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The Effect Unemployment, Labor, and Foreign Direct Investment (FDI) on Economic Growth in Six Central Asia Countries (Philippines, Vietnam, Malaysia, Myanmar, Singapore, and Indonesia)

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Abstract

This research aims to examine the effects of Unemployment, Labor, and Foreign Direct Investment (FDI) on Economic Growth, both partially and simultaneously, in six Southeast Asian countries, namely the Philippines, Vietnam, Malaysia, Myanmar, Singapore, and Indonesia. The type of research used is descriptive quantitative, which involves a quantitative approach to describe and analyze data. The study utilizes panel data from the six selected countries in Southeast Asia. Data collection in this research relies on secondary data from the period 2018-2022, sourced from the World Bank. The results show that, partially, Unemployment, Labor, and FDI variables have a negative and significant impact on Economic Growth. Additionally, it is found that these independent variables-Unemployment, Labor, and FDI-simultaneously influence Economic Growth.

Keywords: Unemployment; Labor; FDI; Economic Growth

1. Introduction

Economic development is a process that leads to an increase in a society's per capita income over the long term. The goals of economic development can generally be categorized into two main objectives: increasing productivity and raising per capita income [1]. According to Putri et al. (2018), economic development aims to achieve societal prosperity through high economic growth. There is a strong connection between national and regional development, creating a solid, equitable economy. Economic development relies on economic growth, where both aspects support each other [2].

Economic growth is a key indicator of a country's development success. Several factors influence it, including reducing unemployment, increasing labor, and foreign direct investment (FDI). According to Todaro & Smith (2015), three main components drive economic growth: capital accumulation, population growth that enhances the labor force, and technological advancements. Countries capable of sustaining economic growth ensure the need for careful planning and monitoring. Global economic cooperation becomes essential to drive growth, especially in cases where countries struggle to meet their domestic needs [3].

Regionally, proximity and historical ties encourage the formation of organizations like ASEAN, which aims to boost economic growth among Southeast Asian nations. ASEAN economies grew by 5.7% in 2022, driven by domestic consumption, trade, and high investment. The region's labor force also benefits from initiatives like the Mutual Recognition Agreement (MRA), which allows skills recognition across ASEAN. Additionally, FDI inflows into ASEAN rose by 42% in 2021, driven by the large market potential. Countries like the Philippines, Vietnam, Malaysia, Myanmar, Singapore, and Indonesia have seen positive economic growth in the region.

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Table 1. Economic Growth of Six Countries in Southeast Asia

Country	Economic Growth (billion USD)				
	2018	2019	2020	2021	2022
Philippines	346.841.896	376.823.402	361.751.145	394.087.359	404.284.326
Vietnam	310.106.478	334.365.270	346.615.738	366.137.569	408.802.378
Malaysia	329.691.934	283.649.531	239.735.486	359.096.907	413.493.207
Myanmar	678.558.450	750.720.380	790.456.950	662.628.130	622.634.662
Singapura	376.869.492	376.837.580	348.392.090	423.797.100	466.788.426
Indonesia	104.227.153	111.909.987	105.905.484	118.650.545	131.910.022

Based on Table 1, the economic growth trends in the Philippines, Vietnam, Malaysia, Myanmar, Singapore, and Indonesia from 2018 to 2022 show both increases and decreases. The Philippines experienced growth in 2022, reaching USD 404.28 billion, driven by strong consumer spending despite rising prices. Its main industries include food processing, textiles, electronics, and automotive. Vietnam's economy also grew in 2022 to USD 408.80 billion, with strong contributions from its rich marine resources and agricultural sector.

Malaysia's growth in 2022 amounted to USD 413.49 billion, benefiting from its natural resources, particularly rubber. Myanmar saw a rise in 2020 to USD 790.45 billion due to a recovery in manufacturing and export activities, with construction projects resuming after a long halt in 2021. Singapore also showed growth in 2022, reaching USD 466.78 billion, boosted by merchandise trade, tourism, and aviation, reflected in a rise in international visitors.

Indonesia's economy grew by USD 131.91 billion in 2022, supported by its leading export and import commodities. The increase in imports, especially capital goods and raw materials, contributed to this, along with growth in gross fixed capital formation and consumption from non-profit institutions serving households. All sectors experienced positive growth, with transportation and warehousing seeing the highest increases, followed by accommodation and food services, driven by increased mobility and tourism.

The COVID-19 pandemic led to economic declines across Southeast Asia due to production halts and income drops from factors like large-scale social restrictions, reduced consumer spending, and mass layoffs. Economic growth helps reduce unemployment by creating job opportunities, a persistent issue in both developed and developing countries. High unemployment levels signal poor economic conditions and can hinder long-term development [4]. Unemployment rates in the Philippines, Vietnam, Malaysia, Myanmar, Singapore, and Indonesia are also reported.

Table 2. Percentage Unemployment Rate of Six Countries in Southeast Asia

Country	Unemployment (%)				
	2018	2019	2020	2021	2022
Philippines	2,23	2,23	2,52	3,39	2,59
Vietnam	1,16	1,68	2,1	2,38	1,53
Malaysia	3,3	3,26	4,54	4,64	3,93
Myanamar	0,76	0,4	1,47	2,2	3
Singapura	3,3	3,1	4,1	4,64	3,59
Indonesia	4,38	3,59	4,25	3,82	3,46

Based on Table 2, the unemployment rates for the Philippines, Vietnam, Malaysia, Myanmar, Singapore, and Indonesia are presented. In the Philippines, unemployment rose to 3.39% in 2021, compared to 2.52% the previous year. Vietnam's unemployment also increased to 2.38% in 2021. In Malaysia, unemployment grew to 4.64% in 2021. Myanmar experienced an increase in 2022 to 3%. Singapore saw a rise in its unemployment rate in 2021, reaching 4.64%, while in Indonesia, unemployment increased to 4.38% in 2018.

Unemployment is a significant issue that needs to be addressed as it reduces productivity and leads to social problems. Unemployment causes resources to become unproductive, reducing income and purchasing power [5]. A high unemployment rate in a country often leads to political and social instability, affecting long-term economic development [6]. According to Okun's Law, there is a relationship between economic growth and unemployment, where high unemployment usually coincides with low economic growth and vice versa.

Another critical factor affecting economic growth is labor. Employed workers who contribute actively play a key role in driving economic productivity. According to Law No. 13 of 2003 on labor, labor covers all matters related to workers before, during, and after employment. Labor is a potential resource driving economic development, contributing to regional growth. Below are labor developments in the Philippines, Vietnam, Malaysia, Myanmar, Singapore, and Indonesia:

Table 3. Labor of Six Countries in Southeast Asia

Country	C				
	2018	2019	2020	2021	2022
Philippines	43.800.369	45.091.808	42.419.079	44.606.252	47.871.825
Vietnam	55.246.118	55.877.866	54.751.935	55.034.918	55.688.922
Malaysia	16.042.818	16.435.873	16.627.612	16.996.006	17.129.366
Myanmar	24.412.306	23.943.305	24.060.818	22.303.449	22.526.660
Singapura	3.471.429	3.527.441	3.511.798	3.418.165	3.540.908
Indonesia	133.327.293	136.201.932	136.106.881	134.381.715	138.099.490

From Table 3, it can be concluded that labor force figures for several Southeast Asian countries have shown significant growth. The Philippines saw an increase in 2022, reaching 47.871 billion USD. Vietnam's labor force grew in 2019 to 55.877 billion USD, while Malaysia's workforce increased to 17.129 billion USD in 2022. Myanmar saw growth in 2018, reaching 24.412 billion USD, and Singapore's labor force also rose to 3.540 billion USD in 2022. Indonesia experienced a notable increase in labor force from 134.381 billion USD in 2021 to 138.099 billion USD in 2022.

Labor is an essential factor in production processes. When combined with capital such as machinery, output increases due to improved productivity and quality. Labor should be viewed not only in terms of quantity but also quality, including education and health levels. The availability of skilled labor enhances production and thus contributes to a country's economic growth [7].

Countries often face challenges in funding economic development, with foreign investment playing a crucial role. Foreign Direct Investment (FDI) occurs when foreign companies invest directly in the production or marketing processes of another country [8]. According to Indonesian law, foreign investment is regulated under Law No. 25 of 2007, which defines foreign capital and outlines how investments are made directly and the risks borne by the investor.

Table 4. Foreign Direct Investment (FDI) of Six Countries in Southeast Asia

Country	Foreign Direct Investment (Miliar USD)				
	2018	2019	2020	2021	2022
Philippines	994.859.882	867.136.587	682.213.329	119.833.633	919.994.290
Vietnam	155.000.000	161.200.000	158.000.000	156.600.000	179.000.000
Malaysia	830.448.074	915.492.168	405.876.967	202.451.573	147.259.704
Myanmar	176.819.552	173.558.941	190.715.404	206.660.647	123.850.000
Singapura	811.608.973	105.293.129	784.475.837	138.544.182	150.844.052
Indonesia	189.098.260	249.935.517	191.750.777	212.130.803	214.283.384

Based on Figure 4, Foreign Direct Investment (FDI) in the Philippines saw an increase in 2018, amounting to USD 994.86 billion. Vietnam experienced a rise in 2022, reaching USD 161.20 billion. Malaysia's FDI rose in 2019 to USD 915.49 billion, while Myanmar saw growth in 2021 with USD 206.66 billion. Singapore recorded an FDI increase of USD 811.61 billion in 2018. Indonesia experienced an increase in 2019 to USD 249.94 billion, compared to USD 189.10 billion in the previous year.

FDI plays a vital role in boosting a country or region’s economic quality by supplementing domestic investments. Its impact extends beyond capital inflow, triggering multiplier effects such as the transfer of technology, managerial skills, and knowledge. FDI also creates jobs, which is key in addressing unemployment [9]. The success of FDI in any region depends on the company’s motives and the region’s purchasing power. Strong domestic investment, particularly during economic crises, can contribute significantly to economic recovery.

2. Literature Review

2.1. Economic Growth

Economic growth is the fiscal development of the production of goods and services prevailing in a country, such as the increase and amount of production of industrial goods, infrastructure development, increase in the number of schools, increase in service sector production and increase in capital goods production. The growth of the world economy or the global economy in general shows the growth of the national economy of all countries of the world [10].

2.2. Unemployment

Unemployment is a macroeconomic problem that affects people directly and is the most severe [11]. For most people, losing a job means a decline in living standards and psychological distress, so it is not surprising that unemployment is a frequent topic in political debates and politicians often claim that the policies they offer will help create jobs. Unemployment can be an inhibiting factor for economic development in a country. This happens if the high population and the unavailability of sufficient jobs can potentially reduce the productivity of people who are in the labor force category. David Ricardo's theory of unemployment states that if the population doubles, there will be excess labor. This excess labor can cause wages to fall, so that it is only enough to meet the minimum living needs. As a result, the economy will stagnate or not progress. Factors that affect unemployment include the state budget (APBN), population, and labor productivity.

2.3. Labor

Labor is part of the population that is included in the process of economic activities [12]. Labor includes, namely: labor force and non-labor force. The labor force consists of residents who are said to be included in the working age population group, which ranges from 15 years to 64 years, including working groups, unemployed groups, and looking for work. In addition, the non-labor force is categorized as the population that has an age of 0-14 years and the population that has an age of more than 64 years, including: those who attend school, those who take care of the household, and others or income recipients.

2.4. Foreign Direct Investment (FDI)

Foreign Direct Investment (FDI) is a form of investment that can increase the economic capital stock and productivity of a country. Capital flows from Foreign Direct Investment can be used to set up factories that contribute to increasing the country's productivity [13].

Foreign Direct Investment is a direct effect of imperfect markets. The motivation and purpose of companies investing abroad is to build the competitiveness of companies where there is no longer a market balance [15]. With the flow of capital to acquire or with potential companies that already exist in the destination country where the capital flows, so that it is more efficient with a higher return on investment. There are also disadvantages to FDI including increased capital investment costs, higher costs to coordinate units located in different countries, increased financial risk, and increased local political risk.

Foreign Direct Investment (FDI) offers several advantages: (1) it reduces capital ownership risk through diversification, (2) it introduces advanced technology from foreign companies, (3) it enhances corporate governance and accounting standards, and (4) it restricts governments from enacting harmful policies due to global capital flow limitations.

3. Research Method

This study uses a quantitative descriptive approach to analyze the effect of unemployment, labor, and Foreign Direct Investment (FDI) in the Philippines, Vietnam, Malaysia, Myanmar, Singapore, and Indonesia.

The type of data used in this study is secondary data, and the data analysis method applied is the panel data regression analysis model.

4. Results and Discussion

Based on the results after the Chow test, Hausman test, and Lagrange Multiplier (LM) test, the most appropriate model used in this study is the Random Effect Model (REM). The results obtained from the regression estimation in this study are as follows:

Table 5. Random Effect Model (REM) Estimation Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	12.51971	1.372523	8.393093	0.0000
UNEMPLOYMENT	-0.097377	0.033993	-2.864638	0.0082
LOG(TK)	-0.280933	0.076840	-3.656103	0.0011
LOG(FDI)	-0.109825	0.036622	-2.998931	0.0059

Source: Processed By Researcher, 2024

Based on the above results in table 5, the panel data regression equation can be obtained as follows:

$$LogPE = 11.519 - 0.097Unemployment - 0.280LogTK - 0.109LogFDI$$

Furthermore, the explanation of the panel data regression model is:

1. The constant value is 11.519, meaning that when the value of the independent variables (unemployment, labor, and foreign direct investment) is fixed, economic growth will increase by 12.519.
2. The coefficient of unemployment is -0.097, meaning that unemployment has a negative relationship with economic growth. So that if unemployment increases by 1 percent, economic growth will decrease by 0.097 billion USD.
3. The coefficient of labor is -0.280, meaning that labor has a negative relationship with economic growth. So that if labor increases by 1 billion USD, economic growth will decrease by 0.280 billion USD.

4. The coefficient value of foreign direct investment is -0.109, meaning that foreign direct investment has a negative relationship with economic growth. So that if foreign direct investment increases by 1 billion USD, economic growth will decrease by 0.109 billion USD.

Based on the results of the T test (partial test) above, it can be concluded that:

1. The unemployment variable has a t-statistic value of -2.864638 with a probability of 0.0082 (0.0082 <0.05) which means that the unemployment variable has a negative and significant effect on the economic growth variable, so hypothesis 1 is accepted.
2. The labor variable has a t-statistic value of -3.656103 with a probability value of 0.0011 (0.0011 <0.05), which means that the labor variable has a negative and significant effect on the economic growth variable, so hypothesis 2 is rejected.
3. The foreign direct investment (FDI) variable has a t-statistic value of -2.998931 with a probability value of 0.0059 (0.0059 <0.05), which means that the foreign direct investment (FDI) variable has a negative and significant effect on the economic growth variable, so hypothesis 3 is rejected.

Table 6. F Test Results

Information	Probability
Prob(F-statistic)	0.010488

Source: Processed By Researcher, 2024

Based on the results of the F test (simultaneous test) in table 6 above, it has an F-statistic probability value of 0.010488 which is with a significant value of 0.010488 < 0.05. So it can be concluded that the independent variables, namely unemployment, labor, and foreign direct investment (FDI) have a significant effect simultaneously (together) on the dependent variable, namely economic growth.

Table 7. Determination Coefficient Test Results

R-squared	0.345983
Adjusted R-squared	0.270519

Source: Processed By Researcher, 2024

Based on the results of the coefficient of determination test in the table above, the Adjusted R-squared value is 0.270519 or 27.0519%. The coefficient of determination shows that the independent variables consisting of unemployment, labor, and foreign direct investment (FDI) are able to explain the dependent variable, namely economic growth by 27.0519%, while the remaining 72.0519% (100 - 27.0519 = 72.0519) is explained by other variables outside this study.

5. Conclusions

Unemployment has a negative and significant effect on economic growth. Labor also has a significant negative impact on economic growth. In addition, foreign direct investment (FDI) has a negative and significant effect on economic growth. Simultaneously, unemployment, labor, and FDI together significantly affect economic growth.

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