

THE EFFECT OF EXCHANGE RATE, INFLATION, CAPITAL AND LABOR FORCE ON ECONOMIC GROWTH IN INDONESIA

Abstract

The study aimed to analyze the influence of exchange rate, Inflation, capital and labor force on economic growth in Indonesia. The data in this study are secondary data sourced from the Central Bureau of Statistics and Bank Indonesia which include data on the rupiah exchange rate against the dollar, inflation, gross domestic fixed capital formation, and labor rate. Analysis of this research based on the Cobb-Douglas Production Function by using the ordinary least square method (OLS) recursively. The results showed that the capital positively affects economic growth. By recursive method, inflation and exchange rate have a significant effect on economic growth. Inflation in particular has a significant negative impact on economic growth through interest rates and capital. However, the amount of labor has no significant effect on economic growth. This means that the government needs to reduce the inflation rate to be able to reduce the interest rate to increase the amount of capital and ultimately increase economic growth in Indonesia.

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INTRODUCTION

Economic growth is a picture of the state of a country's economy, said to grow if there is an increase in real GDP of the country. One important indicator for analyzing a country's economy is inflation, particularly with regard to the broad impact on aggregate macroeconomic variables such as economic growth (Endri, 2008).

There are three main factors in economic growth, namely the accumulation of capital through all types of investment, population growth that will increase the amount of labor and technological improvement (Todaro, 2000). According to Cobb-Douglas, output (economic growth) is a proportional share of capital and labor, meaning that if capital and labor increase then output also increases (Mankiw, 2009).

The relationship between inflation and economic growth has become an important economic issue. This relationship has been debated in the economic literature and has shown a different relationship with world economic conditions (Erbaykal and Okuyan, 2008). Basic macroeconomic indicators can be used as an illustration of a country's economic condition to measure price stability within the country. In general, the inflation rate can be used to measure price stability in the economy (Achsani, et al, 2010).

Labor is one of the factors of production used in the production process, even labor becomes the most important factor of other factors because labor / man is the driving force of all factors of production. Table 1.1 shows that employment growth in Indonesia generally increased from 2000 to 2015. Labor has a positive and significant impact on economic growth, as the number of workers increases, it will increase economic growth.

Table 1.1
Macroeconomic indicators of Indonesia years 1991 -2015

Years	The workforce that worked (in per cent)	The exchange rate of the Rupiah against the US Dollar (in Usd)	Inflation (in per cent)	Gross Domestic Product (in percent))
1991	1.09	1,992	9.52	6.52
1992	2.61	2,062	4.94	6.04
1993	1.08	2,110	9.77	6.10
1994	3.73	2,200	9.24	7.01
1995	2.37	2,308	8.64	7.60
1996	2.31	2,383	6.63	7.25
1997	1.76	4,650	10.27	4.49
1998	2.57	8,025	77.54	-15.11
1999	1.72	7,100	2.01	0.78
2000	1.14	9,595	9.35	4.69
2001	1.07	10,400	12.55	3.52
2002	0.92	8,940	10.03	4.31
2003	1.25	8,465	5.06	4.56
2004	0.97	9,290	6.40	4.79
2005	0.25	9,830	17.11	5.39
2006	1.57	9,020	6.60	5.21
2007	4.48	9,419	6.59	5.97
2008	2.56	10,950	11.06	5.67
2009	2.21	9,400	2.78	4.42
2010	3.08	8,991	6.96	5.86
2011	-0.74	9,068	3.79	5.81
2012	4.52	9,670	4.30	5.69
2013	0.23	12,189	8.38	5.26
2014	1.63	12,440	8.37	4.78
2015	0.17	13,795	3.35	4.57

Source: The Central Bureau Of Statistics, Bank Of Indonesia, The World Bank (processed)

From 2000 to 2008 Indonesia's real GDP grew steady, with a low of 3.5 per cent in 2001, and a 6.3 per cent high point in 2007. The high economic growth shows evidence that Indonesia was able to rise since the Asian crisis of 1997. Although the income distribution is still far from ideal, as production is concentrated in the capital Jakarta, Indonesia is able to regulate economic development by maintaining stable long-term economic growth (Syurkani, 2010).

The global economic downturn caused by the global financial crisis in the late 2000s has a relatively small impact on the Indonesian economy compared to the impact that other countries have. In 2009, Indonesia's GDP growth fell to 4.6 percent, which means that the country's GDP growth performance is one of the best in the world and has the third highest rating among the countries with large economies incorporated in the Group G- 20.

According to Keynes, an investment will be executed or not depends on the comparison between the expected profits (expressed as a percentage per unit time) on the one hand and the cost of funds /

interest rates on the other. The level of profit expected this is called the *Marginal Efficiency of Capital/MEC* (Boediono, 1986). In summary this concept can be described, if the expected profit (MEC) is greater than the interest rate, then the investment is implemented. This means that investment dependent on interest rates.

Kweku dkk (2012) and research "*Determinants of long term interest rate in the united states*", indicating that the overnight interest rate and inflation expectations significantly influential against long-term interest rates in the united states. Khushbakht kanwal dkk, (2014) and research "*determinants of interest rate: empirical evidence of Pakistan*", concluded that the positive influence and very strong between interest rates, inflation, and exchange rates in Pakistan.

THEORETICAL REVIEW

Cobb-douglas Production function

The production function is a mathematical relationship that indicates the maximum number of *output* resulting from the use of a number of *outputs* (Gasperz, Vincent, 2004). One of the models frequently used productivity measurement is a measurement based on the Cobb-Douglas function approach. Calculation of *output* with the production approach based on the Cobb-Douglas production function. Cobb-Douglas production functions States that the national income is divided between capital and labor is to remain constant during a long period. Cobb-Douglas production function has constant results scale, that is if capital and labour increased in the same proportion, then the *output* is increased according to the same proportions (Mankiw, 2009). The Cobb-Douglas production function has an element, that is:

$$\text{Capital Revenue} = \text{MPK} \times K = \alpha Y$$

$$\text{Revenue of Labor} = \text{MPL} \times L = (1 - \alpha) Y$$

Where α is a constant between zero and one that measures the share of income generated by capital and $(1 - \alpha)$ determines the share of income generated by labor. MPK is the marginal product of capital (the marginal production of capital) that is the amount of additional output obtained by the firm from one additional capital unit. MPL is the marginal product of labor (extra-marginal production of labor) that is the amount of additional output the firm derives from one additional unit of labor. K is capital; L is labor and Y is national income. Cobb-Douglas function that meets the above elements is:

$$f(K, L) = A K^{\alpha} L^{1-\alpha},$$

where A is a parameter greater than zero that measures technological productivity.

The relationship of interest rates and capital

In the macroeconomics theory of Keynes, to decide whether an investment will be implemented or not depending on the comparison between the magnitude of the expected benefits (expressed in percentage per unit of time) on the one hand and the cost of use of funds /tingkat flowers on the other. The level of profit expected this is called the *Marginal Efficiency of Capital/MEC* (Boediono, 1986:47). In summary this concept can be described, if the expected profit (MEC) is greater than the interest rate, then the investment is implemented. When the MEC is smaller than the interest rate, then the investment should not be implemented and when MEC equals the interest rate, then the investment should not be exercised and appropriate decision of the owners of capital.

From the description above is known that how much investment level desired by investors is determined by two things, namely the interest rate applicable to MEC functions or investment. The function of the MEC/function this investment demonstrates the relationship between the interest rate applicable to the level of investment spending desired by investors.

The relationship of interest rates and exchange rates

Interest rates play an important role in the foreign exchange markets given the large deposits are traded in the market earns interest rates, each interest rate is different according to the currency that is the unit. The type of information we need to compare the rewards offered by the domestic currency deposits and foreign currency is the currency exchange rate changes forecasts domestic/foreign currencies during that year (Krugman, 2012).

Similar to other prices in the economy determined by buyer and seller interactions, the exchange rate is also determined by the interaction between households, companies and financial institutions that buy and sell foreign exchange for international payments. The market that trades the international currency is called the foreign exchange market. The main actors in the foreign exchange market are the commercial banks of various companies engaged in international trade, non-bank financial institutions such as asset management companies and insurance companies, as well as central banks.

The demand for a foreign exchange deposits in banks are affected by factors that also affect the demand for other assets. The main factor is the belief that the actors that the deposits will be extremely valuable in the future. The value of a foreign currency deposits in the next future is determined by two factors, namely the interest rate being offered (by the bank in question) and the opportunity to change foreign exchange currency interest currency against other currencies.

When all other conditions remain, a rise in the interest rates of deposits increase in a domestic currency causes domestic currency experienced appreciation of foreign currencies. When all other conditions remain, a rise in the interest rates of deposits of a domestic currency causes domestic currency experienced appreciation of foreign currencies. According to Krugman (2012), if the other conditions remain, rising domestic interest rates will cause a country's exchange rate appreciation (the dollar), while a rise in interest rates abroad (the Euro) will cause the domestic exchange rate (the dollar) against the exchange rate depreciate other countries (Euro). This is in accordance with Imamudin (2008), which suggests that an increase in domestic interest rates, it will cause the domestic currency appreciation experience. Conversely, if domestic interest rates come down, then the domestic currency or exchange rate depreciate.

The relationship of inflation, interest rates, exchange rates and output

In theory *the law of one price*, the price of goods that are identical in a country must be equal to the price of goods in other countries when measured in the same currency. Based on the approach of *purchasing power parity*, changes in exchange rates between the two countries, in proportion to the change in the level of inflation in their respective countries. The PPP's relationship with the *law of one price*. If *the law of one price* applies to all commodities, then the *purchasing power parity* will also automatically follow *the law of one price*. Although the *law of one price* is not applicable to all commodities, inflation and exchange rates are not too far away is shifted from predictions of *purchasing power parity*.

When interest rates rise in a country, then the *money demand* in those countries will decline. With a decline in *money demand* in those countries then inflation will decline, according to the theory of purchasing power parity, with the relative decline of the inflation rate in a country then the country's currency will appreciate. When the *money supply* in a country increases, it will increase inflation. Because inflation is rising relatively then in accordance with the theory of *purchasing power parity* of currencies in these countries will depreciate. When the output of a country on the rise, then the money demand will also increase, due to the demand for money increases then inflation will rise, according to an attribute theory then the purchasing power parity exchange rates in the currency of the country It will depreciate (Krugman, 2012).

Through fisher's approach to effect, in the longer term, the rising expectations of inflation will be rising interest rates. The fall in the level of inflation expectations then it will lower the interest rate (Krugman, 2012).

RESEARCH METHODOLOGY

The Scope Of Research

This research would like to examine how big the influence of exchange rates, inflation, capital and labor against economic growth in Indonesia in the past year 1990 up to the year 2015. The object of this research are economic growth, inflation, exchange rates, capital and labor. The data used is the data *time series* data on secondary sourced. *Time series* data in the study are economic growth annually, inflation per year, the exchange rate of rupiah against the dollar, the gross capital formation data and the level of labor annually.

Data and Data sources

Types of data used in the study is secondary data. Secondary data is data in a form that is already so or in the form of data publication. The data retrieved from the Central Bureau of statistics (BPS), Indonesia Finance Economic Statistics (SEKI) and Websites of the Bank Indonesia (BI). In addition the author also used the research libraries to support and complement the research.

Methods Of Data Analysis

Analysis on the research based on the Cobb-Douglas Production Function, where economic growth or *the output* is a function of technology, capital and labor. Cobb-Douglas production function has constant results scale. If capital and labour increased in the same proportion, then the *output* is increased according to the same proportions (Mankiw, 2009). Marginal product of Cobb-Douglas function, composed of marginal product of labour, namely;

$$MPL = (1 - \alpha) AK^\alpha L^{1-\alpha} \quad (1)$$

marginal product of capital, namely;

$$MPK = \alpha AK^{\alpha-1} L^{1-\alpha} \quad (2)$$

From this equation it is known that α between zero and one, the increase in the amount of capital increases the MPL and reduces the MPK, while the increase in the amount of labor reduces the MPL and increases the MPK.. Therefore the development of technologies that increase the parameters A to make both marginal production factors of production rises proportionately.

In the theory of economic growth of the Harrod-Domar, one of the concept anyway that is to grow the economy then added extra stock as new investment capital or *capital output ratio* (COR). According to Keynes, To decide whether an investment will be executed or not depends on the comparison between the expected profits (expressed as a percentage per unit time) on the one hand and the cost of funds / interest

rates on the other. The level of profit expected this is called with *the term Marginal Efficiency of Capital/MEC (Boediono, 1986)*.

On the research of Kanwal dkk (2014), who is researching about the factors that affect interest rates in pakistan, concluded that the positive influence and very strong between interest rates, inflation, and exchange rates.

Analysis of the model used in this research is quantitative analysis. Quantitative analysis is used to analyze quantitative information (data that can be measured, tested and informed in the form of tables and other).

To achieve this, then there are three things to be studied. First is the effect of exchange rate and inflation on interest rates. Second, the influence of interest rates towards the capital. Third, the influence of the exchange rate, inflation, capital and labor against economic growth. The first equation, the second and third equations are solved with recursive model. In the form of a recursive equation model namely the endogenous variables can be specified per value in sequential (order). There are two types of variables that is endogenous and exogenous variables are variables. Endogenous variable is the dependent variable whose value is determined in the system of equations, although the variable may also appear as independent variables within the system of equations. The exogenous variable (eksogenaous variable) is a variable whose value is not specified in the system, but outside the system. For example determined by a policy (policy). This variable causes (causes) the movement of endogenous variables (effect) in the system.

In the recursive equation can be applied ordinary linear regression (OLS) to be able to estimate each block of recursive equation. Regular linear regression (OLS) can be used because in the first equation for example it will produce error u_1 where the value of this endogenous parameter is a function of predetermined variable so there is no correlation of endogenous variables with u_1 . Since the endogenous and u_1 variables are not correlated, the value of the second equation parameter also does not correlate with u_1 . So in the recursive equation model can also be applied linear regression OLS (OLS assumptions are met).

The equation will be built by the author of the above structure based on the assumption that:

1. The equations that describe the factors that affect interest rates

$$i = \gamma_0 + \gamma_1 EX + \gamma_2 INF + \varepsilon \quad (3)$$

2. The equation describes a factor affecting capital

$$k = \gamma_0 + \gamma_1 \bar{i} + \varepsilon \quad (4)$$

3. The equation factors affecting the economic growth

$$\ln Y = \beta_1 \ln k_0 + \beta_2 \ln L + \varepsilon \quad (5)$$

Description:

I = interest rate

\bar{i} = interest rate (interest rate equation estimation results)

K = capital

\bar{k} = kapital (the third equation estimation results)

EX = Rupiah exchange rates against dollars

Y = Gross Domestic Product

INF = Inflation

L = Labour

Testing The Model

1) Test Of Econometrics

Econometrics model is a special pattern that is related to the application of mathematical statistics and the use of statistical tools (tools of statistical inference) for the measurement of economic relationships empirically the dipostulasi based on the theory of Economics (Greene, 2003). In terms of other models of Econometrics is a specific pattern of algebraic model of a stochastic element that includes one or more variables a bully. So Econometrics model has characteristics that take into account the existence of a stochastic element elements are random. The criteria specify whether an Econometrics estimated has the required properties as estimator *unbiasedness*, and *efficiency*. In doing estimation of linear equations using the OLS method then there are some assumptions that must be met for obtaining the required parameter values are: multikolinieritas, heterokedastisitas test test test autocorrelation.

2) Statistical Tests

a. Test T (partial test)

A statistical analysis of partially used to seeing the significance of each free variable individually in explaining the variable bound to a model by using the t-test:

$H_0 : \beta = 0$, mean coefficients equal to zero

$H_1 : \beta_1 \neq 0$ mean coefficients are not the same (different) with zero

Significance directly can be seen from the amount of probability. If p-value is smaller than (eg = 5% or 0.05) then the independent variable significantly influences the dependent variable or rejects H_0 . Apart from the probability number can also be used t statistical value compared with the value of t table. If t statistic is bigger than t table then H_0 is rejected

b. F Test

The overall test of the model to see if all the regression coefficients differ by zero or in other words the model is accepted or not. The procedure is the same as the T test Significance directly can be seen from the magnitude of the probability number. If p-value is smaller than (eg = 5% or 0.05) then the independent variable significantly influences the dependent variable or rejects Ho. Apart from the probability number can also be used F statistical value compared with the value of F table. If F statistic is greater than F table then Ho is rejected.

c. Testing R

Test the degree of accuracy (goodness of fit) by looking at the coefficient of determination R^2 . The test is performed to see how much the regression line capability describes the dependent variable (the proportion in the % dependent variable) which can be explained by the independent variable. The value of R^2 is between 0 s.d 1 getting closer to 1 then in the model the dependent variable can be explained by the free variable perfectly (100%). As for the calculation of R-squared value is:

$$R\text{-squared} = 1 - \frac{ESS}{TSS} = \frac{RSS}{TSS}$$

TSS = Total Sum of Squared

ESS = Error Sum of Squared

RSS = Regression Sum of Squared

d. Adjusted R-squared

The problem that occurs when testing using R-squared is if the independent variable is added then the R-squared value will increase. The Adjusted R-squared test objectively sees the effect of adding independent variables to whether the variables are capable of amplifying the variation of the explanation of the dependent variable. Adjusted R-squared value calculation is:

$$\text{Adjusted R-squared} = 1 - (1 - R\text{squared}) \times \frac{N - 1}{N - K}$$

N= The Number Of Observation

K= the number of variables

RESULTS AND DISCUSSION

The influence of the exchange rate of the rupiah against inflationary and interest rates

The recursive equations that showed the influence of the exchange rate of the rupiah against inflationary and interest rates, that is, $i = \gamma_0 + \gamma_1 EX + \gamma_2 INF + \varepsilon$, where it will be done test your assumptions and hypothesis test.

A Classic Assumption Test

1) Test Heterokedastisitas

The value of the probability for the EX variable is 0.9616 and for the INF variable is 0.6977. Then the value of $0.9616 > \alpha 1\%$ then there is no problem heterokedastisitas on EX variables, as well as the value of $0.6977 > \alpha 1\%$ then the INF variable there is no problem heterokedastisitas.

Autocorrelation Test

Probabilitas Obs*R-squared value is $0.2696 > \text{value } \alpha 1\%$. So on this regression model there is no problem of autocorrelation.

2) Test Multicollinearity

Correlation value of each independent variable shows the number 0.003972 which means the correlation is very small does not exceed the value of more than 0.8, so it can be concluded that there is no multicollinearity..

The Test Of Hypothesis

1) Test t

Partial regression test (t test) shows that the value of regression coefficient of EX variable equal to -0.000608 with t equal to -2,775066 and significance $0,0108 < 0,05$ it shows influence of EX to SBI negative and significant. INF variable regression coefficient value of 0,526168 with t equal to 9,020859 and significance equal to $0,0000 > 0,05$, this shows that influence of INF to SBI is positive significant.

2) Test F

F test statistic test found that the value of F statistic significant at $0.000 < 0.05$, so it can be concluded that together EX and INF variables significantly influence the SBI variable.

3) Test R

Based on the result of regression of OLS, Adjusted R-squared with value 0,776545, it means together EX and INF variable have contribution to explain variable of SBI equal to

77,6%, while the rest equal to 22,4% explained by other variable not examined or not included in this research model.

Influence of interest rate on capital

The following recursive equation shows the influence of interest rates against capital, where, the interest rate is derived from the estimated value in the first equation above, $k = \gamma_0 + \gamma_1 \bar{i} + \varepsilon$, where classic assumption test and Hypothesis Test will be performed.

A classic assumption test

1) Test Heterokedastisitas

The value of the probability for the SBIF variable is 0.7636. Then the value of $0.7636 > \alpha$ 1% then there is no problem heterokedastisitas on SBIF variables.

2) Uji Autokorelasi

To test autocorrelation is done by looking at the value of the Durbin-Watson. This value is commonly called count with DW. These values are compared with criteria of acceptance or rejection will be created with the value of the dL and dU are determined based on the number of free variables in the regression model (k) and the number of sampelnya (n). The value of the dL and dU can be seen in Table DW with the level of significance (*error*) 5% ($\alpha = 0.05$).

The value of the count of DW 0.369543 bigger than dl 1.2879 means being on the existence of negative autocorrelation. For correction of the problem of autocorrelation, we will do the procedure *Cochrane-Orcutt*, expressed with ρ (rho). Method of looping in the *cochrane-orcutt* is done with two phases, among others; (1) determine the correlation between ρ a few pairs of observation in the model, and then (2) run the regression equation with an AR (1) or to the AR (2), to remove the correlation between *error*.

The statistical value of the durbin-watson has indicated the model has rectified the problem of autocorrelation of 1.75. Thus the equation for an ideal condition (*white noise*) which we have gained from the model AR (2) is $K = 10867784 - 3478.85 \text{ SBIF} + [\text{AR}(1)=1.36, \text{AR}(2)= - 0.37, \text{UNCOND}]$ or in other forms: $K = 10867784 - 3478.85 \text{ SBIF} + \mu_t$, where $\mu_t = 1,36 * \mu_{t-1} + 0,37 * \mu_{t-2} + \varepsilon$.

The Test Of Hypothesis

1) Test F

From the results of F statistical test found that the value of F statistic significant at $0,000 < 0,05$, so it can be concluded that the variable SBIF significantly negative effect on the variable K.Uji R

OLS regression results based on the above values Adjusted R-squared of 0.93 means SBIF has a variable contribution describes K of 93%, while the rest of 8% is explained by other variables not examined or not included in this research model.

Equation the economic growth of the Cobb-Douglas

A recursive Equation that shows the factors that affect growth based on the function of economic growth Cobb-Douglas. As for the value of capital is derived from the value of capital estimation on the second, the third equation equation, $\ln Y = \beta_1 \ln \bar{k} + \beta_2 \ln L$. This equation will be performed classical assumptions of the test and test Hypotheses.

A Classic Assumption Test

1) Test Heterokedastisitas

Prob value. F arithmetic of 0.4133 greater than the alpha level of 0.05 (5%) so that, based on the hypothesis test, H_0 is accepted which means there is no heteroscedasticity.

2) Autocorrelation Test

DW count value is 0.8402 smaller than the value of dl is 1.1682 means residing in the area of negative autocorrelation. For correction of autocorrelation problems, we will perform the Cochrane-Orcutt procedure, expressed by ρ (rho). The repetition method in the cochrane-orcutt is done by two stages, among others; (1) determine the correlation ρ between several pairs of observations in the model, then (2) run the regression equation with AR (1) or until AR (2), to eliminate correlations between errors.

The durbin-watson statistic score has indicated the corrected model of the autocorrelation problem of 1.8028 greater than the value of du table 1.5435. Thus the equation for an ideal condition (*white noise*) which we have gained from the model AR (2) is a Log GDP = -2.966316 + 0.913745 log KF + 0.284154 log L + [AR (1) = 1.472465 , AR (2) = - 0.610593 , UNCOND] or in any other form, that is, $\text{Log GDP} = -2.966316 + 0.913745 \log \text{KF} + 0.284154 \log \text{L} + \mu_t$ where, $\mu_t = 1,47 * \mu_{t-1} - 0,61 * \mu_{t-2} + \varepsilon$.

The Test Of Hypothesis

1) Test t

The value of the *prob. t* count of free variable log (KF) of 0.0001 smaller than 0.05 so non variable log (KF) effect significantly to variable log (GDP) on alpha 5% or in other words, influential capital significantly to GDP at the level 95% confidence. But the relationship of free variable log (L) against the variable log (GDP), as the value of the *prob. t* count (0.5207) greater than 0.05 so that it can be said that the free variable log (L) had no effect against the variable log (GDP) on alpha 5% or in other words, the number of influential labor against growth in confidence levels 95%. Or it can also be said to be influential labor to GDP is only on the level below 50%.

2) F Test

From the F statistical test results obtained that the value of F statistic significant at $0.000 < 0.05$, so it can be concluded that the variables and variables L significantly affect the GDP variables.

3) Test-R

Based on the results of OLS regression above the value of Adjusted R-squared of 0.98 means that variable and variable L have contribution explain K equal to 98%, while the rest equal to 2% explained by other variable not examined or not included in this research model.

CONCLUSIONS AND SUGGESTIONS

Conclusion

Based on the results of research and discussion that has been described, it can be concluded that;

1. The rupiah exchange rate has a significant and negative effect on the SBI interest rate, meaning that if there is appreciation of the rupiah exchange rate then there will be an increase in the interest rate of SBI he exchange rate of the rupiah and significant negative effect against the SBI interest rate, meaning that if the appreciation of the rupiah exchange rate will then increase in SBI rates.
2. Inflation has a significant positive effect on the SBI rate, thus if inflation increases then SBI interest rate will increase also.
3. The rupiah exchange rate and inflation recursively through the predicted interest rate of SBI have a significant negative effect on capital. This means that according to the theory of marginal efficiency of capital (MEC), interest rates and capital have a negative relationship.

4. The exchange rate of the rupiah and inflation recursively through the SBI interest rate has being estimated and through capital has being estimated that the capital estimation of results of significant positive effect against economic growth. This means a positively influential capital against economic growth. When viewed recursively in exchange rates and inflation effect significantly to economic growth.
5. Meanwhile, the number of labor has no effect significantly to economic growth. This means that economic growth is more influenced by the exchange rate of the rupiah, inflation and capital compared with the amount of labor.

Advice

1. The amount of labor has no effect significantly to economic growth, the economic growth is thus heavily influenced by monetary factors, namely interest rates, inflation, exchange rates and capital. Therefore, the Government should be able to regulate interest rates, inflation, exchange rates and capital for the purpose of increasing economic growth.
2. The Government needs to lower the inflation rate because if the inflation rate can be pressed then it will lower the interest rate numbers thus increasing the amount of capital and ultimately improve the economic growth in Indonesia.
3. This research does not differentiate conditions before and times of crisis, so it is advisable to pay attention to the period before and during the crisis.

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