

The Impact of Corruption on Unemployment in Indonesia

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Abstract:- This research aims to analyze the impact of economic growth and corruption on unemployment in Indonesia from 1995 to 2023. The research results show that economic growth has no effect on unemployment because the engine of Indonesia's economic growth is a capital intensive sector. However, on the other hand, corruption has a positive impact on unemployment, so to reduce unemployment the government must enforce the law more firmly.

Keywords:- Corruption, Unemployment, Economic Growth.

I. INTRODUCTION

Unemployment can be influenced by some factors. Two main factors are economic growth and corruption. Economic growth has a negative impact on unemployment. The higher economic growth, the lower unemployment will be.

Another factor that can influence the unemployment is corruption. Corruption has positive impact on unemployment. The higher the level of corruption, the higher the unemployment.

There are several paths to the impact of corruption on unemployment.

First, corruption reduces funds for various development projects, both physical and non-physical, which could actually create job opportunities and reduce unemployment. As a result, unemployment, which should be reduced, actually increases as the population and workforce increase

Second, government officials involved in corruption only think about seeking rent to enrich themselves. As a result, they do not think about designing policies to reduce unemployment so that unemployment continues to increase over time

This article aims to estimate the impact of economic growth and corruption on unemployment in Indonesia. Economic growth as a control variable, so the main focus

of this study is to analyze the impact of corruption on unemployment in Indonesia.

Indonesia was chosen as a study location because of the high level of corruption in Indonesia and also high unemployment

II. LITERATURE THEORY

Some studies show that high economic growth can reduce unemployment. Nagel Katarzyna (2015) study the impact of economic growth on unemployment in European Countries. The result of this study shows that high economic growth can reduce unemployment in European countries.

Chuttoo, Usha Devi (2020) conducted research the impact of economic growth on unemployment in Mauritius. The Result of this study show that economic growth can reduce the unemployment.

Several studies show that corruption has a positive effect on the unemployment rate. It means the higher the level of corruption, the higher the unemployment

Adjor DR and Ieleng Kebalo (2018) conducted a study in The Southern African Development Community (SADC). The results of this study found that corruption has a positive effect on unemployment in SADC.

Bouزيد, Bechir N (2016) conducted a research in 96 countries. The result of this study is there is a positive impact of corruption on youth unemployment.

Nnaemeka and Obasi Nathaniel (2021) in their research in Nigeria found the same result that the higher the corruption the higher unemployment in Nigeria.

Onchari DG (2019) in his research located in Kenya found that there is a positive impact of corruption on unemployment.

III. HYPOTHESIS

Hypotheses formulated for this study are: First, economic growth has negative impact on unemployment. It means the higher the economic growth the lower unemployment in Indonesia.

Second, corruption has a positive impact on unemployment rate in Indonesia. It means that the higher the corruption level the higher the unemployment rate in Indonesia. Because corruption is proxied by the corruption perception index (CPI), where the higher the index, the lower the level of corruption, so the higher the index, the lower the unemployment rate. Or in other words the regression coefficient (β_2) will have a negative sign.

IV. RESEARCH METHOD

This research uses annual time series data for the period 1995-2023. Economic growth is obtained from The Central Statistics Agency (BPS). The level of corruption uses Corruption Perception Index (CPI) obtained from Transparency International. Unemployment rate data is obtained from the Central Statistics Agency (BPS).

➤ *The Empirical Model used in this Research is:*

$$URATE = \beta_0 + \beta_1 EGROWTH + \beta_2 CPI + \epsilon_{ijt}$$

Where:

- β_0 = constant (intercept)
- URATE = Unemployment Rate
- EGROWTH= Economic Growth
- CPI= Corruption Perception Index
- ϵ_{ijt} = random error.

V. RESULT

A. Descriptive Statistics

➤ *Unemployment*

The number of unemployed people in Indonesia from 2011 to 2023 fluctuates. The data shows variations in the number of unemployed people each year. There are annual fluctuations in the number of unemployed, with no clear trend towards a consistent increase or decrease. In 2020, there was a significant increase in the number of unemployed, reaching the highest figure in the observed time period. The significant increase in 2020 was due to the impact of the COVID-19 pandemic on the labor market, where many jobs were lost or disrupted due to economic restrictions and uncertainty.

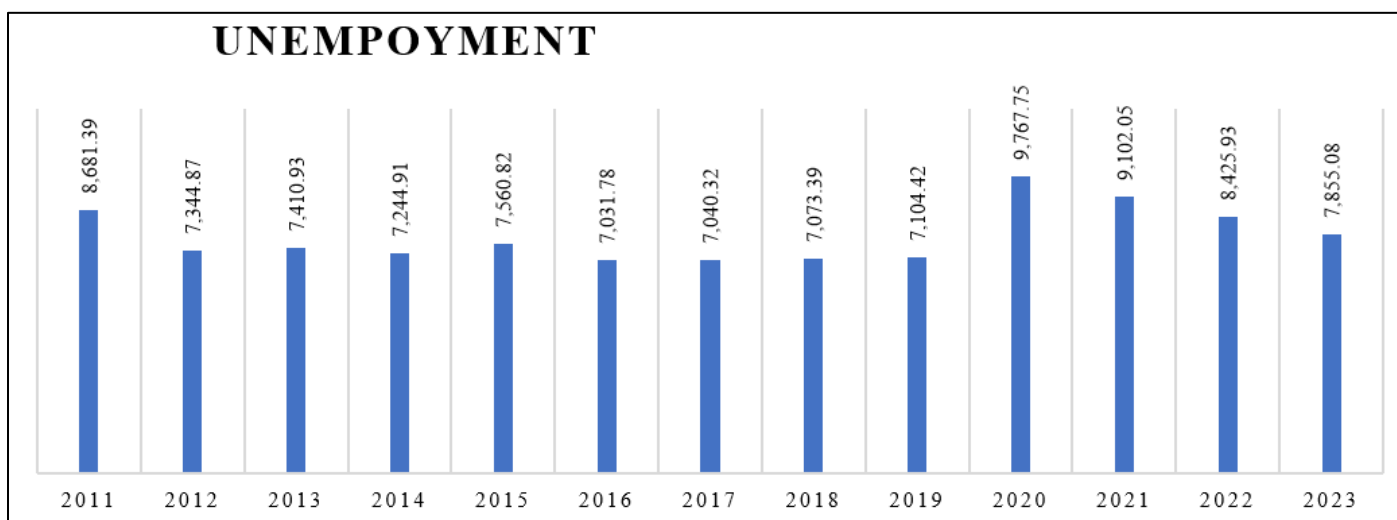


Fig 1: Unemployment in Indonesia 2011-2023 (persons)

After the Covid-19 pandemic, there has been a significant decline in the number of unemployed. Although there are still annual fluctuations, this decline may reflect the post-pandemic economic recovery and the efforts of the government and private sector to recreate lost jobs and support the recovery of the labor market.

➤ *Corruption Perception Index (CPI)*

Corruption Perception Index (CPI) is an index used to assess the level of corruption in a country. This index is published by Transparency International every year and

measures public perceptions of the level of corruption in the public sector in a country (Saha & Ali, 2017). The CPI is based on surveys conducted among business experts and practitioners from various countries that assess the level of corruption in the public sector in those countries. CPI is useful for governments and international institutions to monitor and evaluate efforts to eradicate corruption, but also for civil society, media and other stakeholders to increase awareness and pressure governments to increase transparency and accountability.

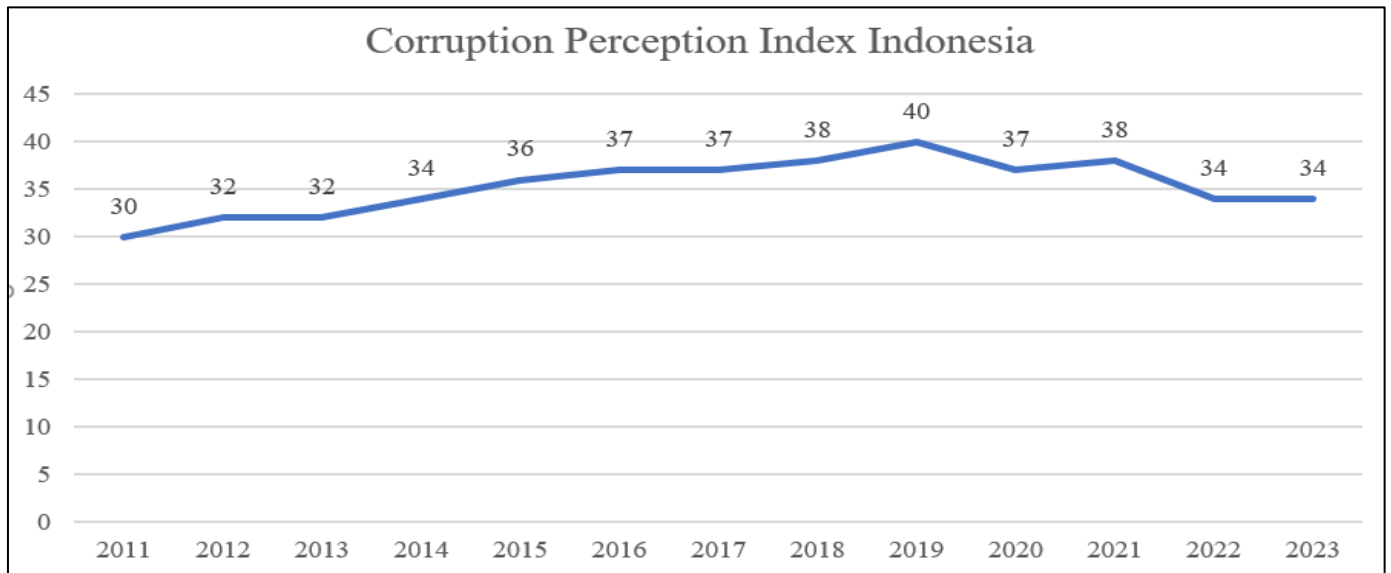


Fig 2: Corruption Perception Index Indonesia 2011-2023

Based on Figure 2, Indonesia's CPI (Corruption Perception Index) data shows the development of perceptions of the level of domestic corruption from 2011 to 2023. The movement of CPI values fluctuates, there is an increasing trend from 2011 to 2019, then a downward trend from 2020 to 2022. CPI is calculated by Transparency International on a scale of 0-100, namely 0 means the most corrupt, while 100 means the cleanest. So the trend of decreasing CPI values shows indications of high corruption from 2021 to 2023.

➤ *Economic Growth*

We can describe Indonesia's economic growth (EGROWTH) from 1995 to 2023 as follow. In analyzing this data, annual fluctuations in the rate of economic growth can be seen, with some years have strong positive growth and other years have contraction or slower growth. At the beginning of the period (1995-1997), economic growth was relatively strong, with a growth rate of around 4.7% to 8.22%. However, the Asian financial crisis in 1998 caused a

significant economic contraction, with economic growth reaching -13.13%.

This reflects the vulnerability of the Indonesian economy to external disturbances at that time. After passing through the crisis, Indonesia's economic growth has gradually recovered, although with a more moderate growth rate. It can be seen that Indonesia's economic growth again reached positive figures in 1999 and continued to increase gradually until it reached a stable economic growth rate of around 5-6% in the following years.

However, fluctuations have been seen again in recent years, especially in 2020 where there was a significant economic contraction of -2.07%, which was most likely influenced by the COVID-19 pandemic and its impact on the global economy. In the following years, there were signs of economic recovery with positive growth returning, although at a more moderate level. In 2022, economic growth will increase again to 5.31%, indicating significant economic recovery efforts.

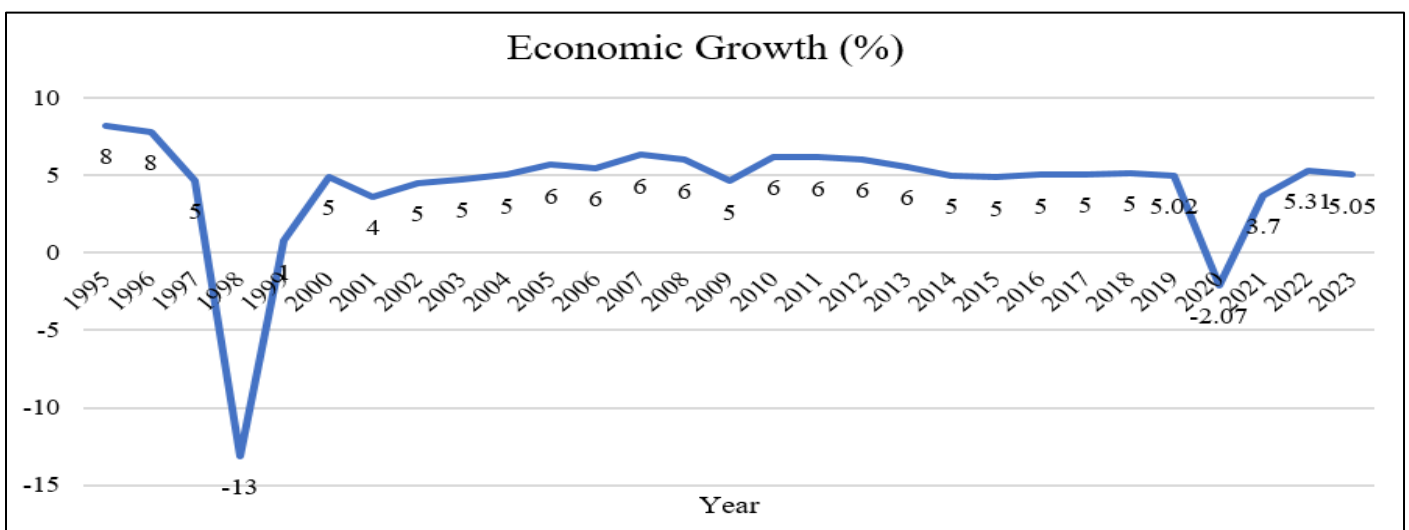


Fig 3: Indonesia Economic Growth 1995-2023 (Percentage)

Indonesia's economic growth have various challenges and fluctuations during the period observed. External factors such as the Asian financial crisis and the COVID-19 pandemic have had a significant impact on the Indonesian economy. However, it appears that the Indonesian economy has resilience and strong recovery potential, as can be seen from the economic recovery after the crisis in 1998 and the economic recovery efforts that are being carried out after the COVID-19 pandemic.

B. The Estimation Result

The estimation result of regression can be seen in Table 1 as below:

Table 1: Regression Estimation Result

Variable	Koefisien	t-ratio (signif)
Constant	9,588727	0,0000
EGROWTH	0,101046	0,2152
CPI	-0,111641	0,0110
R-square	0,243957	
Adj. R-square	0,185800	
F-ratio	4,194788	
Jarque -Bera	0,087641	
N	29	
Dw	0,996616	

Source: Secondary Data, Processed, 2024

The normality test aims to test whether, in the regression model, the confounding or residual variables have a normal distribution. Judging from the Jarque-Bera value of 8,7641 with a probability value of 0, 957126 which is more than $\alpha = 0.05$, the data accepts the null hypothesis, and it can be concluded that the data is normal distributed. The multicollinear test determines whether there is perfect intercorrelation between the independent variables used in the regression equation. In this study, it can be seen from the correlation test to test the presence or absence of multicollinearity. The correlation estimation results show that the correlation value between independent variables is less than 0.80. This means that the correlation value is smaller than 0,80, so this model has no multicollinearity.

The autocorrelation test aims to test the presence or absence of confounding errors in a certain period with mistakes in the previous period in the regression model—decision-making on the lack of autocorrelation using the Durbin-Watson Test Bound the Durbin Watson (d) value is 0.99616. Initially, multicollinearity occurred when using the ordinary least squares estimation method. However, when the Weighted Least Square method is used, the model is free from multicollinearity

The heteroscedasticity test aims to test whether, in the regression model, there is an inequality of variance from the residuals of one observation to another. If the variance of the residuals of one statement to another comment remains, it is homoscedasticity, and if it is different, it is called heteroscedastic. Using Glesjer Method, the result of Heteroschedasticity Test shows no Heteroschedasticity.

The t-statistical test shows how far the influence of each independent variable individually in explaining the variation in the dependent variable. The t-test is seen from the comparison between the t-statistic value and the t-table and the probability value of the t- statistic with an actual level of 0.05. The estimation results show that ECGROWTH has probability value 0.2152, so it is greater than 0,05 so that ECGROWTH has no impact on unemployment. But the CPI variables have the prob value 0.0110 that is less than probability value so CPI has influence on unemployment. The sign of the β_2 that reflect the impact of corruption on unemployment is negative. So it means corruption has positive impact on unemployment because the corruption use CPI as proxy that the higher the CPI the lower the corruption level in a country.

VI. HYPOTHESIS TEST

A. Economic Grwoth Impact on Unemployment

Based on the estimation results economic growth does not impact the unemployment in Indonesia. It is because the engine of growth in Indonesia is the capital intensive sector. So it did not create the employment.

B. Corruption Impact on Unemployment

Based on the estimation results corruption has positive impact on unemployment in Indonesia. The higher the corruption the lower the employment so the higher the unemployment.

VII. CONCLUSION AND SUGGESTION

The conclusion of this study is corruption has positive impact on unemployment in Indonesia. So if the government will decrease unemployment, he must decrease the level of corruption by enforce law enforcement more firmly, overall economy, some efforts must be made by various related parties in the fight against corruption.

REFERENCES

[1]. Adjor DR and Ieleng Kebalo (2018), Does Corruption Matter for Unemployment in SADC Countries?, *Review of Economic and Business Studies*, Volume 11, Issue 2, pp.65-92, available at <http://rebs.feaa.uaic.ro/articles/pdfs/287.pdf>

[2]. Bouzid, Bechir N (2016), Dynamic Relationship Between Corruption and Youth Unemployment: Empirical Evidences From System GMM Approach, *Policy Research Working Paper 7842 (WPS 7842)*, World Bank Group Compensation and Performance Unit, available at <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/916781475156227542/dynamic-relationship-between-corruption-and-youth-unemployment-empirical-evidences-from-a-system-gmm-approach>

- [3]. Nagel Katarzyna (2015), Relationships Between Unemployment and Economic Growth – The Review Results) of The Theoretical and Empirical Research, *Journal of Economics and Management*, ISSN 1732-1948 Vol. 20 (2), University of Economics in Katowice, available at https://www.ue.katowice.pl/fileadmin/user_upload/wydawnictwo/JEM_Artyku%C5%82y_1_30/JEM_20/05.pdf
- [4]. Nnaemeka and Obasi Nathaniel (2021), Does Corruption Matter For Unemployment Investigating The Role Of Bribery, Favouritism, Nepotism Corrupt Practices in Employment, Evidence From Nigeria, *Journal of Developing Economies* ISSN 4960-5720 (Online) Vol.3, Issue 1, pp 32 – 50, available at <https://www.ajpojournals.org/journals/index.php/JDE/article/view/853/977>
- [5]. Onchari DG (2019), The Relationship Between Corruption and Unemployment in Kenya, *Akademi Sosyal Bilimler Dergisi*, Ankara Hacı Bayram Veli University Volume: 6 Issue: 17, 309 - 318, 11.05.2019, available at <https://dergipark.org.tr/en/download/article-file/712416>
- [6]. Chuttoo, Usha Devi (2020), Effect of Economic Growth on Unemployment and Validity of Okun's Law in Mauritius, *Global Journal of Emerging Market Economies*, Vol 2, Issue 2, available at <https://journals.sagepub.com/doi/10.1177/0974910119886934>.