exchange rate also affects the appreciation and depreciation of the currency.

Keywords:rupiah exchange rate, foreign debt, interest rate

#### INTRODUCTION

The foreign trade sector serves as a link between the domestic economy and the foreign economy. These relationships cause each other dependence among various economies. Therefore, the more open the economy of a country, the more susceptible to the welfare of economic activities that occur elsewhere. The increasingly global trend of the world will cause the economy of a country increasingly integrated with the world economy, according to the degree of openness of the country concerned. Similarly, what happens in Indonesia. As a result of an increasingly open economy, the Indonesian economy is increasingly influenced by the condition of the world economy. The degree of openness will have an impact on exchange rate changes. Like other countries, Indonesia in conducting international trade requires foreign exchange in the form of strong currency (currency that is widely accepted as a proof of international payment and used as a medium of exchange in international transactions (Kuncoro, 1996: 18). Currencies falling into that category are US Dollar, Pound Sterling, Yen and Deutsche Mark. Therefore it is important to know the exchange rate exchange (exchange rate) foreign exchange in international trade. This variable rate of exchange is affected by supply and demand. Therefore, it is the term of appreciation and depreciation. Appreciation is the strengthening of the value of a country's currency against the currency of another country determined by the market mechanism, while depreciation is the weakening of the value of a country's currency against other countries determined by the market mechanism (Kuncoro, 2001). Each country would want the value of its currency is stable against the currencies of other countries, not least Indonesia. However, to achieve this is not as easy as turning the palm of the hand because of the strong or weak exchange rate is not only determined by the conditions and economic policies in the country, but also the economic conditions of other countries that are trading partners as well as non-economic conditions such as security and conditions political. In this case the exchange rate is fluctuating or variable, causing the exchange rate can not be predicted in the future because the exchange rate is fully handed to market mechanism. The uncertainty of this exchange rate is caused by many factors, some of which are foreign debt and interest rate.

#### **Problem Formulation**

Based on the above explanation, then the problems that arise are:

- 1. What is the relationship between foreign debt and interest rate partially affect the rupiah exchange rate?
- 2. Do foreign debt and interest rates simultaneously affect the rupiah exchange rate?

## **Research Objectives**

- 1. The purpose of this study to determine the effect of foreign debt and interest rates partially and simultaneously affect the rupiah exchange rate period 2017-2018
- 2. And to analyze the effect of foreign debt and interest rates partially and simultaneously affect the rupiah exchange rate period 2017-2018

#### **Research Benefits**

Providing information to investors the importance of foreign debt and interest rate to rupiah exchange rate period 2017-2018.

## Literature review

Rupiah Exchange Rate (Exchange Rate)

Exchange rate (exchange rate) is the exchange of two different currencies, which is a comparison of the value or price between the two currencies. Exchange rate is one of the important price in the open economy because it is determined by the balance between demand and supply that occurs in the market. Given its great influence on the trade balance, current transactions as well as for other macroeconomic variables (Dumairy, 1996). Or the exchange rate is the exchange rate of a country's currency against another foreign country (Noor, 2011). A more complete definition of the exchange rate (Exchange Rate) is the exchange between two different currencies, which is a comparison of the value or price between the two currencies. This value comparison is often referred to as the exchange rate (Atmadja, 2002). The exchange rate usually changes, the exchange rate changes can be depreciation and appreciation. (Anwary, 2011) This fluctuating exchange rate is influenced by supply and demand. Therefore, it is the term of appreciation and depreciation. Appreciation is the strengthening of the value of a country's currency against the currency of another country determined by the market mechanism, while the depreciation is the weakening of the value of a country's currency against other countries determined by market mechanisms (Kuncoro, 2001). Every country would want the value of the currency is stable against the currencies of other countries, not least Indonesia. However, to achieve this is not as easy as turning the palm of the hand because the strong or weak exchange rate is determined not only by economic conditions and policies in the country but also the economic conditions of other countries that are its trading partners as well as non-economic conditions such as security and conditions politics. In this case the exchange rate is fluctuating or variable, resulting in the exchange rate can not be predicted in the future because the exchange rate is fully handed to market mechanism. Uncertainty of this exchange rate is caused by many factors, some of which are foreign debt and interest rate.

Madura (1989-99) states that exchange rate changes among the currencies of another country are influenced by various factors occurring in the country concerned, ie inflation rate, discount rate, output level, government intervention in the foreign exchange market, market expectations of value the currency to come, or the interaction of these factors. There are various types of exchange rates determined by the government, described by (Madura, 106-110), among others:

- a. Fixed Exchange Rate System Fixed exchange rate system is an exchange rate system that is allowed to fluctuate within the narrow limits set by the government. If the exchange rate changes too big then the government will intervene and return to its original limit.
- b. Freely Floating Exchange Rate System Freely floating exchange rate system is a system of exchange rates determined by the market without any government intervention.
- c. Managed Float Echange Rate System Managed float echange rate system is a combined exchange rate system fixed system and freely floatinf system. In this system the government also intervenes to keep the currency value is not too much change and remain in a certain direction without intending to keep the exchange rate in a fixed condition. Managed float is often called dirty float.
- d. Pegged Echange Rate System Pegged echange rate system is an exchange rate system in which the exchange rate of currency domestic fixed fixed to a foreign currency. The exchange rate of a currency has two concepts: first the nominal concept is a concept to measure the price of different currencies, where the concept states how much the currency a country needs to earn a certain amount of foreign currency. Second, the real concept is a concept that measures the price difference of a country's export commodity in the international market, while the nominal component is the development of foreign exchange rates both bilaterally and multilaterally so that the

real exchange rate of a currency may fluctuate but the nominal exchange rate is stable. To see the relationship of the real exchange rate and the nominal exchange rate the formula is: Real Exchange Rate = Nominal Rates x Price Level Ratio

The real exchange rate between the two countries is calculated from the nominal exchange rate and the price level in both countries.

If the real exchange rate is high, foreign goods are relatively cheap, and domestic goods are relatively expensive. If the real exchange rate is low, foreign goods are relatively expensive, domestic goods are relatively cheap (Mankiw, 2000: 192-193).

## Foreign Debt

Foreign debt is defined as revenue of the state in the form of foreign exchange or in the form of foreign exchange which is dirupisahkan or in the form of goods and or services received from the Lenders / Foreign Grants (PPHLN) to be paid back with certain conditions (Goeltom, 1998) or debt overseas is a source of state financing originating from a foreign country, an international financial institution / institution or from an international money market in the form of foreign exchange, goods and / or services including guarantees which result in future payments to be paid back under a mutual agreement (Rusniar , 2013). High foreign debt will lead to rising inflation. The budget deficit can be closed by selling government bonds or printing money. The situation could get worse if a large debt causes the country default (default) so that the debt rating drops. High foreign overseas will obviously tend to weaken the exchange rate of the country's currency.

## Interest Rate In addition to foreign

debt interest rates in this case also greatly affects the exchange rate of a currency against other currencies. The interest rate determines the value added of a country's currency. The higher the interest rate of a currency, the higher the demand for the country's currency. The interest rate is set by the central bank, and if in the long run the central bank always raises the interest rate then the exchange rate of the country's currency against other countries will tends to rise. This will continue until there are other factors that affect or the central bank again lowers interest rates. The interest rate is the cost borrower must pay on the loan received and is a reward for the lender for the funds. Interest rates tend to influence an individual's decision on the choice to spend more money or save money in the form of savings in the bank (Murdayanti, 2013). The ups and downs of exchange rates or foreign exchange rates can occur in various ways, ie, can be done officially by the government of a country that embraces managed floating exchange rate system, or it could be because of the pull of supply and demand forces in the market (market mechanism) and the usual changes in currency exchange rates can occur due to two things, (Muchlas, 2015).

The interest rate in the basic sense is the price of the use of money for a certain period of time. Interest rate as the price to be paid in case of exchange between one rupiah now and one rupiah to come. According to Keynes the interest rate is determined by Likuidity Preference and the amount of money. While Likuidity Preference is caused by: Transaction Motive, where people need liquid money to make daily payment transactions. Precautionary Motive, where people want to have money supply to deal with unexpected events, reserves / supplies if at any time have to make payment. Speculative Motive, where people want to have liquid money to make a profit when it can be speculated. The classic argues that interest is the price of the use of borrowed funds, which means the funds that occur to lend / the price that occurs in the investment fund market. Loans lent are shaped by savers who serve as suppliers and investors who function as demand. Savers are community members who receive incomes beyond what they need for their consumption needs over a certain period. While investors are members of the community who need funds. As a result of the demand and supply of funds, the Leonable market began to reveal savers and investors. And from the process of bargaining between them ultimately generated the equilibrium interest rate

(Boediono.1995: 77). The interest rate will rise if the amount of money and demand for it is large, and the interest will go down if the amount of money is big but the demand is small (Manullang, 1983: 105).

## RESEARCH METHODOLOGY

#### **Data collection methods**

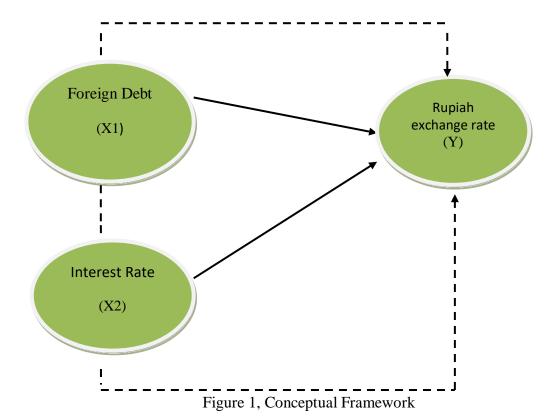
Data taken from this research is secondary data obtained from the official website of Indonesia Stock Exchange, namely www.idx.co.id secondary data required is financial information from financial statements included in the sample according to the variables studied. By method of data collection is method of documentation, that is by collecting and reviewing secondary data of Manufacturing company published by Indonesia Stock Exchange in year 2017-2018.

## **Population and Sample**

The population of companies as many as 4 companies that are Manufacturing companies listed on the Indonesia Stock Exchange and have complete financial statements in the year 2017-2018. The selection of this sample is determined by purposive sampling. Selected company samples are based on criteria. The sample of this research is 4 companies: Alaska Industrindo Tbk (ALKA), Alumindo Light Metal Industry Tbk (ALMI), Beton Jaya Manunggal Tbk (BTON), Citra Turbindo Tbk (CBTN)

## **Research Model**

This research uses a quantitative paradigm because quantitative or quantitative research paradigms emphasize the testing of theories through the measurement of research variables with numbers and perform data analysis with statistical procedures (JC Antula, P. Van Rate, Rw.L. Samadi: 2017)



## Research Hypothesis

- 1. Foreign debt has a significant effect on the exchange rate of Rupiah in Manufacturing companies listed on the BEI period 2017-2018
- 2. The interest rate has significant effect on the exchange rate of Rupiah in Manufacturing companies listed on BEI period 2017-2018

3. Foreign debt and interest rate on Rupiah exchange rate at Manufacturing companies listed on BEI period 2017-2018

# **Data Analysis Method**

**Classic Assumption Test** 

Testing the classical assumption to provide assurance that the regression equation obtained has precision in estimation, unbiased and consistent.

**Hypothesis Testing** 

Data analysis used to test hypothesis using correlation test, multiple linear regression test and t test. To analyze the effect of foreign debt and interest rate on rupiah exchange rate. Use the regression model as follows:

 $Y1 = \beta o + \beta 1ULN + \beta 2BI RATE + e$ 

Where dimana

Y = Rupiah exchange rate

a = Konstanta

b = regression coefficient

ULN = Foreign Debt BI\_RATe = Interest Rate

Partial Test T (t test) Aims to test how the influence of each independent variable individually to the dependent variable.

Simultaneous Effect Test (F test), Aims to show all independent variables have an effect simultaneously on the dependent variable.

Coefficient of Determination Test (R ²), Aim to measure how far the model's ability can explain variations of the dependent variable. Many researchers advocate using Adjusted R² values when evaluating which regression model is best. Adjusted R² value is used if the independent variable is more than one.

## **Discussion**

Simultaneous Test Results (F test)

## **ANOVA**<sup>a</sup>

I	Model		Sum of Squares	Df	Mean Square	F	Sig.
		Regression	123937183127,769	2	71768566562,884	125,629	,000 <sup>b</sup>
	1	Residual	4678512680,231	1	4898511650,231		
		Total	149635685778,000	3			

a. Dependent Variable: Rupiah Exchangerate

b. Predictors: (Constant):Foreign Debt, Interest Rate

Source: SPSS Data Separation Output 20

That In the test table ANOva or F test empirically the value of F arithmetic of 125.629 from each idependent variable and dependent variable and has a significant value of 0.000 that the significant value of F test is above 0.05 or 5%

## **Test Result t (t test)**

Partial hypothesis testing for variable X1 has t hit value = 1.425 with significant level where H1 is not acceptable at significant> 0.05 so that first hypothesis declared rejected. Testing X2 contributes in increasing Y, in partial hypothesis testing for variable X2 has t = 0.775 so H1 is unacceptable so that the second hypothesis proof is declared rejected.

Coefficient Test Results Determination (R 2)

Table 4. Coefficient of Determination Test Results

#### Model Summary<sup>b</sup>

Mod	R	R	Adjusted R	Std.	Error	Cha	Change Statistics					Durbin-
el		Square	Square	of	the	R	Square	F	df1	df2	Sig. F	Watson
				Estimate		Cha	inge	Change			Change	
1	,981ª	,675	,775	75488,493		,962	2	12,629	2	1	,195	3,112

a. Predictors: (Constant), Rupiah Exchange Rate

b. Dependent Variable: Foreigh Debt, Interest Rate

Source: SPSS Data Separation Output 20

Based on the calculation with SPSS 20 program it can be known that R-Square obtained is 0.675 or 96.2%, while the value of adjudted RSquare obtained for 0.775 or 7.75%, empirically in this study used 2 variables, then coefficient of determination used is the number of adjudted R value of 0.775 that the number gives the meaning that changes in the rate of change of stock return is influenced by the level of independent variables such as Foreigh Debt,Interest Rate of 77.5% while the remaining 22,5%, empirically other variables affected by other factors outside the study.

## Test Effect of Foreight Debt Against Rupiah Exchange Rate

Based on the above table 6 above can be seen that Foreigh Debtproduces t count value of 1.425 while t table of 545.741.165, which means t arithmetic <t table and varabel has a significant level of 0.000 which when compared with the degree of error that has been determined of 5% or 0.05 then the value of significance of Forevariables greater the degree of error ofRupiah Exchange Rate.

## Test of Effect Interest Rate of onRupiah Exchange Rate

Based on table 6 above can be seen that the Interest Rate produces in value t arithmetic of 0.881, while t table of 569.851.265, which means t arithmetic <table and this variable has a significant level of 0.540 which when compared with the predetermined degree of error of 5 % or 0.05 then the value of variable significance Interest Rate greater degree of error than Rupiah Exchange Rate

#### **Conclusion & Suggestions**

The conclusions of this study are as follows:

- 1. Foreight Debt and Interest Debt simultan usly have a significant effect on Rupiah Exchange Rate at a state owned financial company listed on BEI on 31 March 2017 period of three months
- 2. Partial Interest Debt has no significant effect on the Exhange rate of stock at the state owned financial company listed on the BEI on March 31, 2017 period of three months
- 3. EPS partially no significant effect on the Rupiah Exchange Rate in state owned financial companies listed on the BEI on March 31, 2017 period of three months.

Based on the above conclusions, the author tries to give suggestions that become consideration for the parties - related parties, as follows:

- 1. For the CommitmenIt is expected to publish reports that have been audited timely, so that financial statements are more reliable, especially for investors
- 2. For InvestorIt is expected to be more careful in doing the analysis before investing even more in analyzing the profit information contained in the financial statements issued by the company because the possibility of the value of the profit presented in the financial statements is not the actual value
- 3. For Further ResearchersThe authors suggest to further researchers when researching with a model like this so that researchers further use the longer motede, the object of more research, and can add other variables. In order to get more accurate results and further explain the influence between the variables tested.
- 4. The purpose of this study to determine the Foreign Debt and Interest Rate effect on the Rupiah Exchange Rate 2017-2018 periode

#### **BIBLIOGRAPHY**

- Anwary, Ahmad Amiruddin. (2011). Prediction of Rupiah Exchange Rate Against US Dollars Using Fuzzy TimeSeries. Informatics Engineering Department of Mathematics. Faculty of Math and Science. Diponegoro University. Semarang. Atmadja,
- Adwin Surja (2002) .Analysis of the Rupiah Exchange Movement Against the US Dollar Followingthe Implementation of Free Floating Exchange Rate System in Indonesia.Staff Faculty of Economics of Christian University Petra. Accounting & Finance Journal Vol. 1.Mei 2002. Page 69-78 http://puslit.petra.ac.id/journals/accounting/.
- Boediono, 2000. Microeconomics. BPFE UGM, Yogyakarta. Dumairy (1996) .Indonesia's economy.Erlangga: Jakarta
- Goeltom, Miranda S & Zulferdi, Doddy (1998). Exchange Rate Management in Indonesia and the Problems. Bulletin of Monetary and Banking Economy. September 1998.
- Kuncoro, Mudrajad. (2001). International Financial Management: Introduction to Global Economy and Business. BPFE: Yogyakarta Madura, Jeff, 2000. International FinancialManagement. Volume 1. Issue 4 Erlangga, Jakarta.
- Mankiw, N. Gregory, 2000. Macroeconomic Theory edition IV. Jakarta. Erland.
- Muchlas, .Mustika, C., Umiyati, E., Achmad, E., (2015) .Analysis of the effect of net exports on the rupiah against the US dollar and economic growth in Indonesia. Journal of Economic Paradigms. Vol. 10 (2); 292-302