



FACTORS THAT AFFECT INDONESIA'S ECONOMIC GROWTH

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Abstract

The purpose of this research is to study and analyze what factors impact Indonesia's economic growth with foreign debt, exchange rates, interest rates, and unemployment variables. Data is collected by taking secondary data with quarterly calculations for 51 years starting from 1968 - 2018, with linear multiple regression methods to analyze the data collected. The result is that Foreign Debt has a effected significant on Indonesia's Economic Growth, Exchange Rates did not have effected on Indonesia's Economic Growth, Interest Rates did not have effected significant on Indonesia's Economic Growth, Unemployment has significant effected on Indonesia's Economic Growth and Foreign Debt, Exchange Rates, Interest Rates, Unemployment are significant effected on Indonesia's economic growth simultaneously.

Keywords: Foreign Debt, Exchange Rates, Interest Rates, Unemployment, Economic Growth

INTRODUCTION

Economic growth is a process of changing a country's economic conditions in a continuous direction for the better in a certain period. Economic growth can be said to grow in the production of goods and services increases every period. Economic growth can indicate economic activities that can generated income and welfare of the community in a certain period which can illustrate that economy of particular country is good developed (Febriyani and Kusreni, 2017).



The last 10 years of economic growth in Indonesia starting from 2009-2019 experienced a stagnant trend at 5%, this shows that a lot of influence makes it tend to be stable, several indicators taken include foreign debt, exchange rates, interest rates, and unemployment.

Table 1: Indonesian Economic Growth 2009 – 2019

Quarterly Years	March (I)	July (II)	September (III)	December (IV)
2009	4,2	4	4,3	4,5
2010	5,7	6,2	5,8	6,9
2011	6,5	6,5	6,5	6,17
2012	6,3	6,4	6,17	6,23
2013	6	5,81	5,62	5,78
2014	5,21	5,12	5	5
2015	4,71	4,67	4,73	5,04
2016	4,92	5,18	3,13	4,94
2017	5,1	5,1	5,6	5,19
2018	5	5,2	5,1	5,1
2019	5			

Source: Bank Indonesia

The relationship of foreign debt to economic growth can increase economic growth or inhibit economic growth. Foreign debt can increase economic growth if used as a long-term investment, create jobs and development (Malik, 2017).

The effected of exchange rate on economic growth occurs in international trade, changes in the real exchange rate reflect Indonesia's competition with trading partners, the higher the real exchange rate, the more it encourages exports (Amrillah, 2016).

Bank Indonesia's interest rates also monitor and respond to the overall development of Indonesia's economy and its impact will affect Indonesia's economic growth through foreign investment into Indonesia (Perlambang, 2010). The other side of economic growth is also influence to the quality of existing human capital in a country, the good quality of human resources is utilized by the state will increase economic growth through production factors.

Based on the description above, this study aims to analyze the factors that influence Indonesia's economic growth through the variable foreign debt, exchange rates, interest rates, and unemployment.

LITERATURE REVIEW

Economic growth is a series of activities from humans, capital accumulation, use of modern technology and the results of input and output of population growth that occurs (Solow, 1987).

Foreign debt is a form of cooperation between creditor countries and debtor countries by effectively closing the government budget where the economic bankruptcy of foreign debt is smaller than printing excess money for budget payments that lead to inflation (Mulyani, 2004).

The exchange rate is the price of the domestic currency against other foreign currencies. The exchange rate is one indicator that influences activities on the stock market and money market because investors are sometimes careful to invest (Bau, 2016).

Interest rates are the percentage received by creditors from the debtor during certain time intervals (Soekirno, 2006). Changes in interest rates will further affect the desire to invest, for example in securities, where prices can go up or down depending on the interest rate.

Population growth and unemployment rates are closely related to economic growth, controlled but high-quality population growth is better than high population growth but low quality. This will cause the number of unemployed to increase (Febryani, 2017).

Syah (2005) states that foreign capital or foreign debt has a significant effect on economic growth. Boediono (2010) states that the decline in national stock indicates deficit so that the government adopts the foreign policy as a substitute for national stock.

H1: Foreign Debt is significant effect on Indonesia's Economic Growth

The exchange rate will cause the depreciation and appreciation of a currency, when a country's currency depreciates against another currency, the prices of goods and services will rise and inflation cannot be avoided, thereby reducing people's purchasing power and will tend to hold their money to shop, so economic growth will slow down. (Mankiw, 2007).

H2: Exchange Rates has a significant effect on Indonesia's Economic Growth

Changes in the relative interest rates will affect securities in foreign investment which in turn will affect the supply and demand of foreign exchange, this will also affect the exchange rate, this will also affect the amount of investment entering and investment because interest rates affect benefits gained after running an investment. Pratiwi (2015) states that interest rates have a significant effect on economic growth in which interest rates are a measure of the prices paid by debtors to creditors.

H3: Interest Rates have a significant effect on Indonesia's Economic Growth

Novriansyah (2018), shows that economic growth is progressing, slowing or setbacks can be seen from the level of unemployment, Septiatin (2016) said that unemployment has a significant effect on the country's economic growth. When a country's economic growth experiences growth at a positive rate and has a continuous trend, it means that income from the community has increased due to the large number of jobs.

H4: Unemployment has significant effected on Indonesia's economic growth

H5: Foreign Debt, Exchange Rates, Interest Rates, and Unemployment have a significant effected on Economic Growth

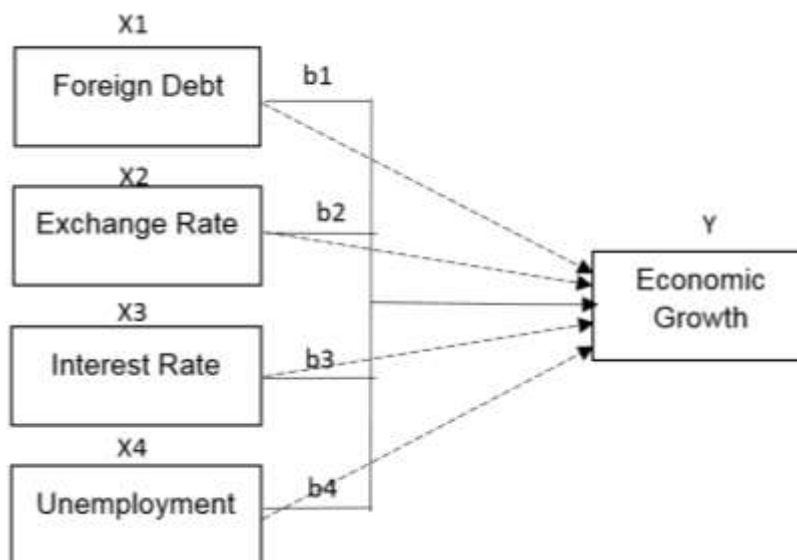


Figure 1. Research Model

RESEARCH METHODS

This research was conducted by searching for secondary data sources from Bank Indonesia and The Central Statistics Indonesia as a research base to determine the effect of Foreign Debt, Exchange Rates, Interest Rates, and Unemployment on Economic Growth in Indonesia. The data that has been collected will then be analyzed using a regression analysis technique aimed at analyzing the effect of a positive and significant independent variable on the dependent variable which is then interpreted to answer the research hypothesis.

ANALYSIS AND RESULTS

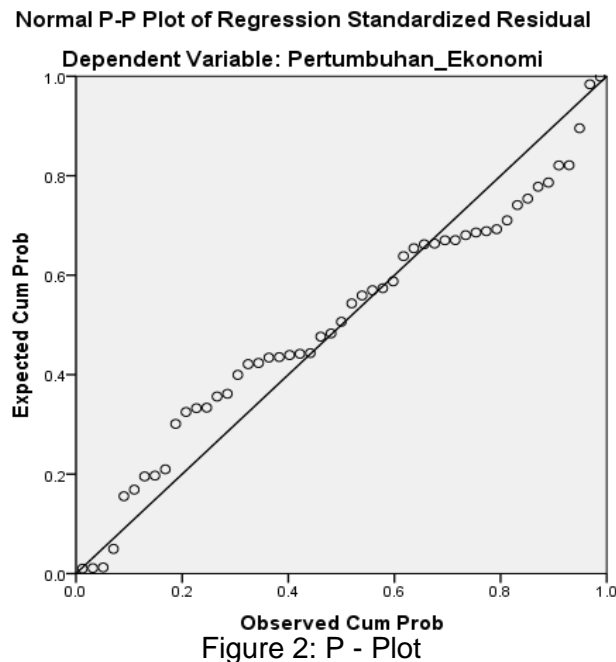
The unit root test (Unit Root Test) was developed by Dickey-Fuller known as the Augmented Dickey-Fuller Test (ADF). Unit root test or statistical test to know whether the time run time data used is stationary or not.

Table 2: Augmented Dickey-Fuller Root Test Results

Variables	1* Difference		
	t_Statistic	Probability	Information
Foreign Debt	-4.125.272	0.0021	stationary
Exchange Rate	-8.011.161	0.0000	stationary
Interest Rate	-5.922.993	0.0000	stationary
Unemployment	-6.774.848	0.0000	stationary
Economics growth	-7.828.930	0.0000	stationary

Table 2 shows that all variables at the first difference level are stationary, thus the stationary data can be used to conduct further test analysis

Purpose Normality Test to test the regression model, dependent variable and independent variables are normal distributions or not. Good regression model is having normal data distribution. One model to determine normality is to use a graph analysis method in histogram and normal probability plot.



The histogram shows that the distribution pattern is approaching normal because data follows the direction of the histogram graph line. Based on the figure in the normal probability plot graph, it shows that the data spread around the diagonal line, follows the direction those line and shows the normal distribution pattern.

Classical Multicollinearity Assumption Test is used to measure the degree of association between independent variables through the magnitude of correlation coefficient (r). multicollinearity occurs if the coefficient between independent variable is greater than 0.60 ($r > 0.60$) and it is said that multicollinearity does not occur.

Table 3: Regression Coefficients

Model	Unstandardized		Standardized Coefficients Beta	t	Collinearity	
	Coefficients B	Std. Error			Sig.	Tolerance VIF
1(Constant)	3.688	2.009		1.836	.073	
Foreign_Debt	.045	.006	1.533	8.024	.000	.174 5.757
Exchange_Rate	-.002	.000	-2.311	-9.683	.000	.111 8.985
Interest_Rate	.300	.278	.099	1.076	.287	.747 1.340
Unemployment	.784	.141	.702	5.569	.000	.399 2.505

a. Dependent Variable: Economic_Growth

From Table 3 seeing the VIF value all of independent variables is smaller than 10 and the tolerance value of all independent variables is greater than 0.1, so it can be concluded that in the regression model used there are no symptoms of multicollinearity.

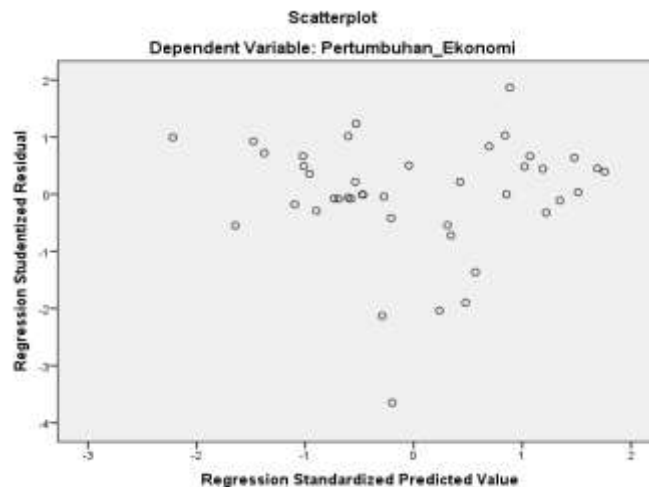


Figure 3: Scatterplots

Based on figure 3, it can be seen that the data (points) spread evenly above and below the zero line, do not gather in one place, and do not form certain patterns so that it can be concluded that in this regression test there is no heteroscedasticity problem.

The heteroscedasticity test tend to determine whether the model of regression there is unequal variant from residuals of one observation to another. If the variance from one observation residual to another observation is still called homoscedasticity and if there is difference heteroscedasticity will occur.

Table 4. Result Glesjer Test
Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.859	1.344		2.128	.039
	Foreign_Debt	-.006	.004	-.530	-1.588	.119
	Exchange_Rate	.000	.000	.592	1.419	.163
	Interest_Rate	-.171	.186	-.148	-.917	.364
	Unemployment	-.164	.094	-.385	-1.746	.087

From Table 4 above, the heteroscedasticity test results with the glacier test show that all independent variables have significance above 0.05% so it can be concluded that the regression model in this study does not occur heteroscedasticity problems.

Table 5. Durbin Watson Test

Durbin Watson	
Model	1.830

Based on Table 5 above the results of the Durbin Watson Autocorrelation Test showed a score of 1.830 From the calculation results obtained that $du = 1.7218 < d\text{-count} = 1.830 < 4 - du = 2.782$. This means that the d-count is in the autocorrelation free area, so it can be concluded that the regression model in this study is no autocorrelation.

Table 6. F-Test

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	357.595	4	89.399	27.950	.000 ^b
1	Residual	147.134	46	3.199		
	Total	504.729	50			

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	.842 ^a	.708	.683	1.78846

Table 7. t-Test

Coefficients^a

Model		Unstandardized		Standardized	t	Sig.
		Coefficients		Coefficients		
		B	Std. Error	Beta		
1	(Constant)	3.688	2.009		1.836	.073
	Foreign_Debt	.045	.006	1.533	8.024	.000
	Exchange_Rate	-.002	.000	-2.311	-9.683	.000
	Interest_Rate	.300	.278	.099	1.076	.287
	Unemployment	.784	.141	.702	5.569	.000

The Effect of Foreign Debt on Indonesia's Economic Growth

The results showed that the $t\text{-test} = 8.024 < t\text{-table} = 2.012$ this means that foreign debt has a significant effect on Indonesia's economic growth partially, this is in line with research conducted by Saputro (2017) where foreign debt has a significant effect on the Indonesian economy, which means that the government's foreign debt is not enough to increase Indonesia's economic growth.

Effects of Exchange Rates on Indonesia's Economic Growth

The t-test shows that $t\text{-count} = -9.683 < t\text{-table} = 2.012$ this means that the exchange rate does not have a significant effect on partial economic growth. This is in line with research conducted by Topowijono (2016) wherein his research entitled "Effect of Exchange Rates and Imports on GRDP" in a case study in East Java where changes in strengthening and weakening of the exchange rate did not affect the growth of GRDP in East Java meaning Exchange Rates no significant effect on Economic Growth.

Effect of Interest Rates on Indonesia's Economic Growth

The t-test shows that the $t\text{-test} = 1.076 < t\text{-table} = 2.012$, this means that the interest rate has no significant effect on Indonesia's economic growth partially. This is in line with research conducted by Wahyudi (2014) where interest rates has no significant effect on Indonesia's economic growth.

The Effect of Unemployment on Indonesia's Economic Growth

The t-test shows that $t\text{-count} = 5.569 > t\text{-table} = 2.012$ this means that Unemployment has a significant and positive effect on partial Economic Growth. This is in line with research by Franita (2016) in his research unemployment in Indonesia greatly affects Indonesia's overall economic growth, because domestic consumption is increasing not accompanied by productivity.

Effects of Foreign Debt, Exchange Rates, Interest Rates and Unemployment on Indonesia's Economic Growth

F-count value = $27.95 > F\text{-table} = 2.57$ or the statistical test falls in the rejection area, then H_0 is rejected. This means that foreign debt, exchange rates, interest rates, and unemployment have positive and significant effected on Indonesia economic growth simultaneously. The difference with previous studies is where this has caused economic turmoil between the two countries that hold the world economy, namely the United States and China, which are carrying out a trade war in this case the import tax rate that is carried out.

CONCLUSIONS AND SUGGESTIONS

This study concludes that Foreign Debt has an effected significant Indonesia's Economic Growth, Exchange Rates have no effected to significantly Indonesia's Economic Growth, Interest Rates have no effected significant Indonesia's economic growth, Unemployment has a positive and significant effected Indonesia's Economic Growth, and Foreign Debt, Exchange Rates, Interest Rates, and unemployment are significant effected to Indonesia's economic growth

The government should use foreign debt more towards short-term investment to promote rapid economic growth so that foreign investors will look at healthy economic growth indicators to entrust sources of funds to invest in Indonesia, and better direct the use of foreign loans to creating factors of production

Seeing the increasingly volatile exchange rate and the tendency to weaken, the government is expected to educate the public more to use the rupiah rather than invest its funds in foreign currencies so that the demand for the rupiah increases so that the rupiah exchange rate will remain stable and even expected to strengthen.

This study still has some limitations in terms of research methodology which are limited number of samples, indicators of information and research time that may restrict generalization of the study. It is hoped that further researchers can complement the shortcomings of this study.

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