Journal of economic Education 14 (1) (2025)

Journal of Economic Education

http://journal.unnes.ac.id/sju/index.php/jeec

ANTECEDENTS AND CONSEQUENCES OF ECONOMIC GROWTH IN ASEAN COUNTRIES

Mohammed Mahmoud Mohammed Imleesh,[1]✉ Sandy Arief[2], Fahrur Rozi[3]

DOI: https://doi.org/10.15294/jeec.v14i1.24717

[1]Master of Economics Education, Faculty of Economics and Business, Universitas Negeri Semarang, Indonesia
[2,3] Department of Economics Education, Faculty of Economics, Universitas Negeri Semarang, Indonesia

History Article

Received May, 11 2025
Accepted May, 17 2025
Published June, 26 2025

Keywords:
Inflation, Unemployment Rate, Exchange Rate, Green Trade, Foreign Direct Investment (FDI), Economic Growth

Abstract

Association of Southeast Asian Nations (ASEAN) standing out as the most developed intergovernmental institution. ASEAN countries have demonstrated impressive economic growth average annual growth rate of 4.2% over the past decade. This study investigates the impact of key macroeconomic variables Foreign Direct Investment (FDI), inflation, unemployment, exchange rate, and green trade on economic growth in ten ASEAN member states. Additionally, it examines the mediating role of FDI in shaping these relationships. Employing panel data regression over a 15-year period (2008–2022), the analysis reveals a significant negative correlation between inflation and economic growth, reflecting the detrimental effects of price instability on economic activity. In contrast, unemployment, exchange rate, and green trade exhibit positive correlations with growth, suggesting that higher employment levels, currency stability, and environmentally sustainable trade practices bolster economic performance. FDI plays a critical mediating role by injecting capital and advanced technology, thereby enhancing productivity, innovation, and job creation. The study underscores the necessity of integrated economic policies that simultaneously address inflation, employment, exchange rate management, and green trade promotion, while actively fostering FDI to support sustainable and resilient economic development across the ASEAN region.

✉ Correspondence address:
Faculty of Economics and Business, Universitas Negeri Semarang
Jalan Raya Sekaran Gunungpati Semarang, Central Java, Indonesia
50229
E-mail: mohammedimleesh.2@gmail.com

p-ISSN 2301-7341
e-ISSN 2502-4485

INTRODUCTION

Association of Southeast Asian Nations (ASEAN) standing out as the most developed intergovernmental institution. ASEAN countries have demonstrated impressive economic growth, with an average annual growth rate of 4.2% over the past decade (Bharti & Kumari, 2024). This growth presents numerous opportunities for businesses looking to expand into emerging markets. It is supported by significant foreign direct investment (FDI) inflows and initiatives such as the ASEAN Free Trade Area, which promotes intra-regional trade and collaboration. As ASEAN continues to enhance trade, investment, infrastructure development, and security cooperation.

ASEAN member states each bring unique strengths to the region, blending diversity with unity. For example, Malaysia thrives as an economic hub, powered by its robust manufacturing sector and strategic position along key trade routes especially with China (Guahnich, 2023). Across ASEAN, economic growth serves as a critical measure of progress, reflecting a nation's ability to produce more goods and services over time. This growth fuels long-term prosperity, improving living standards and opportunities (Hikam et al., 2024). However, challenges like inequality and uneven development persist, highlighting the need for balanced policies that harness regional strengths while addressing gaps.

Economic growth is a key sign of a country's progress. It shows how well the government is working to improve people's lives by creating jobs, reducing poverty, and providing better services. However, many developing countries including those in ASEAN still struggle with high inequality. The big gap between rich and poor, along with widespread poverty, makes it harder to achieve long-term, sustainable development (Dondo et al., 2019).

The data presented in figure 1. shows the economic indicators for Southeast Asian countries from 2018 to 2022, focusing on Singapore, Malaysia, Indonesia, Thailand, Cambodia, the Philippines, Laos, Brunei, Vietnam, and Myanmar.

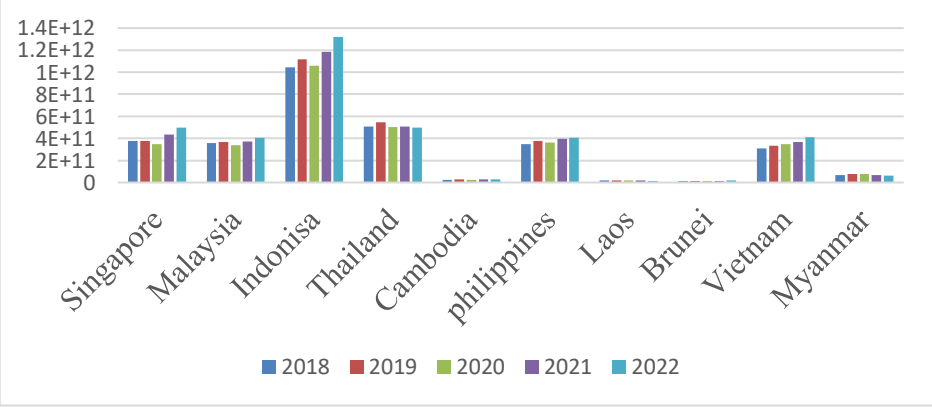

Figure 1. Economic Growth Data in ASEAN Countries From 2018-2022
Source: World Bank (2025)

The COVID-19 pandemic negatively impacted all countries, with varying degrees of recovery. Neoclassical growth theory emphasizes the role of investment in driving economic expansion, with higher saving rates leading to increased capital formation. ASEAN countries' recovery rates differ due to variations in FDI inflows, influenced by governance, policy effectiveness, and regional stability. Examining FDI within the framework of neoclassical growth theory highlights the need for targeted policies to foster investment and promote equitable growth across the region.

Foreign Direct Investment (FDI) is a form of direct investment where the source of financing originates from abroad. The flow of FDI from a home country to a host country signifies the evolution of global flows in the real sector today. FDI has a positive impact on income inequality (Song et al., 2021).

Foreign Direct Investment (FDI) plays a crucial role in the economic development of countries, particularly in emerging economies. Recent research indicates that various factors significantly influence FDI inflows, which in turn can impact unemployment rates. Additionally, factors such as political stability, regulatory quality, and the availability of skilled labor are critical in attracting FDI (H. T. Nguyen et al., 2024). These investments can lead to job creation. However, the relationship between FDI and unemployment is complex; while FDI can create jobs, it may also lead to restructuring in local industries, potentially resulting in job losses in the short term (Le et al., 2024).

To boost economic growth, all nations strive to maintain inflation below the threshold level within their borders. In the near term, employment and inflation are positively correlated, but in the long term, they are negatively correlated. Excessive inflation has a detrimental impact on economic growth, but below a certain threshold, it can have a beneficial impact. As such, it is important to monitor the country's inflation rate and the variables that have both long- and short-term impacts (Khan & Naushad, 2020).

One economic issue that has a direct impact on survival is unemployment. A job loss will lower the community's standard of living. The relationship between the two variables indicates a significant correlation between economic growth and the decrease in unemployment rates. When the growth rate accelerates or the unemployment rate declines, the employment rate rises. Economic literature has devoted a great deal of attention to Okun's law, which asserts that the change in the unemployment rate and the change in the GDP growth rate are inversely related. Okun has effectively illustrated how unemployment and economic growth are inversely correlated. He found that a 1% decrease in unemployment would result in a 3% increase in the real gross domestic product (RGDP), and vice versa. He also found that employment increases correspond with rising real gross domestic product (Hjazeen et al., 2021).

Since the beginning of the new era of exchange rate arrangements, exchange rate volatility and misalignment have become increasingly important factors in developing exchange rate policy. Exchange rate mismatch, generally considered detrimental to macroeconomic performance, could arise from pursuing this objective. Calculating the direct and indirect effects of misalignment on per capita economic growth. The necessity

of closely monitoring exchange rate regulations and encouraging the growth of the financial sector may help offset the detrimental effects of actual exchange rate misalignment on economic expansion (Jehan & Irshad, 2020).

Green trade is also a vital component of sustainable development, capable of promoting clean technology, creating new economic opportunities, and generating green jobs while safeguarding the environment. According to Mahajan et al. (2023). Economic growth and green trade have positive environmental impacts, with stricter environmental policies amplifying the beneficial effects of green trade on sustainable development.

The Environmental Kuznets Curve (EKC) theory posits that environmental pressures may initially rise with increasing income but subsequently decline as wealth continues to grow, indicating a complex relationship between economic growth and environmental sustainability. Stricter environmental regulations can enhance the advantages of green trade and contribute to sustainable development (Halim & Moudud-Ul-Huq, 2024).

This study provides a comprehensive analysis of the combined effects of key macroeconomic factors on economic growth in ASEAN countries, with a particular focus on the mediating role of Foreign Direct Investment (FDI). By integrating neoclassical and endogenous growth theories, the research aims to enhance understanding of the region's economic dynamics and resilience over the past two decades. Unlike previous studies that often examined these factors in isolation, this research simultaneously explores their interactions, revealing underlying drivers of growth and the importance of sustainability through green trade. This novel approach contributes significantly to the field by highlighting how environmentally friendly trade practices and FDI influence economic outcomes, offering actionable insights for policymakers and stakeholders in the ASEAN region.

METHODS

Data

The data collection method for this research involves documentation using secondary data from the years 2008 to 2022. The study relies on various sources for this secondary data, which include:

Table 1. Data Collection

No	Variable	Operational Definition	Source	Unit
1	Economic growth	Economic growth is measured through changes in a country's real Gross Domestic Product (GDP).	World Bank	Value
2	Foreign direct investment	Investments made by individuals or companies from one country to another are measured in value.	World Bank	Value

3	Inflation	The general rate of increase in the prices of goods and services in an economy.	World Bank	Value
4	Unemployment rate	Percentage of the workforce who are unemployed but actively looking for work.	Macrotrends	Percent
5	Exchange rate	The exchange rate between two currencies shows how much of one currency can be exchanged for another.	World Bank, ADB Data Library	Value
6	Green trade	Trade related to goods and services that have a positive environmental impact, measured in value.	ADB: Asian Development Bank	Value

Source: data processed (2025)

Data Analysis Method

This study employs panel data regression to analyze data from 10 ASEAN countries, combining time-series and cross-sectional data using EViews. The one-way model accounts for individual effects:

$Y_{it} = \alpha + \alpha i + X'it\beta + \varepsilon it$ (1)

Meanwhile, the two-way model includes both individual and time effects:

$Yit = \alpha + \alpha i + \delta t + X'it\beta + \varepsilon it$ (2)

With information:

$\boldsymbol{\alpha}$ = constant

$\boldsymbol{\beta}$ = parameter estimation result (px1)

$\boldsymbol{X'it}$ = it's observation

$\boldsymbol{\alpha i}$ = different effect of each with individual

$\boldsymbol{\varepsilon}$**it** = regression error at unit-i and at time-t

δt = time effect

Estimate Model Test

In panel data regression, the estimation models include the Common Effect Model (CEM), Fixed Effect Model (FEM) using the OLS approach, and Random Effect Model (REM) using the GLS approach. For CEM and FEM, classical assumption tests for heteroscedasticity and multicollinearity are necessary.

It is possible to determine the estimating model on panel data in three stages, as follows:

1. Common Effect Model (CEM)

Cross-section and time series data are integrated into the common effect, regardless of temporal or individual variances. CEM Ignores individual and time differences

2. Fixed Effect Model (FEM)

The fixed effect model assumes that each individual has a unique effect, FEM uses OLS with individual-specific intercepts.

3. Random Effect Model (REM)

This study employs the Random Effects Model (REM) panel data analysis, which accounts for variations across both time and individual units through an error component. Unlike OLS, REM uses Generalized Least Squares (GLS) to address correlation in disturbance terms, ensuring efficient estimation. A major benefit of REM is its robustness against heteroscedasticity , making it suitable for analyzing dynamic and diverse datasets.

Determining Estimation Model

Model selection was conducted using:

- Chow test (CEM vs. FEM)
- Hausman test (FEM vs. REM)
- Lagrange Multiplier test (CEM vs. REM)

The REM was selected for its robustness against heteroscedasticity and efficiency in handling dynamic datasets.

RESULT AND DISCUSSION

Statistics Descriptive

Table 2 presents the descriptive statistics of each variable: Inflation (X1) ranges from -1.260 to 26.799 with a mean of 3.891 and a standard deviation of 4.538. Unemployment (X2) varies between 0.1200 and 9.320, averaging 2.85148. Exchange rate (X3) shows wide dispersion (1.249567 to 23,271) with a mean of 4,712.9. Green trade (X4) ranges from 27.091 to 339.82 with an average of 102.27. FDI (Z) ranges from -42,900 to 14,880, with a mean of 13,490 and high variability. Economic growth (Y) lies between 13,191 and 54,460, averaging 23,670.

Table 2. Statistics Descriptive

	X1	X2	X3	X4	Z	Y
Mean	3.891	2.8851	4712.92	102.269	134900	26430
Median	3.023	3.005	50.014	98.991	55900	23670
Maximum	26.799	9.320	23271	339.991	148800	13191
Minimum	-1.260	0.120	1.250	27.091	-429000	54460
Std. Dev.	4.538	2.051	6930.97	61.510	243200	27940
Skewness	2.851	0.776	1.414	1.142	3.352	1.5000
Kurtosis	13.028	3.215	3.819	4.367	15.241	5.4000
Jarque-Bera	831.774	15.355	54.183	44.275	12200	95.500
Probability	0.0000	0.0005	0.0000	0.0000	0.0000	0.0000

Source: Eviews output (2025)

Selection of Regression Model

In the Chow test, the F-statistic value is less than the p-value of 5 percent which means rejecting H0 and accepting H1 so that the best model in the FEM (Fixed Effect Model). And FEM test is the REM model (Random Effect Model). In the (Hausman test), the F-statistic value is 0.0126 so that H0 is rejected and H1 is accepted so that the best model in the FEM (Fixed Effect Model) and in the Lagrange Multiplier test is used to determine the best model to use between the Random Effect Model (REM) and the Common Effect Model (CEM) the Cross-section showing 0.000 so that H0 is rejected and H1 is accepted that's mean the best model is REM (Random Effect Model) as the best model. So it can be concluded that the best regression model in this study is the (Fixed Effect Model).

Table 3. Regression Model Selection Result

Test	F-Stat Value	Hypothesis and , Result
Chow Test	0.0000	H_0: CEM is the best model (p-value > 5%) H_1: FEM is the best model (p-value < 5%) Result: H_0 is rejected, FEM is chosen as the best model
Hausman Test	0.0126	H_0: REM is the best model (p-value > 5%) H_1: FEM is the best model (p-value < 5%) Result: H_0 is rejected, FEM is the best model
LM Test	0.000	H_0 CEM is the best model (p-value > 5%) H_1 REM is the best model (p-value < 5%) Result: H_0 is rejected, REM is the best model
Conclusion	Two of the three tests chose FEM, so the best model in this model is the Fixed Effect Model.	

Source: SPSS output (2025)

Classical Assumption Test

This study validated its regression model by conducting classical assumption tests for normality, autocorrelation, multicollinearity, and heteroscedasticity to analyze ASEAN economic factors. The results confirmed the model's reliability, with no violations detected except for positive autocorrelation, which was addressed to ensure robust findings.

Table 4. Classical Assumption Test

Test	Purpose	Result/ Value	Conclusion	Source
Normality	Test if residuals are normally distributed	Jarque-Bera: 3.796191	Residuals are normally distributed (p=0.149854 > 0.05)	Ghozali (2017)

Autocorrelation	Check correlation of residuals over time	DW Statistic: 0.8077	Positive autocorrelation (DW < dL=1.6649)	Ghozali (2017)
Multicollinearity	Assess correlation among independent variables	Correlations < 0.8	No multicollinearity present	Shrestha (2020)
Heterosceda sticity	Test for unequal variance of residuals	All p-values > 0.05	No heteroscedasticity detected; can be disregarded due to Fixed Effect Model choice	Ghozali (2017)

Source: SPSS output (2025)

The Association Between Inflation And Economic Growth And ASEAN Countries.

FDI plays a critical mediating role in mitigating inflation's negative impact on ASEAN economic growth. While high inflation erodes purchasing power and weakens consumption, FDI helps counteract these effects by injecting capital, improving technology transfer, and boosting operational efficiency key advantages for developing ASEAN economies facing investment uncertainty (Haryani & Putri, 2022). Countries like Vietnam and Thailand, with strong FDI inflows, leverage it to diversify their economies and enhance export competitiveness, stabilizing growth during inflationary periods. Additionally, FDI-supported firms adapt faster to price fluctuations due to advanced technology and management practices. However, FDI's effectiveness varies: diversified economies (Singapore, Malaysia) benefit more than single sector-dependent ones (e.g., Myanmar, Laos), as they can shift resources to less inflation-sensitive sectors (Radzi & Hadi, 2023). To maximize FDI's potential, ASEAN policymakers should combine prudent inflation control with strategies to attract high-quality FDI, alongside workforce training and social safety nets. By doing so, FDI can serve as a resilient bridge between inflation and sustainable growth.

The Role of FDI as a Mediating Variable on Association between Inflation and Economic Growth in ASEAN Countries

This study demonstrates that while inflation negatively impacts economic growth in ASEAN (coefficient: -293.5M; t-stat=-3.81), Foreign Direct Investment (FDI) serves as a crucial mediator, mitigating these effects through three key mechanisms echnology transfer that enhances productivity (Haryani & Putri, 2022), economic diversification evident in Vietnam, Thailand and export competitiveness stabilization. Countries with diversified economies e.g., Singapore and Malaysia show greater resilience to inflation through FDI (Radzi & Hadi, 2023), countering earlier skepticism about FDI's role (Appiah et al., 2023). The findings highlight ASEAN's opportunity to leverage FDI as a stabilizing tool by attracting high-quality FDI in tech-driven sectors, aligning monetary policies with FDI incentives, and upskilling workforces to maximize spillovers. This

research bridges a critical gap in literature by proving FDI's dual role not just as a growth driver but as an inflation shock absorber offering policymakers a roadmap to balance price stability with sustainable development.

The association between Unemployment Rate and economic growth and ASEAN countries

Based on hypothesis testing, economic growth in ASEAN significantly increases unemployment (coefficient: 1.74 million; t-stat = 4.97), contradicting conventional expectations. This jobless growth stems from capital intensive industries (e.g., tech, resource extraction) that boost GDP but create few jobs (Alfalih, 2024), automation displacing low skilled workers without adequate replacement (Al-Kasasbeh, 2022), and skills mismatches where workers lack qualifications for emerging sectors (Baba et al., 2021). Policy shortcomings exacerbate the issue, including foreign investment skewed toward automation (Hawariyuni & Andrasari, 2022) and weak retraining programs (Korkmaz, 2021). To realign growth with employment, ASEAN must prioritize labor intensive sectors (e.g., MSMEs), expand vocational training (Louail & Riache, 2019; Lubbock et al., 2022), and strengthen social safety nets (Nguyen, 2021). Critics argue GDP-centric policies ignore distributive justice (Rahmawati & Kurniasari, 2024), urging a multidimensional framework that pairs growth with explicit employment targets (Uddin & Rahman, 2023). Without such reforms, ASEAN risks perpetuating exclusionary growth despite macroeconomic gains.

The role of FDI as a mediating variable on association between Unemployment Rate and economic growth ASEAN countries

The study reveals ASEAN's economic paradox where growth increases unemployment (coefficient: 1.74M; t-stat=4.97) due to capital-intensive FDI sectors resources that fail to create proportional jobs (Alfalih, 2024), compounded by workforce skills gaps (Baba et al., 2021). While FDI exacerbates this through capital efficiency priorities (Hawariyuni & Andrasari, 2022), its technology transfer potential could resolve structural unemployment if paired with vocational training and MSME support. Simultaneously, exchange rate stability proves vital for growth (coefficient: 2.72M; p=0.0025), enhancing competitiveness (Ha & Homg, 2020), though requires careful inflation balancing. The dual findings demand integrated policies: redirecting FDI toward labor intensive sectors with training programs, and maintaining exchange rate stability while controlling inflation together creating inclusive growth that converts GDP gains into employment opportunities.

The Association between Exchange Rates and Economic Growth in ASEAN Countries

This study confirms a statistically significant positive relationship between exchange rates and economic growth in ASEAN (coefficient: 2.72M; p=0.0025), validating that currency valuation critically impacts regional development. Three key

mechanisms explain this relationship: export competitiveness appropriately valued currencies boost export sectors (Al-Ramli et al., 2024); investment stability predictable exchange rates reduce uncertainty for foreign investors; and volatility management while moderate fluctuations may benefit manufacturing economies like Vietnam, excessive volatility harms agrarian ones like Laos (contrasting Harvey's 2019 universal negative assessment). The research advances prior work by revealing ASEAN specific nuances: exchange rate effects are magnified by regional integration, and their growth impact varies by sectoral composition. These findings suggest policymakers should adopt differentiated exchange rate strategies maintaining stability for macroeconomic certainty while allowing controlled flexibility to stimulate export diversification, all while monitoring inflation trade offs (Jehan & Irshad, 2020). The study particularly highlights how ASEAN's unique position in global value chains makes exchange rate management more impactful than in less trade dependent regions.

The role of FDI as a mediating variable on association between exchange rate and economic growth ASEAN countries

The study confirms a robust positive relationship between exchange rates and economic growth in ASEAN (coefficient: 2.72M; p=0.0025), where a stronger currency boosts growth through enhanced export competitiveness and cheaper capital imports (Musa et al., 2019; Ridhwan, 2024). FDI significantly mediates this relationship (coefficient: 3.79; t-stat=2.01), amplifying growth via technology transfer and sectoral expansion (Tariq, 2022). However, exchange rate volatility presents dual risks while moderate fluctuations may stimulate export diversification in manufacturing economies, excessive instability harms investment and exacerbates inflation (Zhou, 2020; Tariq, 2022). These findings suggest ASEAN policymakers should maintain competitively valued currencies to attract FDI, implement targeted interventions to curb excessive volatility, and align exchange rate policies with FDI incentives to maximize growth potential (Harvey, 2019). The results underscore that strategic exchange rate management, when integrated with investment policies, can serve as a powerful tool for sustainable development in the region's unique economic context.

The association between green trade and economic growth and ASEAN countries.

The study confirms green trade significantly boosts economic growth (coefficient: 1.25M; t-stat=5.28) through job creation and enhanced competitiveness (Hidayatullah, 2024), with effects amplified by a key mediating variable (coefficient: 2.34; t-stat=13.91) that links sustainability practices to productivity gains and FDI attraction (Kang & Lee, 2021). While initial green investments may slow short-term returns (Huang et al., 2022), the long term benefits including resource efficiency and climate resilience justify the transition. For ASEAN policymakers, this underscores the need to implement fiscal incentives for green industries, develop regional sustainability standards, and educate businesses on eco-innovation's economic payoffs. These measures can position ASEAN as both an environmental leader and competitive player in global green markets.

The role of FDI as a mediating variable on association between green trade and economic growth ASEAN countries

This study reveals that green trade significantly enhances economic growth (coefficient: 1.48; t-stat=3.13), with FDI serving as a powerful mediator (coefficient: 2.48; t-stat=9.71) that amplifies this effect through technology transfer and sustainable industry development (Kien et al., 2023). While initial green investments may reduce short-term returns (Huang et al., 2022), FDI transforms these costs into long-term gains by building eco-industrial ecosystems and expanding sustainable export networks (Kurniawan, 2024). The findings highlight ASEAN's opportunity to leverage this green trade-FDI synergy through three key policies targeted incentives for eco friendly FDI (e.g., tax holidays), regional standardization of green trade rules, and stable regulatory frameworks to maintain investor confidence (Li et al., 2022). By strategically aligning these elements, ASEAN can simultaneously achieve environmental sustainability and robust economic expansion.

CONCLUSION

This study concludes that economic growth in ASEAN countries is significantly influenced by several interconnected factors. High inflation negatively impacts growth by undermining consumer confidence and spending, highlighting the need for effective monetary strategies to stabilize prices. Foreign Direct Investment (FDI) plays a crucial mediating role by providing essential capital and technology, which enhances productivity and mitigates inflation's adverse effects. Additionally, higher employment levels are positively correlated with economic growth, with FDI contributing to job creation and productivity enhancement. The research also emphasizes the importance of stable exchange rates in promoting economic performance and confirms a positive relationship between green trade and economic growth, suggesting that environmentally sustainable trade practices can further enhance economic performance, especially when paired with FDI. Overall, the findings underscore the necessity for comprehensive policies that address inflation, unemployment, exchange rates, and green trade to foster sustainable economic growth in the region.

REFERENCES

Abdullah Muhammad Rashid Al-Ramli, Marwa Abd Jawir Shamekh Al-Dulaimi, N. M. S. H. (2024). Exchange Rates and Their Impact on Economic Growth in Iraq for the Period 2004 – 2022. *American Journal of Business Management, Economics and Banking*, *20*(2832–8078), 98–107. Retrieved from https://www.americanjournal.org/index.php/ajbmeb/article/view/1734

Ahmad Radzi, A. R., & Abdul Hadi, A. R. (2023). The Role of Economic Growth in Containing Inflationary Spiral in Selected ASEAN Countries--Panel Data Evidence from Malaysia, Indonesia, Thailand, and Singapore. *Contemporary Economics*, *17*(4). ISSN: 20840845. https://doi.org/10.5709/ce.1897-9254.517

Alfalih, A. A. (2024). The impact of oil prices, foreign direct investment and trade openness on unemployment rates in an oil-exporting country: The case of Saudi Arabia. *Heliyon*, *10*(3), e25094. ISSN:24058440 https://doi.org/10.1016/j.heliyon.2024.e25094

Al-kasasbeh, O. M. (2022). The relationship between unemployment and economic growth: Is Okun's Law valid for the Saudi Arabia case? International Journal of Economics and Business Research, 3(1), 217–226. https://doi.org/https://doi.org/10.37385/ijedr.v3i3.497

Appiah, M., Gyamfi, B. A., Adebayo, T. S., & Bekun, F. V. (2023). Do financial development, foreign direct investment, and economic growth enhance industrial development? Fresh evidence from Sub-Sahara African countries. *Portuguese Economic Journal*, *22*(2), 203-227. ISSN 1617982X. https://doi.org/10.1007/s10258-022-00207-0

Bharti, M. S., & Kumari, S. (2024). China's Belt and Road Initiative in Southeast Asia and its implications for ASEAN-China strategic partnership. *Asian Review of Political Economy*, *3*(1), 1-21.

Ha, D. T. T., & Hoang, N. T. (2020). Exchange Rate Regime and Economic Growth in Asia: Convergence or Divergence. *Journal of Risk and Financial Management, 13*(1). https://doi.org/10.3390/jrfm13010009

Halim, M. A., & Moudud-Ul-Huq, S. (2024). Green economic growth in BRIC and CIVETS countries: The effects of trade openness and sustainable development goals. *Heliyon*, *10*(9), e30148.ISSN: 24058440 https://doi.org/10.1016/j.heliyon.2024.e30148

Harvey, J. T. (2019). Exchange rates and the balance of payments: Reconciling an inconsistency in Post Keynesian theory. *Journal of Post Keynesian Economics, 42*(3), 390–415.ISNN: 01603477 https://doi.org/10.1080/01603477.2018.1548285

Haryani, P., Maulana, A., & Azam, S. M. F. (2022). The nexus of international trade and inflation on ASEAN-5 countries' economic growth: The mediating role of exchange rates. Advances in Economics, Business and Management Research/Advances in Economics, Business and Management Research. https://doi.org/10.2991/aebmr.k.220204.025

Hawariyuni, W., & Andrasari, M. (2022). Role of investment and macroeconomic variables on unemployment in Indonesia. *Economics Development Analysis Journal, 3*, 321–328. http://journal.unnes.ac.id/sju/index.php/edaj

Hikam, A., Wau, T., Wibowo, M., & Muhdir, I. (2024). Economic Growth in OIC Countries: The Role of Political Stability. *Economics Development Analysis Journal*, *13*(1), 125-139. Retrieved from https://journal.unnes.ac.id/sju/edaj/article/view/78948

Hjazeen, H., Seraj, M., & Ozdeser, H. (2021). The nexus between the economic growth and unemployment in Jordan. Future Business Journal, 7(1), 1–8. https://doi.org/10.1186/s43093-021-00088-3

Huang, L., & Zhao, W. (2022). The impact of green trade and green growth on natural resources. *Resources Policy*, *77*(May), 102749.ISNN: 03014207. https://doi.org/10.1016/j.resourpol.2022.102749

Imleesh, M. M. (2023). The determinants of economic growth in North African countries. Efficient: Indonesian Journal of Development Economics, 6 (2), 220–231. https://doi.org/10.15294/efficient.v6i2.60251

Jehan, Z., & Irshad, I. (2020). Exchange rate misalignment and economic growth in Pakistan: The role of financial development. *Pakistan Development Review*, *59*(1), 81–99.ISSN:00309729.https://doi.org/10.30541/V59I1PP.81-99

Kang, S. J., & Lee, S. (2021). Impacts of environmental policies on global green trade. Sustainability (Switzerland), 13(3), 1–15. https://doi.org/10.3390/su13031517

Khan, N. (2020). Analyzing the Impact of Inflation Targeting Adoption on FDI Inflows. Academy of Strategic Management Journal, 19(5), 1-11.

Kien, Pham Van & Ou, Jenho Peter & Sadiq, Dr Muhammad & Nguyen, Tran Thai Ha & Huy, Pham Quang & Tran, Trung Kien, 2023. "What role financial inclusion, green trade and natural resources utilization play in ASEAN economic growth: Evidence from post COVID era," *Resources Policy*, *Elsevier*, *vol. 85*(PB).ISNN:03014207. https://doi.org/10.1016/j.resourpol.2023.103884

Korkmaz, S. (2021). Unemployment and Economic Unemployment and Economic Growth in the Growth: The Casuality Relationship between OECD Countries. *Dynamic Optics in Economics: Quantitative, Experimental and Econometric Analyses*, *January*, 1–270.ISBN:978-363184254-6,978-363183191-5 https://doi.org/10.3726/b17871

Le, H.T.P., Pham, H., Do, N.T.T. et al. Foreign direct investment, total factor productivity, and economic growth: evidence in middle-income countries. Humanit Soc Sci Commun 11, 1388 (2024).ISSN:26629992 https://doi.org/10.1057/s41599-024-03462-y

Li, J., Dong, K., Dong, X., & Shahbaz, M. (2022). How green trade influences pollution emissions in China: A provincial perspective. *Energy Economics*, *115*(September), 106330.ISNN:01409883. https://doi.org/10.1016/j.eneco.2022.106330

Louail, B., & Riache, S. (2019). Asymmetry relationship between economic growth and unemployment rates in the Saudi economy: Application of Okun's law during the period 1991–2017. *International Journal of Advanced and Applied Sciences*, *6*(10), 83–88. https://doi.org/10.21833/ijaas.2019.10.013

Lubbock, K. jannika B., Merin, marvin A., & Gonzalez, A. (2022). Journal of Economics, Finance and Accounting Studies The Impact of Inflation, Unemployment, and Population Growth on Philippine Economic Growth. Journal of Economics, Finance and Accounting Studies, 4(2), 55–64. https://doi.org/10.32996/jefas

M. Rafli Hidayatullaha, W. H. R. (2024). Determinants of Unemployment in 5 ASEAN Countries with Population as Moderation. JJurnal Ilmu Ekonomi (JIE), 08(2963–9239), 88–104.

Mahajan, N., Kaur, N., Singh, V., Gupta, A., & Garg, N. (2023). Green Trade: Transition Towards a Sustainable Economy. IOP Conference Series: Earth and Environmental Science, 1279(1). https://doi.org/10.1088/1755-1315/1279/1/012023

Nguyen, H. T., Le, A. N. N., Le, H. V., & Duong, K. D. (2024). Foreign direct investment and employments in Asia Pacific nations: The moderating role of labor quality. Heliyon, 10(9), e30133. https://doi.org/10.1016/j.heliyon.2024.e30133

Phi-Hung Nguyen, Jung-Fa Tsai, I. E. K. and M.-H. L. (2021). Unemployment Rates Forecasting with Grey-Based Models in the Post-COVID-19 Period: A Case Study from Vietnam. *Sustainability Article*, *13*(7879), 1–27 . https://doi.org/10.3390/su13147879

Rahmawati, K. C., & Kurniasari, W. (2024). Implementation of Okun ' s Law : The Effect of Economic Growth on The Unemployment Rate in Asian Countries. 40–52.

Ridhwan, M. M., Ramadhan, K., Ismail, A., & Suryahadi, A. How Financial Digitalization Affects Business Performance and Business Innovation in Ultra-Micro, Micro, and Small Enterprises: Evidence from Indonesia. *Micro, and Small Enterprises: Evidence from Indonesia*.

Shadrina Song, Y., Paramati, S. R., Ummalla, M., Zakari, A., & Kummitha, H. R. (2021). The effect of remittances and FDI inflows on income distribution in developing economies. *Economic Analysis and Policy*, *72*, 255–267.ISSN: 03135926 https://doi.org/10.1016/j.eap.2021.08.011

Sviatko, M. *Why Inflation Is Poised to Remain ASEAN's Main Economic Concern in 2023*.

Tariq, G., Sun, H., Ali, I., Pasha, A. A., Khan, M. S., Rahman, M. M., Mohamed, A., & Shah, Q. (2022). Influence of green technology, green energy consumption, energy efficiency, trade, economic development and FDI on climate change in South Asia. Scientific Reports, 12(1), 1–13. https://doi.org/10.1038/s41598-022-20432-z

Uddin, I., & Rahman, K. U. (2023). Impact of corruption, unemployment and inflation on economic growth evidence from developing countries. *Quality and Quantity*, *57*(3), 2759–2779. ISSN:00335177.https://doi.org/10.1007/s11135-022-01481-y

Zhou, C. (2020). The effects of outward FDI and export on firm productivity in emerging markets: Evidence from matching approach. *Economics Letters*, 195, 109462.ISSN:01651765. https://doi.org/10.1016/j.econlet.2020.109462