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The Impact Of Unemployment Rate, Labor Force, Capital, Inflation Rate, And Government Expenditure On Economic Growth In Indonesia

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ABSTRACT:*This study was conducted to examine the effect of unemployment rate, labor force, investment, inflation rate, and government expenditure on economic growth in Indonesia in the long term and short term for the period 1986-2015. This research uses cointegration and Error Correction Model (ECM) method. The results of ECM treatment with EViews 8 indicate that the unemployment rate and capital have significant positive effects, labor force and inflation rate have significant negative effects, and government expenditure has an insignificant effect on economic growth in Indonesia within the study period.*
KEYWORDS: *unemployment rate, labor force, capital, inflation rate, government expenditure, economic growth.*

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I. INTRODUCTION

Indonesia as a developing country continues to realize the welfare of the community through the implementation of economic development. Economic development not only increases the national income, but also takes into account the aspects of equity, population growth, and the quality of human resources. Efforts are made to achieve it all by increasing economic growth. Economic growth is one indicator in assessing the performance of an economy, and to make an assessment of the economic development results that have been done by the state.

Indonesia's economic growth itself fluctuated in the period 2006 to 2015. Economic growth achieved in 2006 amounted to 5.50 percent, which increased to 6.35 percent in 2007. Then from 2008 to 2009 decreased due to the global crisis of the world where Indonesia's economic growth of 4.63 percent. Despite the global crisis in 2010 with 6.22 percent economic growth, Indonesia's economic growth declined again in 2015 to 4.79 percent due to the weakening performance of Indonesian exports. According to Sukirno (2000: 443), economic growth is used to illustrate that an economy is experiencing economic development to achieve prosperity. Irawan and Suparmoko (2002: 433-434) state that economic growth is a national increase in physical production, or in general terms is the increase in net national products. The net national product is the sum of all final goods and services produced by the economy within a year of less depreciation, and to achieve the value of national income, the net national product value must be reduced by indirect taxes.

According to Todaro (2000: 137), there are three factors in economic growth, namely capital accumulation, covering all types of investments invested in land, equipment, and capital or human resources; Population growth, which in the next few years will increase the number of labor force; And recent technological advances. To achieve high levels of economic growth, the government implements macroeconomic policies with the aim of achieving community welfare. The government's policy is aimed at achieving economic growth, low unemployment and inflation.

Todaro (2000: 138) states, population growth and labor force are traditionally considered as one of the positive factors that spur economic growth. The large number of workers will increase production levels, while the larger population growth means the size of the domestic market is greater. Furthermore, it is said that the

positive or negative influence of population growth depends on the ability of a country's economic system to absorb and utilize the increase of labor productively.

The number of labor force in Indonesia has increased in the last 10 years. Started in 2006 of 95,456,935 people, then in 2010 the number of labor force in Indonesia reached 108,207,767 people and continues to rise until in 2015 amounted to 114,819,199 people. However, if the availability of labor is not followed by sufficient employment opportunities may result in increased of unemployment rates, as unemployment may affect economic growth.

A high unemployment rate indicates that labor resources are not being used efficiently. Therefore, full employment opportunities should be the primary policy in every government because full employment opportunities maximize output (Meidani and Zabihi, 2011). Blanchard (2006) states that the relationship between the unemployment rate and output growth is negative, when an increase in output will decrease the unemployment rate known as Okun's Law. In Okun's Law, the increase in output will decrease the unemployment rate, since the labor that serves as the input of production will be absorbed in the economic activity that produces the output.

Growth of unemployment rate in Indonesia itself tends to decrease in the last 10 years, with unemployment rate in 2006 amounted to 10.28 percent, unemployment rate continued to decline to 7.14 percent in 2010. Although in 2011 rose to 7.48 percent, In the next year the unemployment rate declined until 2015 with a value of 6.18 percent. It is expected that the Indonesian government will continue to reduce unemployment, because unemployment has a direct impact on people's welfare and high unemployment rate resulting in labor force difficulties in getting jobs. According to neoclassical economists, unemployment occurs when the labor market stiffens, but according to Keynesian economists, unemployment occurs due to market efficiency and ineffective demand on goods and services (Arslan and Zaman, 2014).

Amassoma and Nwosa (2013) research on unemployment rate in Nigeria is one of the guidelines. The differences of previous research with the authors lie in the research year and the area under study. Based on the above background, this study aims to see how the effect of unemployment rate on economic growth in Indonesia in the period 1986-2015 by adding variables affecting economic growth ie investment, inflation rate, and government spending.

II. THEORETICAL FOUNDATION

Gordon (2003: 309) states that economic growth is generally called the rate of GDP growth per capita real. Achieving high economic growth is one indicator of economic success. According to Todaro (2000: 137), there are three factors in the economic growth of each country, namely capital accumulation, population growth, and technological progress. Capital accumulation occurs when a portion of the income is saved and reinvested in order to increase output and income in the future. The procurement of new factories, machinery, raw materials and equipment increases the physical capital stock of a country. Such productive investments should be supplemented by investments such as road construction, electricity supply, clean water supply, and sanitation improvement. Solow's growth theory explains the factors affecting economic growth such as capital, labor, and technology.

The Solow growth model shows how capital input increases, labor, and technological advances affect output. To incorporate technological advances, can look at the production function stated as follows:

$$Y = F(K, L \times E)$$

Where E is a variable called labor efficiency. Labor efficiency reflects people's knowledge of production methods. Thus, as technology progresses, labor efficiency increases. The production function explains that the total output Y depends on the number of units of capital K, and the number of effective workers, L x E. The essence of the approach to this technological progress model is that the increase in labor efficiency E is in line with the increase in the labor force L (Mankiw, 2006: 212).

Unemployment is a macroeconomic problem that affects humans indirectly and most burdensome, since not having income means a decline in standard of living and psychological pressure (Mankiw, 2006: 154). Unemployment is generally caused by the number of labor force or job seekers is not proportional to the number of jobs that exist. Unemployment is often a problem in the economy, because with the unemployment, the productivity and income of society will be reduced so that it can cause poverty and other social problems.

In discussing unemployment, what is always concerned is not about the number of unemployed, but about the unemployment rate expressed as a percentage of the labor force (Sukirno, 2000: 473). The unemployment rate can be interpreted as a number indicating the percentage who are looking for work for the workforce, can generally be formulated with (Mantra,2004): $\mathrm{UR} = \frac{\text{Looking for jobs}}{\text{Total Laborforce}} \times 100\%$

According Simanjuntak (1998: 14), the cause of unemployment can be classified into three types, namely frictional unemployment, structural unemployment, and seasonal unemployment. Frictional unemployment is unemployment that occurs due to temporary difficulties in bringing together job seekers and available job vacancies. This temporary difficulty can take the form of time required during the procedure of application and selection, or due to distance or lack of information. Structural unemployment occurs because of changes in the structure or composition of the economy. Such a structural change requires a change in the skills of the required labor while the job seeker is unable to adapt to the new skill. Seasonal unemployment occurs due to the changing of seasons, such as outside the harvest season and down into the fields, many farmers have no other economic activity, they simply wait for the new season.

The relationship between unemployment and economic growth is explained by Okun's law. Okun's law describes the actual relationship between output growth and changes in the number of unemployed. The relationship between output growth and the unemployment rate can be shown in the following Okun equation (Blanchard, 2011: 186):

$$u_t - u_{t-1} = \beta(g_{yt} - \bar{g}_y)$$

Where:

*u*t : Unemployment rate in year t
u_{t-1} : Unemployment rate in year t-1
β : The coefficient that states the impact of output growth on unemployment changes.
gyt : The growth of output in year t
ḡy : Normal output growth

According to Todaro (2004: 134), population growth and labor force have traditionally been regarded as one of the positive factors that spur economic growth. The large number of workers will increase production levels, while the larger population growth means the size of the domestic market is greater. Furthermore, it is said that the positive or negative influence of population growth depends on the ability of a country's economic system to absorb and utilize the increase of labor productively.

Rahardjo and Manurung (2000: 194) explain that in the theory of Optimum Population as in the previous section, the enactment of The Law of Diminishing Return resulted in not all residents can be involved in the production process, because if imposed, can reduce the level of economic output. To make the addition of manpower can increase the output, then what to do is physical and human resources investments that delay the occurrence of diminishing return. If that happens, then the production function will improve so that the addition of labor will increase output (GDP).

Investment spending plays an important role not only in long-term growth, but also in short-term business cycles because investment is the most changing element of GDP. When spending on goods and services declines during the recession, most of the decline is related to the drop in investment spending (Mankiw, 2006: 476). Economic theory defines investment as expenditures to buy capital goods and production equipment in order to replace and especially increase the capital goods in the economy that will be used to produce goods and services in the future (Sukirno 2000: 366) . According to Harrod-Domar's theory, investment in economic growth is important because investment will increase the stock of capital goods, allowing increased ouput. The source of domestic funds for investment purposes comes from the production saving (national income) saving (Rahardja and Manurung, 2001: 200).

Investment activities enable a society to continually improve economic activities and employment opportunities, increase national income and raise the level of community prosperity. According to Sukirno (2000: 367-368), there are three important functions of investment activity in the economy. First, investment is one component of aggregate spending. Then the increase in investment will increase aggregate demand and national income. The increase will always be followed by an increase in employment opportunities. Second, the increase in capital goods as a result of investment will increase future production capacity and this development will stimulate national production and employment growth. Third, investment is always followed by technological developments. These developments will give a boost to the increase in productivity and income per capita society.

The inflation rate is an increase or percentage change in the whole price level (Mankiw, 2006: 75). When a price increase occurs in only one or two items then it can not be called inflation unless the increase then widespread and leads to an increase in the prices of other goods. Sukirno (2000: 491) explains if there is a change in the real sector, then it will affect the national income and price level. Development in the real sector can be caused by the development of the domestic sector as well as the development of the foreign sector. Domestic sectors include rising household expenditures, increased private investment, rising government

expenditures or reductions in corporate income taxes and taxes. While foreign sector changes include net export increase.

The relationship between government spending and economic growth depends on the size of the budget applicable in each country, so the relationship can be a positive or negative relationship. Government spending reflects government policy. If the government has established a policy to purchase goods and services, government expenditures reflect the costs incurred by the government to implement the policy (Mangkoesoebroto, 2010: 169). Changes in government spending affect the economy. Government spending is one of the government's policy instruments in the allocation function, so higher government spending leads to higher planned expenditures for all income levels (Mankiw, 2006: 277).

III. RESEARCH METHODOLOGY

This research is a descriptive quantitative method that focuses on hypothesis testing Quantitative approach leads to generalization results and explains phenomena measurably complemented by various evidences. The data used in this research is time series data. Quantitative approach with time series data will explain the relationship of dependent variable of economic growth with independent variables are unemployment rate, labor force, capital, inflation rate and government expenditure. While the descriptive approach in question to interpret the test calculation results in the least squares method with time series data is to answer the problems that occur as well as to generate conclusions. The author uses the software "Eviews 8" to process data and statistical tests.

There are two kinds of variables used in this study are dependent variables and independent variables. The dependent variable in this research is Economic Growth, while the independent variables in this research are Unemployment Rate, Labor Force, Capital, Inflation Rate, and Government Expenditure.

The data used in this study is secondary data in the form of time series data. Data used from 1986 to 2015. Sources of data used are collected from Indonesia's Central Bureau of Statistics (BPS) and World Data Indicators (WDI) by World Bank 2017.

Referring to the research model conducted by Amassoma and Nwosa (2013), the model in this study is as follows:

$$Y_t = \beta_0 + \beta_1 UNEM_t + \beta_2 lnLABF_t + \beta_3 GFCF_t + \beta_4 INFR_t + \beta_5 GEXP_t + \varepsilon_t$$

Where:

ln : Natural Logarithm

Y : Economic Growth

UNEM : Unemployment Rate

LABF : Labor Force

GFCF : Capital

INFR : Inflation Rate

GEXP : Government Expenditures

β_0 : Intercept / Constants

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$: Regression Coefficients

ε : Error Term

T : Time

This research uses multiple linear regression analysis using Ordinary Least Square (OLS) method. Regression analysis is the study of the dependence of a independent variable to estimate or forecast the average value of a population of dependent variables. Widarjono (2009: 59) explains the multiple regression model is a regression model consisting of more than one independent variable.

Tests conducted for time series data are root unit test. One of the most commonly used stationarity tests is the Augmented Dickey-Fuller (ADF) root test unit. The next stage of cointegration test using the Engel-Granger method is by testing the stationality of residual long-term model. If the residual is stationary, then the regression is a cointegrated form of regression, or in other words the dependent variable and the independent variable used in the regression is not stationary resulting in a stationary residual. The concept of cointegration test using Engle-Granger method is by using stationary test of ADF unit root test on residual which is the result of estimation of long-term regression model (OLS).

After that if there is cointegration, then ECM can be implemented. Error Correction Model (ECM) is a model used to correct the regression equation between unstandarded individual variables to return to their equilibrium value in the long run, with the main condition being the existence of cointegration relationships among the constituent variables. The first step in the use of the ECM method is to test for cointegration of variables over the long run and the residual cointegration test derived from long-term equations. After the independent variables, dependent variables, and cointegrated residuals, re-examined the model by including residuals obtained from long-term equations into the ECM.

IV. RESULT

The results of the ADF unit root test at the first difference level, the economic growth (Y) and inflation (INFR) variables show the stationary and unemployment rate (UNEM), labor force (LABF), capital (GFCF), and government expenditure (GEXP) Indicates a stationary result.

After performing stationary test of each variable, the next step is to perform cointegration test with Engle-Granger method. The Engle-Granger method is by using stationary test of ADF unit root test on residual which is the result of long-term Ordinary Least Square (OLS) regression estimation. The results of long-term regression (OLS) estimation can be seen in Table 1.1.

Based on the coefficient value of each independent variable, the interpretation for each independent variable in long-term regression (OLS) is as follows:

The coefficient of unemployment rate variable (UNEM) is positive. It shows that when the unemployment rate increases by one percent (1%), then economic growth will increase by 0.432415% assuming other variables are constant.

The labor force variable coefficient (LABF) is negative. It shows that when the labor force has increased by one percent (1%), then economic growth will decrease by 0.123063% assuming other variables are constant.

The capital variable coefficient (GFCF) is positive. It shows that when there is an increase in investment of 1 percent (1%), then economic growth will increase by 0.316018% assuming other variables are constant.

Inflation rate variables coefficient (INFR) are negative. This shows that when the inflation rate increases by one percent (1%), then economic growth will decrease by 0.362921% with the assumption that other variables are constant.

The coefficient of government expenditure variable (GEXP) is negative. It shows that when government expenditures increase by one percent (1%), then economic growth will decrease by 0.249455% assuming other variables are constant.

Table 1.1 Long Term Estimation Results Ordinary Least Square (OLS)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
UNEM	0.432415	0.178238	2.426060	0.0231
LABF	-0.123063	0.027741	-4.436120	0.0002
GFCF	0.316018	0.100373	3.148433	0.0044
INFR	-0.362921	0.030251	-11.99683	0.0000
GEXP	-0.249455	0.307852	-0.810308	0.4257
C	2.251119	0.487087	4.621592	0.0001
***R-squared* (R^2)**	0.909644			
Prob(F-statistic)	0.000000			

Table 1.2 Short Term Estimation Results Error Correction Model (ECM)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DUNEM	0.477203	0.260773	1.829957	0.0808
DLABF	-0.077120	0.203573	-0.378834	0.7084
DGFCF	0.170213	0.135837	1.253068	0.2233
DINFR	-0.358450	0.020933	-17.12394	0.0000
DGEXP	-0.051085	0.463468	-0.110222	0.9132
ECT	-0.727541	0.213644	-3.405388	0.0025
C	0.000203	0.004599	0.044149	0.9652
***R-squared* (R^2)**	0.944305			
Prob(F-statistic)	0.000000			

The coefficient of determination R-Squared (R2) long-term regression (OLS) is 0.909644. This figure represents that the variation of all independent variables of 90.96% can explain dependent variables, while the remaining 9.04% is explained by other variables outside the model.

The probability value of F-statistics in the table shows the figure of 0.000000 percent (0%). This figure reflects that the F-statistic probability value is smaller than the level of significance α of 1 percent (1%). It reflects that all the independent variables (unemployment rate, labor force, investment, inflation rate, and government expenditure) simultaneously have a significant effect on the dependent variable (economic growth) in Indonesia over the long term.

Based on the coefficient value of each independent variable, then the interpretation for each independent variable in the short-term regression (ECM) is as follows:

The coefficient of unemployment rate variable (DUNEM) is positive. This means that when the unemployment rate increases by one percent (1%), then economic growth will increase by 0.477203% with the assumption that other variables are constant.

The coefficient of labor force variable (DLABF) is negative. This means that when the labor force increases by one percent (1%), then economic growth will decrease by 0.077120% with the assumption that other variables are constant.

The capital variable coefficient (DGFCF) is positive. This means that when there is an increase in investment of 1 percent (1%), then economic growth will increase by 0.170213% assuming other variables are constant.

The inflation rate variable coefficient (DINFR) is negative. This means that when the inflation rate increases by one percent (1%), then economic growth will decrease by 0.358450% with the assumption that other variables are constant.

The coefficient of government expenditure variable (DGEXP) is negative. This means that when government spending increases by one percent (1%), then economic growth will decrease by 0.051085% with the assumption that other variables are constant.

ECT variable coefficients are negative. This proves that there is an imbalance in the short term, but will be able to achieve long-term balance. The negative sign on the ECT (Error Correction Term) coefficient also shows that the short term regression (ECM) is valid, because the coefficient value is at zero to one (0-1) ie -0.727541.

The coefficient of determination R-Squared (R2) of short-term regression (ECM) is 0.944305. This figure represents that the variation of all independent variables of 94.43% can explain the dependent variable, while the remaining 5.57% is explained by other variables outside the model.

The probability value of F-statistics in the table shows the figure of 0.000000 percent (0%). This figure reflects that the F-statistic probability value is smaller than the level of significance 伪 of 1 percent (1%). It reflects that all independent variables (unemployment rate, labor force, capital, inflation rate, and government

expenditure) simultaneously have significant effect on the dependent variable (economic growth) in Indonesia in the short run.

The relationship between unemployment and economic growth is explained by Okun's law. Okun's law describes the actual relationship between output growth and changes in the number of unemployed. In contrast to the existence of Okun Law, in this study has the result that the influence of unemployment rate on economic growth shows a positive influence in the long term and short term. Septiatin et al. (2016) found that the unemployment rate positively affected Indonesia because economic growth was more influenced by capital-intensive industries that rely on mechanical or technological power, thus not absorbing much labor.

The effect of the labor force on economic growth based on regression results shows a negative effect in the long run and short. Rahardjo and Manurung (2000: 194) explained that in theory the optimal population, the enactment of The Law of Diminishing Return resulted in not all residents can be involved in the production process, because if forced, can reduce the level of economic output. Physical investment (capital goods) and human resources can be done to delay the occurrence of symptoms diminishing.

The effect of capital on economic growth based on regression results shows a positive influence in the short and long term. According to Harrod-Domar's theory, investing in economic growth is important because investment will increase the stock of capital goods, allowing increased ouput. The source of domestic funds for investment purposes comes from the production saving (national income) saving (Rahardja and Manurung, 2001: 200). In line with research conducted by Adhikary (2011), the level of capital formation found to have a significant positive effect on economic growth.

The effect of inflation rate on economic growth based on regression result shows negative effect both in short and long term.The influence of inflation rate on economic growth based on regression result shows negative effect both in short and long term. In Utami's (2007) study, found that inflation has a negative effect on economic growth due to rising prices. The effect that arises is the prices or inflation increases. These effects resulted in the community to reduce their consumption, thus encouraging the decrease of consumption in aggregate. The decline in aggregate consumption will further hamper economic growth.

The effect of government expenditure on economic growth based on regression results shows negative results are not significant in the short term or long term. Abdulrahman (2016) finds that government spending has a negative and insignificant effect. According to Abdulrahman (2016), the government should strive to eradicate corruption in the economy. This will likely ensure that the financial allocations are properly disbursed. When this is done, the impact of government spending on the economy will be more pronounced, and judged more precisely.

V. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Based on the results of research and discussion that has been described, then got the following conclusion:

1. The unemployment rate has a significant positive effect on economic growth in the short term and the inflation rate has a significant negative effect on economic growth in the short term. While the variable of labor force, investment, and government expenditure are not significant to economic growth in the short term.

2. Unemployment rate and investment have a significant positive effect on long term economic growth. The unemployment rate has a positive effect because economic growth is more influenced by capital-intensive industries. Then the labor force variable and the inflation rate have a significant negative effect on economic growth in the long term. The labor force has a negative effect because the quality of human resources available is still low, and the inflation rate is negatively affected by the decrease in consumption. While for government expenditure variable have an insignificant effect to economic growth in long term.

RECOMMENDATIONS

Based on the results of the analysis, it can be presented several suggestions as follows:

1. The government is expected to further promote specific training programs to improve the workforce skills in accordance with industry needs so that more workers are absorbed and adds many scholarships for people who want to continue higher education hierarchy but constrained funds. In addition, it is also expected to provide entrepreneurship training to the community so as to encourage people to open new jobs to absorb labor.

2. For further research, it is expected to add years of research, and other macro variables. In addition, where possible, the use of data by province can be used to see the effect of macro policies on RGDP per province.

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Appendix

Long Term Estimation Results Ordinary Least Square (OLS)

Dependent Variable: Y
Method: Least Squares
Date: 07/23/17 Time: 09:57
Sample: 1986 2015
Included observations: 30

Variable	Coefficient	Std. Error	t-Statistic	Prob.
UNEM	0.432415	0.178238	2.426060	0.0231
LABF	-0.123063	0.027741	-4.436120	0.0002
GFCF	0.316018	0.100373	3.148433	0.0044
INFR	-0.362921	0.030251	-11.99683	0.0000
GEXP	-0.249455	0.307852	-0.810308	0.4257
C	2.251119	0.487087	4.621592	0.0001

R-squared	0.909644	Mean dependent var	0.053302
Adjusted R-squared	0.890820	S.D. dependent var	0.038917
S.E. of regression	0.012859	Akaike info criterion	-5.692679
Sum squared resid	0.003969	Schwarz criterion	-5.412439
Log likelihood	91.39018	Hannan-Quinn criter.	-5.603028
F-statistic	48.32306	Durbin-Watson stat	1.411292
Prob(F-statistic)	0.000000		

Engle Granger Cointegration Test Result on Level

Null Hypothesis: RESID01 has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=7)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-4.323928	0.0020
Test critical values:	1% level	-3.679322	
	5% level	-2.967767	
	10% level	-2.622989	

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(RESID01)
Method: Least Squares
Date: 07/23/17 Time: 10:00
Sample (adjusted): 1987 2015
Included observations: 29 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.

RESID01(-1)	-0.760379	0.175854	-4.323928	0.0002
C	0.000681	0.002054	0.331578	0.7428

R-squared	0.409143	Mean dependent var	0.000591
Adjusted R-squared	0.387260	S.D. dependent var	0.014130
S.E. of regression	0.011061	Akaike info criterion	-6.104329
Sum squared resid	0.003303	Schwarz criterion	-6.010033
Log likelihood	90.51277	Hannan-Quinn criter.	-6.074797
F-statistic	18.69636	Durbin-Watson stat	2.066818
Prob(F-statistic)	0.000187		

Engle Granger Cointegration Test Result on First Difference

Null Hypothesis: D(RESID01) has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=7)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-7.465663	0.0000
Test critical values:	1% level	-3.689194	
	5% level	-2.971853	
	10% level	-2.625121	

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(RESID01,2)
Method: Least Squares
Date: 07/23/17 Time: 10:00
Sample (adjusted): 1988 2015
Included observations: 28 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(RESID01(-1))	-1.361736	0.182400	-7.465663	0.0000
C	0.000624	0.002575	0.242249	0.8105

R-squared	0.681903	Mean dependent var	-0.000421
Adjusted R-squared	0.669669	S.D. dependent var	0.023675
S.E. of regression	0.013607	Akaike info criterion	-5.687702
Sum squared resid	0.004814	Schwarz criterion	-5.592544
Log likelihood	81.62782	Hannan-Quinn criter.	-5.658611
F-statistic	55.73613	Durbin-Watson stat	2.145091
Prob(F-statistic)	0.000000		

Short Term Estimation Results Error Correction Model (ECM)

Dependent Variable: DY
Method: Least Squares
Date: 07/23/17 Time: 10:01
Sample (adjusted): 1987 2015
Included observations: 29 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DUNEM	0.477203	0.260773	1.829957	0.0808
DLABF	-0.077120	0.203573	-0.378834	0.7084
DGFCF	0.170213	0.135837	1.253068	0.2233
DINFR	-0.358450	0.020933	-17.12394	0.0000
DGEXP	-0.051085	0.463468	-0.110222	0.9132
ECT	-0.727541	0.213644	-3.405388	0.0025
C	0.000203	0.004599	0.044149	0.9652

R-squared	0.944305	Mean dependent var	-0.000404
Adjusted R-squared	0.929116	S.D. dependent var	0.044694
S.E. of regression	0.011899	Akaike info criterion	-5.818154
Sum squared resid	0.003115	Schwarz criterion	-5.488117
Log likelihood	91.36323	Hannan-Quinn criter.	-5.714790
F-statistic	62.16836	Durbin-Watson stat	2.055304
Prob(F-statistic)	0.000000		

dr. Muryani, Se.“ The Impact Of Unemployment Rate, Labor Force, Capital, Inflation Rate, And Government Expenditure On Economic Growth In Indonesia.” American Journal of Engineering Research (AJER), vol. 7, no. 3, 2018, pp.109-119.