



## MACROECONOMY, FLUCTUATION OF RUPIAH EXCHANGE RATE ON AMERICAN DOLLARS AT THE TIME AND BEFORE THE JOKOWI GOVERNMENT

**Lilieek Nur Sulistyowati, Herman Ahmadi**

Faculty of Economics and Business, Accounting Study Program, University of PGRI Madiun  
Faculty of Economics and Business, Management Study Program, University of PGRI Madiun

### ABSTRACT

*The rupiah exchange rate against the US Dollar penetrated the highest figure at Rp. 14,728, - during the reign of Jokowi, so it is necessary to discuss the anticipation of rupiah depreciation against the US dollar. Quantitative data types, secondary data ([www.bps.go.id](http://www.bps.go.id)), ([www.bi.go.id](http://www.bi.go.id)), Rupiah exchange rate against US dollar, inflation, Interest Rate, Money Supply, Import, Export. Sampling technique is sample saturated, this study uses monthly time series data period before Jokowi government starting from October 2013 until October 2014, and in the reign of Jokowi November 2014 until November 2015, Data analysis techniques using the test of Normality and Test Paired sample T-Tes, T-test Result of research that there is no difference of inflation, interest rate, money supply before and after Jokowi government, while Export and Import there is difference before and after Jokowi government, whereas t test before Jokowi Government known only interest rate only influence the rupiah exchange rate on USDollar, while after Jokowi government variable inflation, interest rate, money supply, Export, import, no Significant.*

*Keywords: Inflation rate, interest rate, money supply, export, Import, Rupiah exchange rate on dollar*

### ABSTRAK

Indonesia telah mengalami pergerakan nilai tukar yang fluktuatif. Nilai tukar rupiah atas Dolar Amerika menembus angka tertinggi pada level Rp.14.728,- pada masa pemerintahan Jokowi, sehingga perlu membahas langkah antisipasi pelemahan rupiah terhadap dolar AS, Jenis data kuantitatif, data sekunder ([www.bps.go.id](http://www.bps.go.id)), ([www.bi.go.id](http://www.bi.go.id)), Kurs rupiah terhadap dolar Amerika, inflasi, Suku Bunga, Jumlah Uang Beredar, Impor, Ekspor. Teknik sampling adalah sampel jenuh, Penelitian ini menggunakan data *time series* bulanan periode sebelum pemerintahan Jokowi terhitung mulai bulan Oktober 2013 sampai dengan bulan Oktober 2014, dan dimasa pemerintahan Jokowi bulan November 2014 sampai dengan bulan November 2015, Teknik analisis data menggunakan uji Normalitas dan Uji *Paired sample T-Tes*, Uji t Hasil penelitian bahwa Bahwa tidak terdapat perbedaan inflasi, suku bunga, jumlah uang beredar sebelum dan sesudah pemerintahan Jokowi, sedangkan Ekspor dan Impor terdapat perbedaan sebelum dan sesudah pemerintahan Jokowi, sedangkan uji t sebelum Pemerintahan Jokowi diketahui hanya suku bunga saja yang signifikan mempengaruhi kurs rupiah atas Dollar Amerika, sedangkan setelah Pemerintahan Jokowi variabel inflasi, suku bunga, jumlah uang beredar, Ekspor, Impor tidak berpengaruh signifikan

Kata Kunci: Tingkat Inflasi, suku bunga, jumlah uang beredar, ekspor, Impor, Kurs rupiah atas dollar

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\*Corresponding Author: liliek nur Sulistyowati  
E-mail: anny.asmara@gmail.com

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## INTRODUCTION

Indonesia as a developing country that adheres to the free-floating exchange rate system has experienced fluctuating exchange rate movements. President Joko Widodo gathered economic ministers and businessmen to discuss anticipatory measures to weaken the rupiah against the US dollar that weakened currencies and economic slowdown as well experienced by other countries, due to the devaluation of the Chinese yuan and the planned increase in interest rates by the US Central Bank, the drop in the rupiah exchange rate was caused by selling on the stock market not only in Indonesia but also globally.

JISDOR data (Jakarta Interbank spot Dollar rate), the rupiah exchange rate against the US dollar has experienced sharp fluctuations from the Rp.11,993 figure, - in October 2014 continued to fluctuate to break the highest level at Rp. 14,728, which occurred in September 2015 from the Bank Indonesia website ([www.bi.go.id](http://www.bi.go.id)).

The phenomenon of exchange rate fluctuations requires serious handling, because it will affect the level of confidence in the domestic currency so that it will change people's behavior in using money, change investors' decisions in investing their funds and will tend to interfere with foreign trade activities, because most of their trading activities are assessed by US dollar currency. So that will affect the performance of an economic activity in a country which also affects the economic conditions in that country.

This is consistent with research conducted by Muchlas and Alamsyah (2015) in which a sudden and large increase in inflation in a country will cause an increase in imports by the country of various goods and services from abroad, so that more foreign exchange is needed to pay for import transactions. The funds will result in increased demand for currencies.

The exchange rate is one of the important prices in an open economy because it is determined by the balance between demand and supply that occurs in the market. The free foreign exchange system and coupled with the implementation of the freely floating exchange rate system in Indonesia since 1997, caused exchange rate movements in the market to be very vulnerable by the influence of economic and non-economic factors. According to (Agustina, Reny, 2014), simultaneously export, import, the rupiah exchange rate and inflation rate affect Indonesia's foreign exchange reserves and partially export has a positive and significant effect on Indonesia's foreign exchange reserves, the rupiah exchange rate has a significant negative effect on Indonesia's foreign exchange reserves while the import and rupiah exchange rate do not affect Indonesia's foreign exchange reserves. In contrast to (Fabiano, Daniel, Kelmara, 2014) there is a positive influence of GDP and the negative influence of inflation and the exchange rate on Bovespa, an exception from the interest rate (Selic) which is not significant with the stock index. H1: there is no significant

difference in the fluctuation of the rupiah against the US dollar in the Jokowi Government and before the Jokowi Government seen from the inflation rate H2: there is no significant difference in the rupiah exchange rate against the US dollar in the Jokowi Government and before the Jokowi Government seen from the interest rate, H3 : there is a significant difference in the fluctuation of the rupiah exchange rate against the US dollar in the Jokowi Government before the Jokowi Government seen from the amount of money in circulation, H4: there is no significant difference in the rupiah exchange rate fluctuation against the Jokowi Government and before the Jokowi Government seen from the H5 Export: no there is a significant difference in the rupiah exchange rate fluctuations against the US dollar in the Jokowi Government and prior to the Jokowi Government seen from Imports

### **Fluctuations in the rupiah exchange rate against the US dollar**

Exchange rate fluctuations are the fluctuations in the value of one currency against another from various countries. Fluctuations in the exchange rate will cause what is referred to as currency exchange risk. This risk will be seen in the value of a strong and weak currency (Simi., Et.Al2015).

A currency is said to be strong if there is a surplus in the balance of payments because revenues are greater than payments (credit transactions > debit transactions), otherwise, it is said to be weak if the

balance of payments is a deficit, namely payments greater than revenues (debit transactions > credit transactions).

## **2. Exchange rate**

According to Joesoef (2008: 23), the exchange rate (exchange rate) is the amount of a particular currency that can be exchanged against one unit of another currency. According to Muhammadiyah (2011), Foreign exchange rates are the ratio of a country's currency exchange rates with other countries.

### **A. Types of exchange rates in Indonesia**

1. Judging from the period of delivery of funds according to Joesoef (2008,3031) the exchange rate can be classified into:
  - a) Spot rate: b) Forward rate
2. Judging from the type of transaction, the exchange rate can be classified into a) Buying rate b) Selling rate c) Mid-term

## **3. Inflation**

According to Ristaino and Puryani (2011: 181) inflation is a situation where the price of goods and services increases, for example, apartment rentals, book prices, haircuts, wholesalers and almost everything, the longer it tends to increase.

## **4. Interest rates**

According to Ristono and Puryani (2010) Interest (interest) can be interpreted as money paid for the use

of a saved amount of money (savings, deposits, SBI, etc.),

### 5. Amount of Circulation (JUB)

According to Sukirno (2012: 267), money is objected that are approved by the community as an intermediary for conducting trade/trade. "Approved" means there is an agreement from the community to use the object as an exchange tool.

### 6. International trade

International trade is a trade that occurs not only among communities in an area or a country but extends to trade between countries (foreign trade).

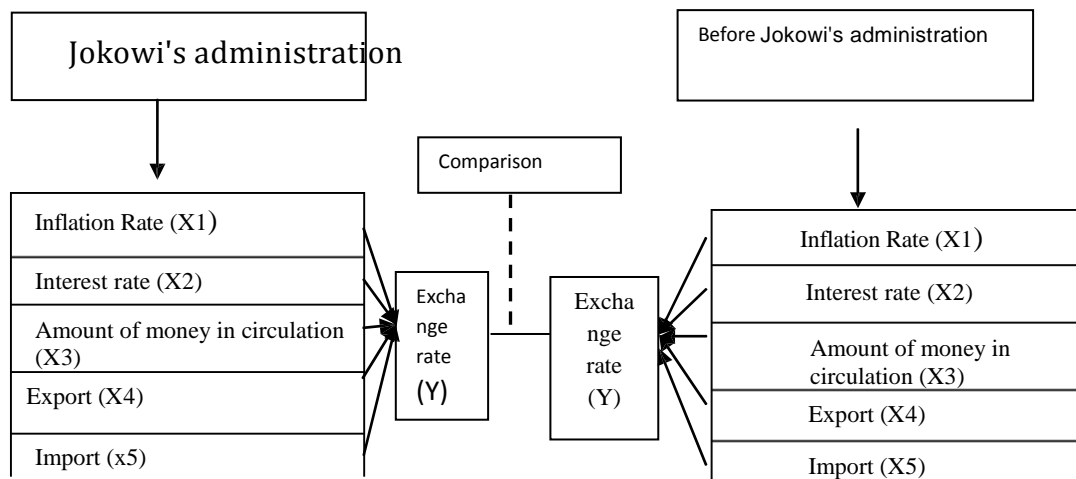
#### a. Export

Exports are one indicator to find out how much economic growth in a country. From export activities can be guaranteed business activities in the real sector are increasingly maintained.

#### b. Import

According to Agustina and Reny (2014) import transactions are traded by entering goods from abroad into Indonesian customs by complying with the provisions of the prevailing laws and regulations

## B. Theoretical Thought Framework



### **A. Place and Time**

This research was carried out by taking data on the website of the Central Bureau of Statistics ([www.bps.go.id](http://www.bps.go.id)) and Bank Indonesia ([www.bi.go.id](http://www.bi.go.id)), and from journals, articles, or other literature. This research was conducted in Jokowi's month. November 2014 to November 2015 before the Jokowi administration starting from October 2013 to October 2014

### **B. Population and Samples**

The population in this study is the currency or exchange rate in Indonesia. Samples according to Martono (2010: 66) are some members of the population selected using certain procedures so that they are expected to represent the population. The sampling technique used is saturated samples where all populations are used as a sample. then the sample of this study is the rupiah exchange rate against the US dollar, using a sample in the Jokowi administration of 13 months and before the Jokowi administration of 13 months with a total of 26 (twenty-six) samples or observations.

### **C. Type of Research**

The type of research used is explanatory research. Explanatory research is research that tries to explain the phenomena that exist (Zainuldan Muchlas, 2015).

### **D. Research Variables and Operational Definitions**

Variables according to Martono (2010: 49) can be defined as concepts that have variations or have more than

one value. The variables in this study are described as follows:

1. Independent variable (X)
  - a) Inflation (X1)
  - b) Interest rate (X2)
  - c) Amount of money circulating (X3)
  - d) The amount of export (X4)
  - e) The amount of import (X5)
2. Dependent variable (dependent variable) (Y)

Dependent variable or dependent variable (dependent variable) according to Martono (2010: 51) is a variable that is caused or influenced by independent variables. The dependent variable in this study is the exchange rate or exchange rate of the rupiah against the US dollar. Exchange rates (exchange rate) is the price of a currency against another currency. In the study used the rupiah exchange rate against the US dollar. Measured by using the exchange rate per month in units of rupiah.

### **E. Types and Data Sources**

The type of data used in this study is quantitative data, where the data source used is secondary data. This study uses monthly time series data. Secondary data used are:

1. The middle exchange rate of the rupiah against the US dollar, sourced from the Indonesian Economic and Financial Statistics (SEKI) at the Bank Indonesia website ([www.bi.go.id](http://www.bi.go.id)), is expressed in units of Rupiah / USD. Indonesian inflation data is sourced from the Indonesian Central Statistics Agency's website ([www.bps.go.id](http://www.bps.go.id)), which is stated in points.
3. Interest rates are derived from the Indonesian Economic and

Financial Statistics (SEKI) on the Bank Indonesia website (www.bi.go.id), which is stated in percent units. 4. The amount of money circulating in Indonesia is sourced from the Indonesian Economic and Financial Statistics (SEKI) on the Bank Indonesia website (www.bi.go.id), in units of billions of rupiah. sourced from the Indonesian Economic and Financial Statistics (SEKI) on the Bank Indonesia website (www.bi.go.id), in thousand dollars American. 6. The magnitude of imports in Indonesia comes from the Indonesian Economic and Financial Statistics (SEKI) on the Bank Indonesia website (www.bi.go.id), in thousand-dollar units of America.

#### **F. Data Collection Technique**

Collecting data in a study is intended to obtain materials that are relevant, accurate and realistic. Because macro data, data collection techniques used in this study are documentary techniques, namely getting information through notes, literature, grooming documentation and other relevant research. In addition, there are also written report data related to this research from various literature studies obtained from related agencies, websites, and research journals.

#### **Data Analysis Techniques**

Analysis with the Normality test and by using the T-Test Paired sample test. The significant level taken in this study is 5% or a confidence level of 95%. Test the hypothesis used in this

study is valid, if the significant (2-tailed) value is smaller than  $\alpha = 0.05$ , then  $H_a$  cannot be rejected, whereas if the value is significant (2-tailed) greater than  $\alpha = 0.05$ , then  $H_0$  is rejected.

### **RESEARCH RESULTS AND DISCUSSION**

#### **a. Paired sample T-Test**

Based on the results of the analysis carried out by researchers used to answer the results of testing the differences between the two paired or related samples can be shown in the table below:

1. Inflation

Table 1 Test of Inflation T-test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 inflation_ before - inflation_ after	-.025	1.598	.443	-.990	.941	-.056	12	.957

Source: Data processed

2. Interest rates

Table 2 Interest rate T-test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 sb_befor e - sb_after	-.077	.158	.044	-.172	.018	-1.760	12	.104

Source: Data processed

3. The money supply

Table 3 T-test test Amount of money in circulation

Paired Samples Test								
	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
jb_before - jb_after	-1.13231	6.56465	1.82071	-5.09928	2.83467	-.622	12	.546

Source: Data processed

4. Export

Table 4 Export T-test

Paired Samples Test								
	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
export_before - export_after	.16692	.08159	.02263	.11762	.21623	7.377	12	.000

Source: Data processed



5. Import

Table 5 Import T-test

Paired Samples Test								
	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 import_before - import_after	.21231	.11748	.03258	.14131	.28330	6.516	12	.000

Source: Data processed

**Hypothesis Testing Results**

1. Table 6 Test of Partial Regression Coefficients (Test t) before the Jokowi Government

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	108.597	77.440		1.402	.204
	inflation	.163	.342	.193	.476	.648
	sb	-3.761	2.293	-.605	-1.640	.145
	Jub	.006	.030	.060	.215	.836
	Eksport	-3.772	6.929	-.410	-.544	.603
	Import	.850	5.168	.122	.164	.874

a. Dependent Variable: kurs

Source: Data Processing Results

2. Table 7 Test Partial Regression Coefficients (Test t) during the Jokowi Government

Model		Coefficients <sup>a</sup>				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-118.942	52.938		-2.247	.059
	Inflation	-.102	.080	-.510	-1.279	.242
	Sb	3.545	1.246	.742	2.844	.025
	Jub	.247	.209	.504	1.185	.275
	Export	2.710	1.845	.407	1.468	.185
	Import	1.719	1.853	.236	.928	.384

a. Dependent Variable: exchange rate  
Source: Results of data processing

## CONCLUSION

1. That there is no difference in inflation before and during the Jokowi administration so that H1 states that there is no significant difference in the rupiah exchange rate against the US dollar in the Jokowi Government and before the Jokowi Government seen from the inflation rate received
2. That there is no difference in interest rates before and during the Jokowi administration so that H2 states that there is no significant difference in the rupiah exchange rate fluctuations against the US dollar in the Jokowi Government and before the Jokowi Government seen from the interest rates received.
3. That there is no difference in the money supply before and during

the Jokowi administration so that H3 states that there is a significant difference in the rupiah exchange rate fluctuations against the US dollar in the Jokowi government and when the Jokowi Government is seen from the amount of money circulating rejected

4. That there were differences in exports before and during the Jokowi administration so that H4 stated that there was no significant difference in the rupiah exchange rate fluctuations against the US dollar in the Jokowi Government and before the Jokowi Government was seen from Export rejected
5. That there are differences in imports before and during the Jokowi administration so that H5 states that there is no significant difference in the rupiah exchange

rate fluctuations against the US dollar in the Jokowi Government and before the Jokowi Government was seen from Imports rejected

6. Based on test (partial test), before the Jokowi government could only know interest rates that significantly affected the rupiah exchange rate against the US Dollar and the variable inflation, the money supply, exports and imports were not significant to the rupiah exchange rate against the US Dollar, while the Jokowi government was variable inflation, interest rates, the amount of money in circulation, exports, imports are not significant to the rupiah exchange rate against the US Dollar. the results of this study differ from the research of Triyono (2008) which states that the results of short-term analysis of inflation, money supply, interest rates, imports have a significant effect against the exchange rate, while in the long run the variable inflation, interest rates, imports have a significant positive effect on the exchange rate, the variable amount of money

### Suggestion

1. The results of this study are expected to add insight into the literature for science, especially in the field of foreign exchange and finance, and can be used as a material for consideration and additional information in conducting further research.

2. The results of this study are expected to help investors in making appropriate investment decisions so as to provide a maximum level of return and minimal risk.

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