

Analysis of Factors Affecting the Unemployment Rate of Educational Labor in Indonesia

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ABSTRACT

This study aims to analyze the effect of exchange rate rate, Inflation, Economic growth, Minimum wage, Foreign Direct Investment, and Domestic investment on educated unemployment in Indonesia. This study uses time series data from 1990 to 2020. By using OLS (Standard Least Square) method, it found that exchange rate and FDI had a negative and not significant effect on educated unemployment, Inflation and Domestic investment had a positive and not significant effect on educated unemployment in the short and long term period, while economic growth has negative and significant on educate unemployment, and the last variable is minimum wage has positive and significant effect on educated unemployment in Indonesia both for short and long term period.

Keywords: *Educated unemployment, Rupiah exchange rate, inflation, economic growth, minimum wage, FDI, domestic investment.*

1. INTRODUCTION

One of the joblessness attributes in Indonesia is joblessness with advanced education or called educated unemployment. As indicated by [1], educated labor is somebody who is searching for a task or has not worked yet has a secondary school training or more. In view of information from the 2018 Public Workforce Study, joblessness in Indonesia overwhelmed by the labor force with secondary school training (both general and professional) and tertiary instruction (lone wolf and recognition). This is an amusing marvel thinking about that it implies the higher an individual's schooling, the higher the likelihood or plausibility that somebody gets jobless. At the full scale level, educated labor is a waste on the off chance that it is related with the chance expense forfeited by the state because of joblessness in the informed labor force, particularly advanced education. From a financial perspective, the informed jobless has a more noteworthy monetary effect than the less taught jobless in the event that it is seen from the commitment that the economy neglects to get. What's more, in the miniature view, joblessness can influence the degree of individual utility [2].

Factors that are assumed to have an influence on educated unemployment, is the exchange rate. [3] in

their research in Germany found some evidence that higher exchange rate changes increase unemployment level. According to [4], even a temporary increase in the exchange rate can encourage firms to delay job creation because an unstable exchange rate increases the uncertainty of future earnings.

[5] additionally analyzed the connection between the joblessness rate and the exchange rate, the exploration tracked down a negative connection between the two variables which infers that an expansion in the exchange rate can expand the degree of work in an economy. [6] in his examination depicts inflation is having a negative relationship with joblessness. While [7] tracked down that these two factors are financially interconnected. The tradeoff among joblessness and inflation is known as the Phillips bend. The Phillips bend shows a negative relationship between the joblessness rate and the inflation rate. On the off chance that we need to accomplish high work openings, as an outcome should bear the weight of high inflation [6].

But [8] in his research, showed that rising inflation rates reduce employment output and increase the unemployment rate. Similarly, [9] found that in the long run there is a positive relationship between inflation and unemployment. [10] states that conditions in which

unemployment is simultaneously high and also followed by high inflation are referred to as stagflation.

[1] said that economic growth has a negative relationship to the joblessness rate. In this examination, a quantitative proportion of economic growth is utilizing GDP (Gross domestic product) information. As indicated by [11] in their exploration on the connection between economic growth and the joblessness rate in Eastern European nations, it shows that the economic growth variable influences joblessness contrarily, as such, an increment of 1% of Gross domestic product will lessen the joblessness rate by 0.08%. [12] expressed In the business cycle, joblessness moves alongside yield. All together for joblessness not to expand, Gross domestic product should be expanded as high as could be expected. [13] additionally examined the connection among business and genuine Gross domestic product. The outcomes tracked down that the high joblessness rate is impacted by low monetary development rates.

One of the macroeconomic factors that additionally influence taught joblessness is minimum wage permitted by law. [14] reasoned that there is a negative connection between an increment in the minimum wage permitted by law and the joblessness rate. At the point when the joblessness rate is high the rate expansion in the minimum wage permitted by law rate is low and assuming the joblessness rate is diminished, the rate expansion in the minimum wage rate is increment. [15] analyzed the connection between the minimum wage permitted by law and the joblessness rate. They tracked down that expanding in the lowest pay permitted by law for the most part diminishing the quantity of instructed jobless. Yet, concentrates by [16] said that assuming the minimum wage permitted by law rate is higher, this condition influences the expanding cost of creation, because of which to make productivity, the organization is compelled to downsize work, which will bring about high joblessness. [17] said that in a cutthroat occupation market, when the minimum wage is set over the compensation level of the harmony market will prompt a decrease in business and make joblessness.

Foreign direct investment or FDI is accepted to help have nations to make new positions, decrease the joblessness rate, and gain work quality [18]. Examination directed by [19] shows the positive effect of FDI in non-industrial nations, remembering opening new positions for the jobless for agricultural nations. [20] said from one perspective, FDI can make new positions to decrease the joblessness rate. In any case, actually, FDI is regularly incapable to straightforwardly influence the joblessness rate [21].

[22] directed examination between joblessness rate and the factors of Private Domestic Investment in Nigeria. The outcomes show that the degree of Domestic Investment venture is genuinely huge in affecting joblessness temporarily. As per [23] in his exploration, the degree of Domestic Investment was discovered to be negative and fundamentally identified with lessening by and large youth joblessness. as indicated by [24] homegrown speculation is required to have the option to set out and give work open doors to nearby inhabitants. In the meantime, FDI is gainful for financial improvement since it gives open positions between areas.

An investigation led by [25] tried the suggestion that capital arrangement was a significant variable in deciding joblessness in the Canadian economy in the period 1976 - 2003. Utilizing time series data arrangement information, their exploration results tracked down that domestic investment had the option to develop business and diminish the joblessness rate. [26] researched the connection among speculation and joblessness in the Assembled Realm and 7 European Association nations in 1985 - 2007 and tracked down that domestic investment contrarily affected the work market and positively affected decreasing the joblessness rate.

In view of the information introduced over, the creators speculate that the Rupiah exchange rate, inflation, economic growth, minimum wages, FDI and domestic investment affect the quantity of instructed jobless. Thus, the creators are keen on leading an examination as exploration named " Analysis Factors Affecting the Unemployment Rate of Educated Workers in Indonesia."

2. METHODS

This investigation utilizes time series data, to be specific information comprising of a few time spans, and got from narrative information, in particular information that has been distributed by specific organizations [27] like the Indonesian Focal Agency of Insights, Indonesian Service of Money Distributions, and the World Bank. The model utilized is Customary Least Square (OLS). Numerically the OLS relapse condition model in this examination is as per the following:

$$Y = \alpha_0 + \beta_1.X_1 + \beta_2.X_2 + \beta_3.X_3 + \beta_4.X_4 + \beta_5.X_5 + \beta_6.X_6 + U_t$$

Where Y is Educated unemployment, α_0 is a constant, $\alpha_1, 2, 3, 4$ is a regression coefficient, X_1 is Rupiah exchange rate, X_2 is Inflation, X_3 is Economic

growth, X_4 is Minimum wage, X_5 FDI, X_6 Domestic investment, U_t is residual (error term).

Based on the OLS equation, the ECM equation form can be made as follows:

$$\text{Log}(Y) = \alpha_0 + \beta_1 \text{Log}(X_1) + \beta_2 (X_2) + \beta_3 \text{Log}(X_3) + \beta_4 \text{Log}(X_4) + \beta_5 \text{Log}(X_5) + \beta_6 \text{Log}(X_6) + e_t$$

T test is used to determine whether the independent variable (X) has a significant effect on the dependent variable (Y) partially [28]. Hypothesis testing (F) is useful for seeing the suitability of the model used to analyze the effect of the independent variables together with the dependent variable. And the last one we are looking at the R-square (R^2). According to [27] the coefficient of determination is to measure the suitability or suitability of a regression line where R^2 measures the share or percentage of the total variation Y described by the regression model.

3. RESULTS AND DISCUSSION

Table 1 shows the results of stationarity tests using a unit root test with different levels, where the results of the root test of this unit show no data that is not stationary at the second level.

Table 1. Unit Root Test Results

Variables	degree	Probability Value
Educated Unemployment (Y)	2 nd difference	0,0000
Exchange rate (X1)		0,0000
Inflation (X2)		0,0001
Economic growth (X3)		0,0050
Minimum wage (X4)		0,0000
FDI (X5)		0,0000
Domestic Investment (X6)		0,0000

Source: Processed by Author, 2020

Based on the results of the stationary test, it can be concluded that there are no problems in the time series data in this study, then it can be continued with OLS regression test. Table 2 shows the OLS test results as follows.

Based on Table 2, the following OLS equations can be made:

$$Y_t = 33,02 - 0,20 \text{Log } X_{1t} + 0,08 X_{2t} - 1,02 \text{Log } X_{3t} + 0,60 \text{Log } X_{4t} - 0,09 \text{Log } X_{5t} + 0,04 \text{Log } X_{6t}$$

Based on the results for the first hypothesis that Exchange rate has negative and not significant effect to

educated unemployment with a probability value of $0.278 > 0.05$. Because when the Rupiah exchange rate weakens, it will increase the price of exports products. This causes people to look for alternative from domestic products, so that demand will increase. In order to meet this demand, the producer will increase the number of workers.

Table 2. OLS regression test results

Results of Regression (OLS)		
Variables	Coefficient	Probability
Konstanta (C)	33,02	0,014
LOG (X ₁)	-0,20	0,278
(X ₂)	2,25	0,738
LOG (X ₃)	-0,70	0,030
LOG (X ₄)	0,60	0,0001
LOG (X ₅)	-0,09	0,273
LOG (X ₆)	0,04	0,700
Note : tingkat kepercayaan $\alpha = 0,05$		
F (Prob) = 0,00		
R-Squared = 0,92		

Source: Processed by Author, 2020

Based on the results for the second hypothesis that Inflation has positive and not significant effect to educated unemployment with a probability value of $0.738 > 0.05$. This results are different from the Phillips curve theory where there is a negative relationship between inflation growth and the unemployment rate. If you want to achieve high employment opportunities, then as a consequence you must be willing to bear the burden of high inflation [14].

Based on the results for the third hypothesis that Economic growth has negative and significant effect to educated unemployment with a probability value of $0.030 < 0.05$. If the level of economic growth increases, the educated unemployment rate will decrease. With the increase in economic growth, the government can encourage the growth of MSMEs and provide more job opportunities. This is done in order to absorb labor and reduce unemployment.

Based on the results for the fourth hypothesis that Minimum wage has positive and significant effect to educated unemployment with a probability value of $0.0001 < 0.05$. Because the increase in the minimum wage level causes an increase in the cost of production in the real sector, the real sector will reduce the use of labor. Decreasing use of labor by the real sector will increase unemployment.

Based on the results for the fifth hypothesis that Foreign direct investment has negative and not significant effect to educated unemployment with a

probability value of $0.273 > 0.05$. If the number of FDI increases, the educated unemployment rate will experience a reduction, but the effect is not significant. Thus, it means that foreign investment in the long term does not contribute significantly to educated unemployment in Indonesia.

Based on the results for the sixth hypothesis that Domestic investment has positive and not significant effect to educated unemployment with a probability value of $0.700 > 0.05$. This means that the positive effect indicates that if the amount of domestic investment increases, the educated unemployment rate will also increase, but the effect is not significant. This means that the amount of domestic investment in the long term does not contribute significantly to educated unemployment in Indonesia.

4. CONCLUSIONS

Economic growth has a negative and significant influence on Educated unemployment in Indonesia, while Minimum wage has a positive and significant effect on Educated unemployment in Indonesia.

Exchange rate and Foreign direct investment (FDI) has negative and not significant effect on Educated unemployment in Indonesia. Then Inflation and Domestic investment has a positive and not significant influence on Educated unemployment in Indonesia.

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