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Determinants of Unemployment: Case Study of ASEAN 6 Countries (Indonesia, Philippines, Malaysia, Thailand, Singapore, Vietnam)

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Abstract

Unemployment is a major problem for the development of a country. The role of youth is needed for development, but there are still many young people who become unemployed. The research we conducted has the main objective of analyzing what factors cause a lot of unemployment in a country, especially in the 6 countries of the ASEAN Region. The analysis period is from 2002 to 2021. Data sources obtained from the World Bank. This research uses quantitative research methods, namely using panel data regression analysis. Based on the results of research that has a positive effect, namely on the variables of Unemployment, Population, and Inflation. While those that have a negative effect are the Gross Domestic Product and Foreign Direct Investment variables.

Keywords: Gross Domestic Product, Population, Inflation, Foreign Direct Investment

1. INTRODUCTION

Economic development in a country is not only measured by its income growth rate. A quality state development is one that can distribute its income evenly to the entire population. One indicator that reflects the development of a country can be seen from its unemployment rate. Unemployment is a global problem that does not only exist in developing countries, but can also occur in developed countries. (Hasan and Sasana 2020). The International Labor Organization (ILO) defines unemployment as someone who is of working age, not working but actively looking for work. However, in fact, some people are of working age, there are also those who do not work and are also not active in trying to get a job.

Unemployment itself can occur because of a gap between the large number of workers and the inadequate number of jobs. This is seen from an economic and social point of view which says that unemployment can hinder the economic growth of a country and has a negative social impact. (Dimas et al. 2022)If the level of productivity decreases, the purchasing power of the community also decreases, and the revenue that the government gets from taxes will decrease, and the crime rate or crime rate also tends to increase, which affects the quality of health and also economic stability and political stability in a country also decreases drastically.

Unemployment is currently a problem faced by various developing and developed countries, one of which is faced by the ASEAN Region countries. Therefore, it is very important to reduce the unemployment rate in a country, one of which is to achieve the goals of the SDGs, namely ending poverty to achieve a healthy and prosperous community life at all ages without experiencing hunger. By increasing decent and equitable employment opportunities for all people, the impact will be very large, people can generate their own income to meet the needs of their lives and their families. In addition, improving the quality of education for all residents is also a goal of sustainable development so that the human development index is increasing. With quality education, it will make it easier for people to find jobs in the world of work and not be left behind by changing times. A success in economic development can be seen through the unemployment rate. In this case we can see the rapid economic development as well as the slow economic development or the one that is experiencing a decline,(Sattar et al. 2013) Unemployment also has another meaning, namely someone who wants to get a job that is classified as a labor force but still cannot get a job to fulfill his various needs.

One of the indicators that affect the existence of unemployment is economic growth. Indicators of economic growth are shown through economic activities that have an impact on community production to produce a good or service whose increase is followed by an increase in community welfare which can also be measured through *GRDP* or *GDP Growth.* the economy of a country that continues to increase automatically shows that it is experiencing good economic growth. (Nisa and Sugiharti 2022)But it also happens the other way around if the economy of a country does not experience a good increase, it will have a bad impact, one of which is the existence of unemployment in the country. things like this can happen because economic growth is not balanced by the availability of business fields or jobs that are evenly distributed every year the unemployment rate can increase. Likewise, if it is not balanced by growth against inflation, which results in a decrease in welfare levels caused by income levels that are unable to keep up with the increase in inflation. (Nisa and Sugiharti 2022)

Unemployment is also influenced by population indicators, this is because if the population of a country experiences a solid increase, it will affect the number of labor forces that will also increase. (Amrullah et al. 2007)What happens in developing countries is that usually the availability of the number of jobs that will automatically be less when compared to the population growth rate which includes the labor force. This results in a large number of the labor force who do not get a job so that the unemployment rate increases in a country. This theory is influenced by the policies taken by the government to reduce unemployment. In addition, inflation also causes a continuous increase in general prices which has an impact on the unemployment rate and economic stability in developing countries. (Fathul Muin 2020)Another indicator is the level of foreign investment in developing countries that has an impact on unemployment because the entry of foreign investment to invest in a country will provide employment opportunities to people who are still unemployed as widely as possible.(Atmayudi Gandhi et al. 2022) This study uses variables of Gross Domestic Product, Population, Inflation, Foreign Investment.

1.1 Update

The novelty of this research includes the aspect of 5 variables including GDP, Population, Inflation, Foreign Direct Investment, and Unemployment. The variables that researchers take are very relevant to have a relationship with the unemployment rate. This study analyzes 6 ASEAN countries, namely Indonesia, the Philippines, Malaysia, Thailand, Singapore, Vietnam, each country for 20 years, starting from 2002-2021, which has a total of 120 years. Researchers are interested in having the object of research because the country has abundant natural resources but still has a fairly high unemployment rate, therefore researchers are interested in researching it and solving policy solutions to overcome it.

1.2 Purpose

Based on the explanation of the problem above, this research aims to analyze the factors that cause unemployment in the 6 ASEAN countries, namely Indonesia, the Philippines, Malaysia, Thailand, Singapore, Vietnam. The reason for taking these 6 countries is because researchers want to solve the problem of what makes the unemployment rate of these 6 countries high in world bank data. Meanwhile, we know that these 6 countries are developed countries in the Southeast Asian region such as Singapore and also developing countries such as Indonesia and have abundant natural resources, but there are still people who are not prosperous or become unemployed.

2. LITERATURE REVIEW

2.1 Unemployment

Unemployment is a problem that is very difficult and complex to avoid in every country because it can lead to a decrease in the level of community welfare and the purchasing power of the community for goods. Unemployment is an economic problem that affects other people to lose a decent life. Unemployment is a term for someone who does not have a job or does not work at all and also for those who are looking for work.(Trimurti and Komalasari 2014) unemployment is usually a factor in the limited number of jobs when compared to the number of labor force or job seekers who are not proportional to the availability of jobs. Unemployment often causes a problem in the economy because it can affect the reduction of productivity and also the income obtained by the community. (Trimurti and Komalasari 2014) This can lead to various kinds of social problems, including the problem of poverty and increased crime. A person is considered to be unemployed if he is not currently or not trying to find a job or waiting for the time to work. Losing a job or not having a job will affect a low standard of living and also put a person in mental distress. Unemployment is actually something that must be found in every country, especially countries that are still developing, (Qausar and Shinta Aminda 2022)Unemployment usually occurs in the younger generation who have just completed their education and there is a tendency to look for work that suits their desires. The desire of young people who want to work in the office or modern sector who are usually willing to wait for a certain period of time also causes high unemployment rates. According to (Sari and Hasmarini 2023) types of unemployment are grouped into 3 types based on the circumstances or situations that cause it, including:

1. Frictional unemployment or unemployment that occurs due to the action of a worker who decides to leave his job or prefers to look for a better job or a higher salary according to his wishes. caused by a structural change in an economy.
2. Conjuncture unemployment, or unemployment that occurs as a result of a natural excess of unemployment due to a reduction in aggregate demand.

This relationship is very close to poverty in a country and affects the people in living their lives. (Sari and Hasmarini 2023)

2.2 Economic Growth

Economic growth is an effort to increase production in order to achieve an output that is measured by GDP or *GDP Growth* in a country. Economic growth can also be seen as a process of increasing per capita output in the long term. It has 3 important aspects, namely a process, output per capita, and also in the long term. In other words, economic growth is a process in the economy, not a picture of the economy that occurs in the future.(Alrayes and Abu Wadi 2018) In this case we can pay attention to how the economy continues to develop and also changes from year to year with pressure on its own changes. According to Prof. Simon Kuznet, an economic growth can be interpreted as an increase in the long-term capacity of a country to provide all the needs of various economic goods to its people. (Kumar, Jai, and Joti 2021)This is due to an increase in technological, institutional and ideological progress with a state. Economic development is a process or a change that occurs over time to increase per capita income. This increase must also continue to occur over a long period of time accompanied by various improvements in an institutional system in various fields, for example in the political, legal, economic, social and cultural fields. This can be seen through the aspect of improvement in an institution and also improvement in formal or informal legal regulations. (Wardhana and Kharisma 2021)GDP is an indicator that is very important for the potential of a country, in fact GDP affects the number of labor forces that have worked using the assumption that if the value of GDP continues to increase and an increase in the amount of output in all economic units will increase and affect the demand for labor. (Muhammad Ernanda, Hutagaol, and Zulva Azijah 2021a)

2.3 Total Population

The population or the total population living in a country. the increase in population or population density in a country is also a factor inhibiting economic growth. This is because if a country has a very dense population but is not balanced with many jobs, food supplies, adequate income will have a negative impact. (Nahara et al. 2022)It also causes competition among residents to get a decent job in order to meet the needs of a decent life. If this is associated with the number of the labor force, if the labor force continues to increase but is not matched by increased employment opportunities, it will cause the number of unemployed to increase. (Corolina and Panjawa 2020a)This also proves that an increase in the population of a country does not guarantee the success of the country's economy or development. This must be balanced with an increase in various sectors as well, for example improving the quality of Human Resources to be able to help advance the development of a country. In addition, the availability of jobs is also needed to overcome this population increase. It is also necessary to control the increase in population in order to support a welfare in society.(Muhammad Ernanda, Hutagaol, and Zulva Azijah 2021b)

2.4 Inflation

Inflation can be defined as an increase in the prices that are prevailing in an economy. However, the inflation rate is a percentage increase in the prices of goods at a certain time. (Nurrahmah et al. 2020)Inflation is also characterized by a decrease in the value of paper currency in circulation in society. If this inflation rate continues to increase in the near future, it will result in economic growth which will automatically decline and affect unemployment will increase. In addition, inflation also indicates a weakening of purchasing power that occurs in a decrease in the real value of currency in a country. According to the theory of A.W. Philips inflation emerged in 1929 in the United States experienced a depression in the economy. This had an impact on the increase in unemployment.(Salim and Mohammed 2018)which is high. There are various negative impacts of inflation including an increase in production costs, high demand, chaos in the economy and politics of a country, and also national debt. According to Bank Indonesia, inflation has a lasting effect that can cause incomes and living standards to decline. This has a very long impact, namely causing the poor middle to lower class people to get poorer. One of them is because the income earned by the community is not balanced. Which means that there will be parties who are harmed by inflation but there are also some parties who will benefit or benefit from inflation. (Chowdhury 2014)There are 3 theories about inflation including:

1. Quantity Theory, a theory first introduced by Irving Fisher, states that the cause of inflation is due to the influence of the large amount of currency in circulation in the community and also the expectation of price increases by the community.(Prasetya 2021)
2. Keynes' theory, in this theory states that inflation is caused because there are some groups of people who live beyond their economic means, which causes the demand for a good to increase beyond the amount that is already available. Usually people who belong to this group use various methods to get more funds that exceed their actual economic capabilities.(Prasetya 2021)
3. Structuralist Theory, this theory will put an emphasis on the economic structure of developing countries as it links inflation to various structural factors of an economy. According to the understanding, these factors can change gradually in the long run. And this theory can also be called long-term theory. (Prasetya 2021)

2.5 Foreign Direct Investment

Foreign direct investment is a foreign investment in finance from abroad through investors investing in a country in the hope of obtaining profits and financial benefits from these investment activities. *Foreign direct investment* is investment from foreign companies for a long period of time. (Hasan and Sasana 2020)According to Harrod-Domar in his theory, economic growth is influenced by capital formation or incoming investment. The wealth of a country will increase if it advances the production of goods or services. if the country's risk is high, (Dimas et al. 2022)According to Krugman Sarwedi, direct foreign investment is an international flow of funds which enlarges an industry or establishes a new industry in another country. This encourages economic growth and foreign investment to be one of the important sources of financing for developing and developed countries. Foreign investment is expected to have a dominant influence on the development of a country through the transfer of wealth. This can affect unemployment to decrease if foreign investment increases, (Wardhana, Kharisma, and Lathifah 2021)automatically the industrial sector requires a lot of labor to be empowered. This directly helps the economy and the income of unemployed people. In addition, national income can also increase rapidly which can result in increased manufacturing. Increasing investment as much as possible, whether foreign, public, or private, will provide many job opportunities, especially for the middle to lower class or poor population.

3. RESEARCH METHODS

This research uses a method with a quantitative approach. The data used is secondary data obtained from the *World Bank* web from 2002-2021 for 6 ASEAN countries with the highest unemployment, namely (Indonesia, Philippines, Malaysia, Thailand, Singapore, Vietnam) this study uses 5 variables, namely, GDP (X1), Population (X2), Inflation (X3), Foreign Direct

Investment (X4), Unemployment (Y). In order to answer the formulation and also to examine the hypothesis in this study, we use data analysis techniques, namely panel data analysis techniques, panel data analysis equations are an analysis by combining time series data and cross section data. In this study, which uses the panel data analysis technique, it has the advantage that if more observations are made, it will have a positive impact on the higher degree of freedom and can reduce the collinearity between independent variables, where the regression model is as follows:

$$Y = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + + \beta\ X44 + Ui$$

Where:

Y : Unemployment

X1 : GDP

X2 : Total Population

X3 : Inflation

X4 : Foreign Direct Investment

i : 6 Countries

t : 2002-2021

β0 : Constant

β1, β2, β3 β_4 : Regression coefficient

Ui : confounding variables

3.1 Best Model Selection Test

Panel Data Model Test

In this panel data model test technique, there are 3 techniques used in this study, including using the *Common Effect technique, Fixed Effect* technique and *Random Effect* technique. These three techniques are used to be able to choose which model is the best or most appropriate in conducting regression tests on this panel data using 3 tests, namely the *chow* test, *Hausman test and LM test.*

- **Common Effect Model**

In this *Common Effect* model by combining between 2 data, namely time series data and cross section data, but there is no need to look at the dimension of individuals or the time dimension, as well as the behavior that will occur towards individuals with assumptions that say all are equal.

- **Fixed Effect Model**

In this model, namely the *Fixed Effect* model, researchers can use dummy variables to allow for a change in individual intercept and slope time changes, and the assumptions in this model are fixed.

- **Random Effect Model**

In this *Random Effect* model, researchers use techniques for panel data that pay attention to any differences that may occur in each individual and to the time passing intercept to be accommodated for errors that will occur in correlation throughout the time series and cross section.

A. Best Model Selection

In determining the best and appropriate model in this study, there are types of models, namely the *Commont Effect, Fixed Effect* and *Random Effect* models which require tools in testing in this study, namely 3:

1. Chow Test
2. Hausman Test
3. Breush Pagan Test (LM)

B. Classical Assumption Test

In this test, the classical assumption test is used as a statistical requirement that must be carried out for multiple linear regression analysis tests using the ordinary lest square basis. In this OLS there is only 1 dependent variable, but the independent variable has more than 1. Which is used to determine which model has accuracy and must also test various classical assumptions including normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test.

Effect Model

- **Multicollinearity Test**

This multicollinearity test is carried out in research so that it can be seen whether there is a correlation between the independent variables using this test.

- **Heteroscedasticity Test**

In this test, namely the heteroscedasticity test carried out by researchers to test the regression model whether there is an inequality of variance from one residual and also from one observation to another.

D. Hypothesis

1. T Test

In this test, it is used to test the hypothesis partially by using a test to find out and also be able to measure existing variables. Where each variable has a relationship of closeness and also has a high or strong effect.

2. F Test

This test is carried out with a simultaneous hypothesis, and uses a testing tool as a correlation coefficient [R] and also the coefficient of determination (R2).

3. Test Coefficient of Determination (R2) R-Squared

In this test which is a test on the coefficient of determination of [R2] or R-Squared which uses numbers ranging from 0 - 1 to indicate how much between the combination of the dependent variables together and has an influence on the value of the dependent variable.

4. RESULTS AND DISCUSSION

4.1 Panel Data Regression Model Selection

Table 1. Testing the Best Model

	Test	Prob	Description
1	Chow Test	0.0000	Fixed effect is more appropriate
2	Huasman Test	0.0000	Fixed effect is more appropriate
3	LM Test	0.0000	Fixed effect is more appropriate

The test results obtained in the Breusch-Pagan LM test are obtained a probability value of 0.0000 which means that the value is smaller than 0.05, the conclusion is to reject H0 and accept H1, namely the Fixed effect model is more appropriate than the Common Effect model.

4.2 Classical Assumption Test

Based on the results of the panel test that has been carried out, the FEM test is the best test. Heteroscedasticity test and multicollinearity test will be conducted next.

Heteroscedasticity Test and Multicollinearity Test

a. Cross-Sectiion Test, Period Test, Correlation Test

Table 2. Heteroscedasticity and Multicollinearity Testing

Cross-Section Test				
Source	Value	Df	Prob	
Likehood Ratio	66.32937	6	0.0000	
Test Period				
Source	Value	Df	Prob	
Likehood Ratio	13.93984	6	0.0303	
Correl Test				
Unemployment_Y	GDP_X1	Total_Population_X2	Inflation_X3	FDI_X4
1.000000				
0.067446	1.000000			
0.341635	0.018332	1.000000		
0.082403	0.280630	0.275141	1.000000	
0.153179	0.132425	-0.498609	-0.137776	1.000000

Interpretation

With the above results, it is noted that the probability of the Cross-Section Test is 0.0000 and the Period Test is 0.0303, which means that it accepts H0 and it is concluded that there is no heteroscedasticity or it is said to be **homoscedasticity.** While the correl test can be concluded that the correl value of all variables is less than 1, so it can accept H0 and reject H1 which means **there is no Multicollinearity.**

4.3 Conclusion of the Heteroscedasticity and Multicollinearity test results

Table 3. Conclusion of Classical Assumption Test

Testing	**Testing Results**
Multicollinearity	Multicollinearity Free
Heteroscedasticity	Heteroscedasticity Free

4.4 Panel Data Regression Test Results

From the data results in the panel data regression significance test above, the best model was chosen, namely Fixed Effect, which is more suitable for the multiple linear regression equation below:

Table 4. Fixed Effect Regression Test

Bound and Free Variables	Regression Coefficient	Probability
C	9.026858	0.0000
GDP X1	-0.018901	0.2051
Total Population X2	-6.06E-08	0.0000
Inflation X3	-0.011158	0.2748
FDI X4	-0.043228	0.0621
R_Square	0.916076	
Adjusted R_Square	0.909209	
F-statistic	0.546078	
Prob (F-Statistic)	0.000000	

The interpretation of the estimated panel data regression model above is :

a. The constant (α) has a value of 9.026858 with a significance level of 0.0000 which explains that when GDP, Population, Inflation, FDI is = 0 or constant then Unemployment will increase by 9%.

b. β_1 (GDP) = -0.018901, the regression coefficient of the GDP variable is -0.018901. from this result shows that there is a negative influence between GDP on unemployment (Y), namely -0.018901. if GDP (X1) increases by 1%, unemployment will decrease by -0.01%, but if GDP (X1) decreases by 1%, unemployment will increase by -0.01%, assuming other variables are constant.

c. β_2 (Total Population) = -6.06E-08, the regression coefficient of the variable Total Population (X2) is -6.06E-08. Which shows that there is a negative influence between Total Population (X2) on Unemployment (Y), namely -6.06E-08. if Total Population (X2) increases by 1%, Unemployment will decrease by -6.06%, but if Total Population (X2) decreases by -6.06%, Unemployment will increase by -6.06%, assuming other variables are constant.

d. β_3 (Inflation) = -0.011158, the regression coefficient of the inflation variable is -0.011158. the results of this test show that there is a negative influence between Inflation on unemployment (Y) which is -0.011158. if Inflation (X3) increases by -0.01% then Unemployment will decrease by -0.01% but if Inflation (X3) decreases by -0.001% then Unemployment will increase by -0.01% assuming other variables are constant.

e. β_4 (FDI) = -0.043228, the regression coefficient of the FDI variable is -0.043228. which shows that there is a negative influence between FDI on unemployment (Y), namely -0.043228. if FDI (X4) increases by -0.04%, unemployment will decrease by -0.04%, but if FDI (X4) decreases by -0.04%, unemployment will increase by -0.04%, assuming other variables are constant.

Table 5. Regression Estimation Table

Variables	Regression Coefficient	Probability
C		0.0000
GDP X1		0.9621
Total Population X2		0.0000
Inflation X3		0.8777
FDI X4		0.0000
R_Squared	0.256164	
Adjusted R_Square	0.230292	
Prob(F-statistic)	0.000001	

F Test Interpretation

Based on this output, it can be seen that the prob value. F statistic is 0.000001 or <0.05 then H0 is rejected, thus accepting H1. So it can be interpreted that the GDP, Population, Inflation, FDI Variables jointly affect Unemployment in 6 ASEAN Countries (Indonesia, Philippines, Malaysia, Thailand, Singapore, Vietnam) in 2002-2021.

R-Squred Interpretation:

Based on this data, it is known that the R-Square is 0.256164 or 25.61%. this shows, the amount of influence given by GDP, Population, Inflation, FDI on Unemployment in 6 ASEAN Countries (Indonesia, Philippines, Malaysia, Thailand, Singapore, Vietnam) 2002-2021 is 25.61%. While the remaining 74.39% is influenced by other variables.

4.5 Discussion

a. Effect of GDP on Unemployment

In this study, in order to determine economic growth in a country is through Gross Domestic Product through how much production of goods or services has been produced through various units of production in a country and in a certain period of time. (Corolina and Panjawa 2020b)A country can be interpreted as experiencing economic growth if there is an increase in GDP. Conditions in the 6 ASEAN countries studied graphs of GDP growth tend to increase and decrease every year, all countries experienced a very drastic decline in 2020 due to the effects of the Covid-19 pandemic so that it affected economic growth. Based on the results of the research that has been done, the regression coefficient of the GDP variable is -0.018901. which proves that there is a negative and significant influence between GDP on unemployment (Y), namely -0.018901. if GDP (X1) increases by 1%, unemployment (Y) will decrease by -0.01%, but if GDP (X1) decreases by 1%, unemployment will increase by -0.01%, assuming other variables are constant. Therefore, it can be interpreted that the GDP variable does not have much influence on the unemployment rate in 6 ASEAN countries (Indonesia, Philippines, Malaysia, Thailand, Singapore, Vietnam) in 2002-2021. However, there are often assumptions that link GDP with unemployment, (Hasan and Sasana 2020)but in reality it does not always have a significant effect. The proper situation is that GDP growth can create an increase in employment and also greater opportunities for work. However, it must be balanced with the absorption of labor if production increases, it will have the effect of reducing unemployment.

b. Effect of Population on Unemployment

Population is the total of all the people who live in a country and carry out various economic activities in the region. If the population of a country is overcrowded,(Ramadhani and Santoso Putra 2019) will also increase the unemployment rate due to the imbalance between the population and the availability of jobs. According to the results of the research that has been done, it shows that the regression coefficient of the Total Population variable (X2) is -6.06E-08. Which shows that there is a negative and insignificant influence between Total Population (X2) on Unemployment (Y), namely -6.06E-08. if Total Population (X2) increases by 1%, Unemployment will decrease by-6.06% but if Total Population (X2) decreases by -6.06%, Unemployment will increase by -6.06%, assuming other variables are constant. This is because in ASEAN 6 countries, especially Singapore, there are more people of productive age to work as much as 75% compared to the underage and elderly population, it is possible from the panel data test results that population has a negative influence on unemployment. However, according to Malthus theory, if the population in the region increases, the availability of food will also become very limited and there will be competition. And it can also be related to the number of labor force if it is not balanced with opportunities or employment opportunities that are getting wider / more food will also cause many residents in the region to become unemployed. (Ramadhani and Santoso Putra 2019)And also the development or progress of a country is not seen from the number of its population, but it is seen from the quality of existing human resources whether it can be useful for the progress of the nation or even become an obstacle.

c. The Effect of Inflation on Unemployment

When inflation occurs, there is also an increase in the price of goods in the market. Which is caused by various factors, one of which is the push for an increase in wages, (Nisa and Sugiharti 2022)However, it cannot be overcome if the price of goods is still cheap, therefore producers increase the price of goods to cover wage demands to overcome production costs. To meet the public demand for goods, producers must produce more and more if there is a surge in orders. In this study shows that, the regression coefficient of the inflation variable is -0.011158. which shows that there is a negative and significant influence between Inflation on unemployment

(Y) which is -0.011158. if Inflation (X3) increases by -0.01% then Unemployment will decrease by -0.01% but if Inflation (X3) decreases by -0.001% then Unemployment will increase by -0.01% assuming other variables are constant. This is because if the inflation rate increases, businesses will need more workers in a short time due to the higher wage value, therefore it can cause the unemployment rate to decrease. However, inflation may affect unemployment in the short term but not necessarily in the long term, at this time the number of natural unemployment will not be affected by the problem of changes in prices if inflation. This is consistent with the principle of the monetary neutralist theory. And in accordance with the theory of the Philips curve which states that if inflation increases it will affect the amount of unemployment decrease. Inflation is also related to the economy of the community, if the economy is high enough then inflation is not too heavy, but if the economy is low then inflation is very influential in people's lives. (Nisa and Sugiharti 2022)High and low inflation will affect the economic growth of a country and there will be an increase in the unemployment rate.

d. The Effect of Foreign Direct Investment (FDI) on Unemployment

One of the factors to encourage economic growth in a country is the presence of foreign investment into the country. The presence of foreign investment can encourage and increase real GDP which connects to the effects of unemployment.(Atmayudi Gandhi et al. 2022) If many foreign companies invest in the country, it will automatically create as many jobs as possible and help improve the economy and reduce unemployment. Based on the research above that, the regression coefficient of the FDI variable is -0.043228. which shows that there is a negative and significant influence between FDI on unemployment (Y), namely -0.043228. if FDI (X4) increases by -0.04% then unemployment will decrease by -0.04% but if FDI (X4) decreases by -0.04% then unemployment will increase by -0.04% assuming other variables are constant. With the incoming foreign investment, it will increase the capacity of the production of a good. And also the availability of capital to increase the existing workforce and also extra production demand. (Atmayudi Gandhi et al. 2022)This will affect the number of employment opportunities if foreign/private companies open new jobs. And it will also help the country in industrial and economic development.

5. CONCLUSIONS AND SUGGESTIONS

5.1 Conclusion

This study analyzes the determinants that affect unemployment in 6 ASEAN countries (Indonesia, Philippines, Malaysia, Thailand, Singapore, Vietnam) during the period 2002-2021 using panel data analysis. The results of the study concluded that in the Gross Domestic Product variable, Foreign Direct Investment has a negative and significant influence on unemployment in 6 ASEAN countries because the probability value is smaller than the 5% significance level, while in the Total Population variable, there is a negative and insignificant influence between Total Population and unemployment according to the test results. Therefore, each country in the ASEAN region must increase the value of GDP, foreign investment and overcome the inflation that occurs. This is so that there is an increase in the domestic industrial sector in each ASEAN country in order to create many broad employment opportunities for the community. Which is expected to improve the welfare of the community and a decent life to realize the goals of sustainable development that has a major impact on poverty alleviation. And the government must pay attention to every export and import policy so as not to harm the domestic industry. With a lot of foreign investment coming into a country, it will have a big impact on reducing unemployment because the industrial sector will increase which automatically requires a lot of labor if the demand for goods continues to increase. This will encourage economic growth and increase people's income.

5.2 Suggestions

For the governments of the ASEAN 6 countries, they should focus more on foreign investment in sectors that are very promising in accordance with their respective countries for the opening of new jobs. Each ASEAN 6 country must improve the quality of education and human resources to be able to compete nationally and internationally.(Dimas et al. 2022) And do not forget to provide job skills training such as opening a vocational training center so that the abilities / skills possessed by the community are in accordance with what is needed by the labor market. It is better to improve or build infrastructure to facilitate access in the economy to reach various remote areas that are difficult to reach so that the community is easy to carry out various economic activities such as work. However, infrastructure is very useful for distributing products from various regions to increase income and economic growth.

Cooperate with foreign or private companies to empower people affected by poverty to become unemployed. Increase social assistance to underprivileged communities, and conduct trade between ASEAN countries so that diplomatic relations between countries are stronger and can increase economic growth. And suggestions for future researchers to further extend the time span of research and the scope of case studies that have not been studied before. And more to find and understand theories in order to make comparisons to this research.

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