

## The Influence of Economic Growth, Inflation, Minimum Wage And Investment On Education Unemployment In Indonesia

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### Abstrak

Objective from study This is For find out the factors that contribute to the occurrence of educated unemployment in Indonesia from 2015 to 2022. To achieve this, this research uses analysis regression be double, with educated unemployed as variable dependent, And growth economy, inflation, minimum wage, and investment as variable independent. Data Which used in this research comes from sources secondary, that is data growth economy, inflation, minimum wage, and investment. Findings study This shows that inflation and investment do not have a significant effect on unemployment educated in Indonesia during period certain. Meanwhile, growth The economy and minimum wages have a negative and significant effect on unemployment educated in Indonesia. Government Indonesia hopefully can develop more effective policies to address the problem of educated unemployment, like designing policy education Which aligned with current demands and adapting the labor market to accommodate employment opportunities.

*Keywords: Economic growth; Inflation; Minimum wage; Investment and Educated Unemployment*

### 1. Introduction

Unemployment is a problem that cannot be avoided in economic growth, especially in Indonesia. According to [1] unemployment shows that resources are wasted, even though those who are unemployed have the potential to contribute to national income. According to the Central [2] educated unemployment is the ratio between the number of job seekers with a high school education and above (as an educated group) to the total workforce in that group. It can also be called educated unemployment, namely unemployment from high school, diploma and bachelor's degrees.

A lack of understanding in the field of technology can result in lagging behind in effectively operating any technological device used in the professional field. Inflation is a recurring problem in economic progress, which ultimately causes unemployment[3]. According to [4] in the book "Macroeconomics" it is stated that high inflation can create uncertainty in the labor market, which can inhibit investment and create economic instability, which in the end can affect the unemployment rate. When inflation is low, the unemployment rate tends to increase, and conversely, when inflation is high, unemployment tends to decrease. The result of unemployment is a decrease in individual welfare due to lack of income which ultimately results in poverty[5].

K In 2022, the educated unemployment rate is expected to reach 27.38%, while gross domestic product (GDP) is expected to increase by 5.31%. This growth rate is higher than in previous years. Over the last eight years, there has been a decline in inflation. In 2015 inflation

was at 6.38%, while in 2022 it will fall to 4.21%. This shows a consistent decline in inflation in a certain period. In contrast, the minimum wage in 2022 is estimated at IDR. 2,754,917. This figure is a significant increase compared to previous years. However, it should be remembered that the minimum wage in Indonesia is still relatively low and is not able to adequately meet people's basic needs. In addition, private investment in Indonesia has decreased over the last eight years. In 2015 investment reached 3.56, while in 2022 it reached 22.1, resulting in a difference of 18.54. High unemployment rates can hinder economic growth and have a negative impact on individual welfare.

The policy that the government can implement in this problem is to adapt the system designed to the needs of the times[6]. Changes in the investment climate remind us of the existence of human resource trade-offs. To achieve the above goals, cooperation between the central government and regional governments is needed to overcome the poverty that occurs, especially due to low minimum wages and inflation.

## 2. Methodology

This research uses secondary time series data from 2015 to 2022 obtained from the Central Statistics Agency (BPS). This data set includes information on educated poverty, economic growth, inflation, minimum wages, and investment. To assess the impact of changes in variables on other variables, a quantitative approach using multiple regression analysis methods is used. This approach makes it possible to determine the extent of influence of a variable on other variables, which functionally can be represented as follows:

$$Y = f(x_1, x_2, x_3, x_4)$$

Information :

AND = Educated Unemployment.

X1 = Economic Growth

X2 = Inflation

X3 = Minimum Wage

X4 = Investment

## 3. Result and Discussion

### 3.1. Research result

### 3.2. Classic Assumption tesst

- Normality test

The normality test can be carried out using three methods, namely histogram, plot and kolmogrov. It is said to be normal if the significance level value is greater than 0.05. In this study the Kolmogrov test was used to test normality. In table 1.1 it can be concluded that all the variables contained in this study are normal. It can be seen that the significance level value is  $0.200 > 0.05$  so it can be concluded that the data is normally distributed.

Table 1  
 Normality test

One-Sample Kolmogorov-Smirnov Test

|                                      | Nonstandard Residues |
|--------------------------------------|----------------------|
| N                                    | 8                    |
| Normal Parameters Means              | .0000000             |
| a, b                                 |                      |
| Std. Deviation                       | .02049266            |
| The Most Extreme Absolute Difference | .197                 |
| Positive                             | .126                 |
| Negative                             | -.197                |
| Kolmogorov-Smirnov Z                 | .                    |
| Asymp. signature. (2-tail)           | .200                 |

A. Normal test distribution.

B. Calculated from data.

- Multicollinearity test

The multicollinearity test is a method used to detect the presence or absence of multicollinearity by looking at the magnitude of the VIF value. The findings presented in table 1 show that all variables examined in this study show a normal distribution. The significance level value of 0.200 is greater than 0.05 so it can be concluded that the data is normally distributed.

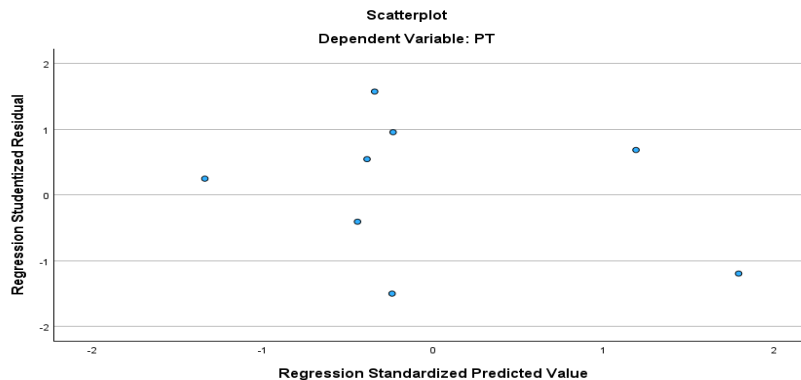
Table 2  
 Multicollinearity Test

| Model      | Collinearity statistics |                   |       |
|------------|-------------------------|-------------------|-------|
|            | B                       | Tolen competition | VIF   |
| (constant) | 6,681                   |                   |       |
| GDP        | -.344                   | ,538              | 1,859 |
| INF        | ,040                    | 266               | 3,759 |
| UM         | -.187                   | 380               | 2,633 |
| INV        | -.027                   | 900               | 1,111 |

- Heteroscedasticity Test

The heteroscedasticity test can be seen in Figure 1. If you look at Figure 1, the distribution of points does not form a particular pattern or rule and it can be concluded that heteroscedasticity does not occur.

Figure 1  
 Heteroscedasticity



### 3.1.3 Multiple Linear Analysis

Based on the table below, it shows the results of statistical analysis of the influence of economic growth (X1), inflation (X2), minimum wage (X3) and investment (X4) on educated unemployment (Y) in Indonesia.

Table 3  
 Influence between variables

Coefficient <sup>a</sup>

| Model      | Unstandardized Coefficients |           | Standardized Coefficient | Q      | signature. |
|------------|-----------------------------|-----------|--------------------------|--------|------------|
|            | B                           | Std.Error | Beta                     |        |            |
| (Constant) | 6,681                       | ,847      |                          | 7,890  | ,004       |
| GDP        | -.334                       | ,050      | -.962                    | -6,852 | ,006       |
| INF        | ,040                        | ,053      | ,150                     | 0.750  | ,508       |
| UM         | -.187                       | ,057      | -.550                    | -.3290 | ,046       |
| INV        | -.027                       | .014      | -.210                    | -1,938 | ,148       |

The table above shows the results of a static analysis of the influence of economic growth (X1), inflation (X2), minimum wage (X3) and investment (X4) on open unemployment (Y1) in Indonesia.

Based on data analysis, the research estimation equation is as follows;

$$Y = 6.681 - 0.334X_1 + 0.040X_2 - 0.187X_3 - 0.027X_4 + e$$

The relationship between each of these variables:

#### A. Economic growth

The economic growth variable has a coefficient of -0.334. This negative coefficient indicates that an increase in economic growth by one percent will result in a decrease in the unemployment rate by 0.0334 percent. Therefore, it can be concluded that economic growth has no impact on educated unemployment in Indonesia.

#### A. Inflation

The inflation variable has a coefficient of 0.040. This positive coefficient indicates that an increase in inflation of one percent will result in an increase in educated unemployment of 0.040 percent. Therefore, it can be concluded that inflation has a positive impact on educated unemployment in Indonesia.

#### B. Minimum wage

The Minimum Wage variable shows a coefficient of -0.187. This negative coefficient value indicates that an increase in the minimum wage of one percent will have an impact on reducing educated poverty by 0.187 percent. Thus, it can be concluded that the minimum wage has a negative impact on poverty in Indonesia.

#### C. Investment

The coefficient on the investment variable is -0.027. This shows that the investment coefficient value is negative. Thus, an increase in investment of one percent will have an impact on reducing educated unemployment by 0.027 percent. Therefore, it can be concluded that investment has a negative impact on educated unemployment in Indonesia.

### 3.1.4 Hypothesis Testing

The research hypothesis is supported if the influence or direction of the variable is in accordance with the hypothesized expectations. This research tests four hypotheses, namely as follows:

H<sub>1</sub>: Economic growth has a negative and significant effect on educated unemployment

The findings from table 3 show that economic growth has a detrimental and important impact on educated unemployment. The influence coefficient value is -0.334 and the probability value is 0.006 < 0.05 indicating a significant negative relationship. This means that if the level of educated unemployment increases, economic growth will decrease.

Based on these results, it can be concluded that economic growth does have a negative and significant effect on educated unemployment. Therefore, hypothesis H<sub>1</sub> which states that economic growth has a negative and significant effect on educated unemployment is validated.

H<sub>2</sub>: The test findings in table 3 show that there is an insignificant positive relationship between inflation and educated unemployment. The influence coefficient value is 0.040 and the probability value is 0.508 which is greater than the significance level of 0.05. A positive coefficient value indicates a unidirectional relationship, indicating that a higher level of educated unemployment is associated with a lower level of inflation.

Based on these results, it can be concluded that inflation has no significant effect on educated unemployment. Therefore, hypothesis H<sub>2</sub> which states that inflation has a positive and significant effect on educated unemployment is rejected

H<sub>3</sub>: The minimum wage has a negative and significant effect on educated unemployment The analysis findings presented in table 3 show that the minimum wage has a detrimental and statistically significant impact, as evidenced by the influence coefficient value of -0.187 and the probability value

of  $0.046 < 0.05$ . A negative coefficient value indicates a unidirectional relationship, meaning that an increase in educated unemployment causes a decrease in the minimum wage.

Based on these results, it can be concluded that the minimum wage plays a negative and significant role in educated unemployment. Therefore, H3, which states that the minimum wage has a negative and significant effect on educated unemployment, is supported.

H<sub>4</sub> : : Investment has a positive and significant effect on educated unemployment

The test results presented in table 3 show that investment has a noteworthy and detrimental impact, as evidenced by the influence coefficient value of  $-0.027$  and the probability value of  $0.148 > 0.05$ . A negative coefficient value indicates a unidirectional relationship, meaning that an increase in educated unemployment will cause a decrease in investment.

Based on the results of the analysis, it can be concluded that investment has no significant effect on educated unemployment because the probability value is greater than  $0.05$ . Therefore, H<sub>4</sub>, which has a positive and significant effect, is rejected.

Overall, the results of research hypothesis testing are displayed in table 4 below:

Table 4  
 Results of research hypothesis testing

| Connection | Hypothesis          | Test results |             |                 | Conclusion |
|------------|---------------------|--------------|-------------|-----------------|------------|
|            |                     | Coefficient  | Probability | information     |            |
| X1 → Y     | (-) Significant     | -0.034       | 0.006       | Significant     | Accepted   |
| X2 → Y     | (+) Not significant | 0.04         | 0.508       | Not significant | Rejected   |
| X3 → Y     | (-) Significant     | -0.187       | 0.046       | Significant     | Accepted   |
| X4 → Y     | (-) Not significant | -0.027       | 0.148       | Not significant | Rejected   |

### 3.2 Discussion

#### 3.2 The influence of economic growth on educated unemployment in Indonesia in 2015-2022

Based on the results of data analysis, it can be seen that the level of economic growth has a significant and detrimental influence on educated unemployment [7]. This cannot be separated from the increasing unemployment rate which is directly influenced by economic growth, one form of which is educated unemployment. The large number of educated people who are unemployed is mainly due to limited employment opportunities in society. In addition, job seekers who have a bachelor's degree tend to

be smarter in finding jobs that match their qualifications[8]. Therefore, this scenario not only impacts economic growth in Indonesia but also impacts the welfare of society as a whole.

The findings of this research are in line with existing theory, which states that economic growth has a direct impact on the level of educated unemployment. When the unemployment rate increases, economic growth decreases, causing a decline in people's welfare due to reduced income. This research also strengthens[9].

### **3.2 Educated unemployment inflation rate in Indonesia 2015-2022**

Based on the research results, it is stated that infestation does not have a significant effect on educated unemployment. This is supported by the research results of [10] which states that inflation does not have a significant effect on educated unemployment, because if inflation is high it cannot be guaranteed that the unemployment rate will increase. This is because the high level of inflation has a direct impact on the unemployment rate. In a situation where inflation remains low, the unemployment rate tends to increase. Conversely, when inflation is high, the unemployment rate tends to decrease.

### **3.3 The effect of the minimum wage on educated unemployment in Indonesia in 2015-2022**

Based on the findings of the analysis, it is clear that the minimum wage has a detrimental and important impact on the unemployment rate among the educated population[8]. This can be caused by the low minimum wage which has a negative impact on the aspirations of job seekers, causing them to choose to stop working because they are deemed unable to meet their personal financial needs. In addition, individuals tend to be more selective in choosing jobs, preferring positions that are considered relevant to their qualifications. Conversely, an increase in the minimum wage will attract more job seekers. However, this phenomenon is also influenced by the scarcity of job opportunities and high competition in the labor market, thereby exacerbating inequality. Therefore, it is important for the government to address this problem effectively by implementing appropriate measures. This is supported [2] research, which states that inflation has a significant effect on educated unemployment.

### **3.4 The influence of investment on educated unemployment in Indonesia in 2015-2022**

Based on the research results, it shows that investment has no impact on educated unemployment. [11] supports this assumption because it reveals that investment has no significant effect on open unemployment among college graduates. This finding contradicts the initial hypothesis which stated that community investment has a large influence on the creation of employment agreements in that community.

## **4. Conclusion**

Based on the results of data processing and discussion, both statistically and comprehensively based on empirical facts and related theoretical studies, this research can draw the following conclusions

#### **a. Economic growth**

The impact of economic growth on educated unemployment is quite large and large, as

evidenced by the influence coefficient value of  $-0.334$  and the probability value of  $0.006 < 0.05$ . A negative coefficient value indicates a unidirectional relationship, meaning that an increase in the level of educated unemployment will cause a decrease in economic growth. Therefore, the hypothesis which states that economic growth has a negative and significant influence on educated unemployment is validated.

b. Inflation

Inflation does not have a significant effect on educated unemployment, where the probability value is higher than  $0.05$ , namely  $0.148$ . The high level of inflation has a direct impact on the unemployment rate. If the number of educated unemployed is high then this can reduce the purchasing power of society in general. The impact of inflation on educated unemployment depends on overall economic conditions

c. Minimum wage

The impact of the minimum wage is considered to have quite a large and detrimental impact, this is shown by the influence coefficient value of  $-0.187$  and the probability value of  $0.046$ , smaller than the conventional significance level of  $0.05$ . A negative coefficient value indicates a unidirectional relationship, meaning that an increase in educated unemployment is related to a decrease in the minimum wage. As a result, the hypothesis which states that the minimum wage has a large and negative influence on educated unemployment is validated.

d. Investment

The influence of investment on educated unemployment in Indonesia in 2015-2022

Based on the research results, it shows that investment has no impact on educated unemployment. Farid Wahid's research in (2022) supports this assumption because it reveals that investment has no significant effect on open unemployment among college graduates. This finding contradicts the initial hypothesis which stated that community investment has a large influence on the creation of work agreements in that community .

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