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The Impact of Macroeconomic and Digital Economy Factors on the GDP of the ASEAN-5

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A B S T R A C T

The integration of the digital economy and macroeconomic factors is increasingly influencing economic growth in the ASEAN-5 region, particularly in Indonesia, Malaysia, Singapore, the Philippines, and Thailand. This phenomenon is worth studying given the region's dependence on foreign investment, exchange rate stability, and internet adoption. This study aims to analyze the effects of FDI, exchange rates, inflation, and the number of internet users on GDP for the period 2014–2024. A quantitative approach using panel data regression with the Common Effect Model (CEM) was employed, utilizing Stata 14. The results indicate that FDI, exchange rates, and internet users have a positive and significant impact on GDP, while inflation has a negative but insignificant impact. These findings suggest that foreign investment, exchange rate stability, and digital economy adoption play a crucial role in driving regional economic growth, whereas inflationary pressures still need to be controlled.

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INTRODUCTION

Economic growth, reflected in increasing GDP, is a key indicator of development performance and social welfare. The ASEAN region plays a strategic role as a driver of global economic growth, with a high degree of integration into the world economy. As an economic integration bloc, ASEAN encourages growth through free trade and foreign direct investment (FDI) flows, which positively contribute to the economies of its member countries (Husain Saefurrahman & Preticia, 2023). Various studies confirm that regional economic integration, particularly through the ASEAN Economic Community, strengthens trade connectivity and attracts FDI, making ASEAN one of the most dynamic economic growth regions in the world. ASEAN's economic integration through AFTA and the AEC has driven growth by increasing FDI, production expansion, and technology transfer (Ishikawa, 2021; Nguyen, 2025). Macroeconomic stability, such as exchange rates and inflation, as well as the development of the digital economy, are also important factors influencing the region's economic performance.

Based on data from the World Bank, five ASEAN countries—Indonesia, Thailand, the Philippines, Malaysia, and Singapore—were selected as research objects because they account for more than 85% of ASEAN's total GDP and represent the diverse economic characteristics and stages of digital development in the region. Within the Keynesian framework, GDP is determined by consumption, investment, government spending, and net exports. FDI plays a strategic role not only as an influx of capital but also as a vehicle for technology and knowledge transfer that accelerates economic growth. FDI boosts national income by increasing productivity and human resource quality, although its impact on income distribution depends on the quality of institutions (Joyce, 2024). A study in Nepal proves the positive cointegration of FDI towards economic growth. (Dhungel & Lamichhane, 2023), while research in Indonesia shows that manufacturing FDI encourages growth, agricultural FDI tends to hinder it (Fazaalloh, 2024). During the 2014-2024 period, Singapore was the most dominant FDI in ASEAN, reaching an average of 25% of the country's GDP, while other ASEAN-5 countries recorded more moderate FDI averages of below 3.5% of their respective GDPs. Investment stability in these countries is influenced by the dynamics of the exchange rate against the US dollar.

Exchange rates affect the competitiveness of domestic products, import costs, and foreign investment flows, so their movements have broad implications for real sector performance and economic growth rates. The Washington Consensus warns that overvaluation can undermine export competitiveness and weaken domestic industry, while export-led growth theory suggests that undervaluation can boost exports, attract investment, and accelerate industrialization and economic growth in developing countries (Sein & Sah, 2025). A study in the European Union (1995–2016) found that overvaluation of the real exchange rate depressed economic growth by reducing exports and private investment, while undervaluation actually boosted growth, although the positive effect diminished as the degree of undervaluation increased, and this relationship was strongest in countries with fixed exchange rate regimes (Krekó

& Oblath, 2020). Exchange rate stability has also proven important in supporting trade and investment that drive regional economic growth (Chikwira & Jahed, 2024).

Internal macroeconomic factors, such as inflation, as measured by the Consumer Price Index (CPI), influence GDP in a complex manner. Moderate inflation can stimulate consumption and investment, but high inflation actually depresses real income, purchasing power, income distribution, and domestic investment due to monetary imbalances. Therefore, inflation control policy is key to growth, given that inflation has been shown to significantly negatively impact economic growth through declining per capita income and private investment, as well as triggering interest rate increases (Mary Obiageli & Ndubuisi Felix, 2024). In the ASEAN-5 context, during the 2014-2024 period, the average country experienced inflation in the range of 1.1% to 3.40%, although some countries experienced deflation or spikes in inflation in certain years. However, on average, this indicates that these countries were able to maintain price stability.

The Solow growth model states that economic growth depends on physical capital, labor, and technological progress. Advances in information technology, particularly through internet adoption, can drive economic growth by facilitating digital economic activity and expanding access to information and communication globally. Therefore, internet adoption is an important indicator in measuring digital economic development. This statement is supported by research conducted in Ghana, West Africa, which found that government support for expanding internet access was able to reverse the economic downturn caused by the COVID-19 pandemic (Aawaar & Abotsi, 2025). During the observation period, Singapore achieved the highest average internet penetration in ASEAN at 89% and Malaysia at 85%, while Thailand, the Philippines, and Indonesia were lower at 46–66%. Research in Southeast Asia has shown that internet use contributes positively to economic growth through business efficiency and accelerated trade transactions (orhamizah Abdul Wahaba, Sabri Nayanb, 2020). The increasing number of internet users contributes to economic growth through entrepreneurial opportunities and non-farm employment (Zhou et al., 2020), and is strengthened by the network effect which increases with the increase in users (Vu, 2019), so that government policies in expanding internet access and digital infrastructure are key to maximizing the positive impact on stability and accelerating economic growth (Aawaar & Abotsi, 2025).

Previous research shows that FDI, exchange rates, and inflation have a close influence on GDP, but in today's digital era, the determinants of economic growth have expanded with the role of the digital economy starting to be recognized (Hordofa, 2023). Integrating macroeconomic and digital factors is necessary for a more comprehensive understanding of GDP growth in the era of globalization and digital transformation. This study aims to fill this gap by providing the latest empirical evidence for the 2014–2024 period on the impact of FDI, exchange rates, inflation, and the digital economy on GDP in the ASEAN-5.

LITERATURE REVIEW

Neoclassical Solow – Swan Theory

The Solow-Swan model (1956) through the production function Y = A·F (K,L) shows that capital (K), labor (L), and technology (A) contribute to long-term growth (Mankiw, nd). Previous studies (Wau et al., 2022) confirms that ASEAN FDI (2000–2020) boosted growth in developing countries through capital accumulation and productivity. However, this model demonstrates that capital accumulation only generates temporary growth until a plateau, leaving the only source of sustainable growth to exogenous technological progress. Therefore, a sustainable increase in real GDP requires technological innovation, improved human resource quality, and institutional improvements, not simply additional capital and labor.

Harrod-Domar Theory

The Harrod-Domar theory states that investment is a key determinant of economic growth. The more conducive the investment climate, the higher the national income achieved. Investment plays a role in increasing productive capacity by increasing the capital stock. However, domestic savings are often insufficient, requiring external funding sources such as exports and FDI to achieve economic growth. This is confirmed by previous studies that found FDI has a significant positive effect on economic growth (FA Putra & Anindyntha, 2024).

Washington Exchange Rate Theory

The Washington Consensus (Williamson, 1989) is a package of economic policy recommendations from the IMF, the World Bank, and the US Treasury Department. This consensus emphasizes the importance of a competitive exchange rate to promote economic growth, namely by avoiding overvaluation that erodes export competitiveness. However, excessive undervaluation is also discouraged because it can lead to distorted resource allocation, inflation, and macroeconomic imbalances. Therefore, the ideal exchange rate is stable and close to its fundamental equilibrium, not the result of artificial intervention (Berg & Miao, 2010). This theory is supported by previous research conducted in the European Union, which proved that an overvalued exchange rate would reduce GDP, while an undervalued exchange rate would increase GDP (Krekó & Oblath, 2020).

Irving Fisher's Theory

The Quantity Theory of Money (M × V = P × Y) states that the money supply (M) is directly proportional to the price level (P), because the velocity of money (V) and real output (Y) are relatively stable. Thus, inflation is essentially caused by excessive growth in M. In ASEAN, Indonesia shows a strong relationship between M and inflation if it is not balanced by Y growth. Malaysia tightly controls M for price stability. Singapore is able to absorb high M without inflation because Y grows rapidly. Thailand experiences inflationary pressures during rapid credit expansion. The Philippines also experiences inflation due to aggressive M growth (Mankiw, 2013; Xuan, 2025). Research outside the ASEAN

region, namely in Nigeria, shows that inflation that is not controlled by appropriate policies will reduce the country's economic growth (Mary Obiageli & Ndubuisi Felix, 2024).

Threshold Theory

Inflation threshold theory (Nasrullah, 2023) states that the relationship between inflation and economic growth is non-linear. Inflation only has a significant negative impact after it exceeds a threshold level, which is around 1–3% for industrialized countries and 7–11% for developing countries. At low to moderate inflation levels, economic growth can still proceed undisturbed. This theory provides a more nuanced analytical framework for understanding the relationship between price stability and economic performance. Research in the BRICS region has shown that high inflation exceeding the threshold creates uncertainty, reduces purchasing power, and increases investment/technology costs (Audi et al., 2025).

Tapscott's Theory

The Digital Economy Theory (Tapscott, 1996) defines it as an economic era driven by digital technology and global networks, with 12 key themes such as knowledge as a primary asset, digitization, virtualization, molecularization, and network integration. The digital economy is not simply the adoption of technology, but rather a fundamental transformation in value creation and collaboration. Studies in Ethiopia also state that technological innovation, transportation, and internet use are emerging as important variables in driving growth, energy consumption, and even CO2 emissions (Hordofa, 2023).

Hypothesis Development

H_1: It is suspected that Foreign Direct Investment/FDI, Exchange Rate, Inflation, and Digital Economy have a significant impact on the Gross Domestic Product of 5 ASEAN countries.

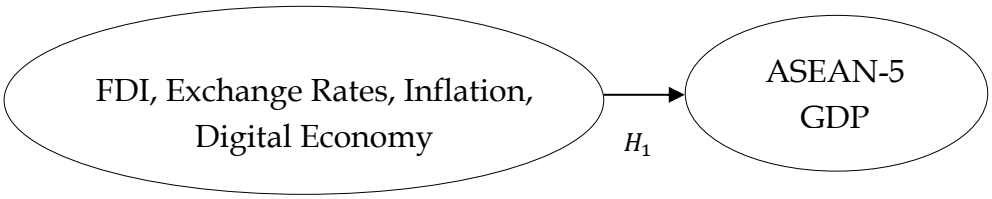


Figure 1. Conceptual Framework

METHODOLOGY

This study uses a quantitative approach with annual secondary data from the World Bank for 2014–2024 on five ASEAN countries (Indonesia, Malaysia, the Philippines, Singapore, and Thailand), totaling 55 observations. The dependent variable is real GDP (constant 2015 prices, million USD). Independent variables include FDI (% GDP), exchange rate (local currency per USD), inflation (% change in CPI), and digital economy (% internet users). Data were collected through secondary source documentation and analyzed using the Common Effect Model (Pooled OLS) with a multiple regression model assuming no

individual or period heterogeneity. The relationship between variables was analyzed using the multiple regression model as follows:

$$\ln Y_{it} = \beta_0 + \beta_1 FDI_{it} + ln\beta_2 EX_{it} + \beta_4 INF_{it} + \beta_5 INT_{it} + \varepsilon_{it} \text{ .....(1)}$$

Information :

GDP	: Gross Domestic Product (Y)
FDI	: Foreign Direct Investment (X1)
EX	: Currency Exchange Rate (X2)
INF	: Inflation (X3)
INT	: Digital economy (X4)
β_0	: Constant
$\beta_1, \beta_2, \beta_3, \beta_4$	: 5 ASEAN Countries
i	: Period 2014-2024
ε	: Term Error
ln	: Natural Logarithm

RESEARCH RESULT

Normality Test

The normality test aims to determine whether the residuals generated by a regression model are normally distributed. A model is said to meet the normality assumption if its residuals follow a normal distribution pattern.

Table 1. Normality Test

Variables	Obs	W	V	Z	Prob>z
healthy	55	0.97266	1,387	0.701	0.24166

Source: Stata (Data processed)

The residual normality test in this study was evaluated using the Shapiro-Wilk test. The prob value > z of 0.24166, which exceeds the significance limit of 0.05, indicates that the residual distribution is within a range consistent with the characteristics of a normal distribution. Thus, the assumption of normality is considered met in this analysis.

Multicollinearity Test

Based on the Gujarati book, the multicollinearity test aims to detect the presence of high correlation between variables Independent. This detection can be done by looking at the VIF value; if it exceeds 10 or the Tolerance value is less than 0.1, then it indicates serious multicollinearity that warrants attention. Although multicollinearity does not violate the Gauss-Markov assumption and the estimator remains BLUE (Best Linear Unbiased Estimator), its presence can still interfere with the reliability of the interpretation of the regression results.

Table 2. Multicollinearity Test

	VIF	1/VIF
int	3.54	0.282721
ln ex	2.50	0.400238
info	2.48	0.403881
fdi	2.24	0.446601
Mean VIF	2.69	

Source: Stata (Data processed)

The results in Table 2 above show that the average VIF (Mean VIF) value is 2.69. This value is well below 5, indicating no signs of multicollinearity. Therefore, because the 1/VIF value for the independent variable is below 10, the model passes the multicollinearity test.

Heteroscedasticity Test

The heteroscedasticity test is a test to detect the inequality of the variance of the error term (disturbance) in the regression model, which violates the classical assumption of linear regression where the error variance must be homoscedastic.

Table 3. Heteroscedasticity Test Results

Significance Level	**Prob**
Prob>F	0.1124

Source: Stata (Data processed)

Based on the data analysis results, this study shows that the probability value is 0.1124 > 0.05, which means the results accept H0 and reject H1. Thus, the residual variance in the model is free from heteroscedasticity symptoms.

Model Selection Test

In panel data regression analysis, the Chow Test, Hausman Test, and Lagrange Multiplier Test are required, which are sequential procedures for selecting the best model in panel data regression.

Table 4. Model Selection Test Results

Name of Test	**Test Summary**	**Prob.**
Chow Test	Cross Section-F	0.0000
Hausmann Test	Cross Section	0.7432
LM Test	Cross Section	1,0000

Source: Stata (Data processed)

Based on the results of the panel data model selection test, the Chow Test shows a p-value of 0.000, so H0 is rejected, meaning the Fixed Effect model is more appropriate to use. Furthermore, the Hausman Test provides a p-value of 0.7432, so H0 is accepted, meaning REM is more appropriate than FEM. Then, in the final test, the Lagrange Multiplier test produces a p-value of 1.000, meaning H0 is rejected and the OLS model is the most appropriate model in this study.

Selected Model

From the results of the model selection test in this study, it was found that the best model used was the Common Effect Model.

Table 5. Selected Model Results

Variables	Coefficient	Std. Error	t	p>z
FDI	.0087877	.0015044	5.84	0.000
lnEX	.1680261	.0054784	30.67	0,000
INF	-.0091001	.0059164	-1.54	0.130
INT	.0065186	.000691	9.43	0.000
Constant	25.73243	.0616331	417.51	0.000
R-square	0.9604			
Prob>F	0.0000			

Based on table 5, the results of the regression model equation between the dependent variable (GDP) and independent variables (FDI, exchange rate, inflation and digital economy) are as follows:

$$\ln\hat{Y}_{it} = 25.73243 + 0.0087877\, FDI_{it} + 0.1680261 \ln EX_{it} - 0.0091001\, INF_{it} + 0.0065186\, INT_{it} + \varepsilon_{it} \quad \text{.....(2)}$$

It can be presented as follows:

The constant value is 25.73243, meaning that if the variables FDI, exchange rate, inflation, and digital economy are held constant, Gross Domestic Product (GDP) will increase by 25.73243%. FDI Coefficient Value 0.0087877, meaning that if the FDI variable increases by 1%, it will increase GDP by 0.0087877 or 0.88% assuming other variables remain constant. Exchange Rate Coefficient Value 0.1680261, This means that if the exchange rate variable increases by 1%, it will increase GDP by 0.1680261 or 16.80% assuming other variables remain constant. The Inflation Coefficient value is -0.0091001, meaning that if the Inflation variable increases by 1%, it will decrease GDP by -0.0091001 or -0.91%, assuming other variables remain constant. Digital Economy Coefficient Value 0.0065186, meaning that if the Digital Economy variable increases by 1%, it will increase GDP by 0.0065186 or 0.65%,assuming other variables remain constant.

T-Test Results

This study uses a t-test to measure the extent to which each independent variable significantly influences the dependent variable. The partial t-test aims to determine whether each independent variable significantly influences the dependent variable at a certain level of confidence. In this study, the significance level used is 0.05. Based on the results of the analysis, it was obtained that the p>z value for the three independent variables, namely FDI, Exchange Rates, and Digital Economy was 0.000, which is below the 0.05 significance level, while the Inflation variable obtained a p>z value of 0.130, which means it is above the 0.05 significance level. Thus, it can be concluded that the independent variables that have a significant effect on the dependent variable are FDI, Exchange Rates, and Digital Economy, while the Inflation variable does not have a significant effect.

F Test Results

The F-test is used to examine the simultaneous influence of all independent variables on the dependent variable. If the significance value is <0.05, then the independent variables simultaneously have a significant influence. In this study, the p-value = 0.0000 (<0.05), thus concluding that all independent variables simultaneously have a significant influence on the dependent variable.

Coefficient of Determination

The coefficient of determination (R^2) measures how much the independent variables are able to explain the dependent variable, with a value between 0 and 1. The closer to 1, the better the model's predictive ability. In this study, the R^2 value = 0.9604 or (96.04%), meaning that Foreign Direct Investment, Exchange Rates, Inflation, and the Digital Economy simultaneously affect Gross Domestic Product by 96.04%, while the remaining 3.96% is influenced by other factors

outside the model. This indicates a very strong relationship between the independent and dependent variables.

DISCUSSION

The Impact of FDI on GDP

Based on the estimation results in this study, it was found that Foreign Direct Investment (FDI) has a positive and significant effect on Gross Domestic Product in five ASEAN countries with a coefficient value of 0.0088 units, meaning that every 1% increase in FDI will drive an increase in GDP by 0.88%. This research result is in accordance with the Harrod-Domar theory which emphasizes that investment is the main determinant of economic growth through capital accumulation. FDI acts as a source of external capital that directly drives economic expansion, as also confirmed by (Wau et al., 2022) which states that ASEAN FDI in the 2000-2020 period contributed positively to economic growth in developing countries through increased capital accumulation and productivity. The analytical output of this study also empirically confirms the predictions of the Solow-Swan neoclassical growth model, which positions FDI not solely as a source of capital financing but also as an instrument of technology transfer and efficiency improvement, which are the foundation of sustainable economic growth (Su & Liu, 2016). Studies in developing countries like Indonesia also provide evidence that the success of technology transfer through FDI depends heavily on the adoption capacity of domestic firms and the quality of human resources. In the manufacturing sector, local firms are able to effectively absorb foreign knowledge. Conversely, in the agricultural sector, the low quality of human resources—reflected by only 2% of the workforce having a tertiary education—leads to suboptimal technology transfer, resulting in Indonesian FDI negatively impacting GDP growth (Fazaalloh, 2024). On the other hand, from a Keynesian perspective, FDI, as an investment component, plays a role in stimulating aggregate demand. This in turn accelerates gross domestic product growth through the multiplier effect within the economic system and through the productivity of production factors (Otieno & Aduda, 2022). Thus, it is necessary to continue strengthening economic cooperation, both at the intra-ASEAN level and with extra-ASEAN partners, while still considering the context and absorption capacity of each.

The Effect of Exchange Rates on GDP

Based on the estimation results in this study, it was found that the exchange rate has a positive and significant effect on Gross Domestic Product in five ASEAN countries with a coefficient value of 0.1680 units, which means that every 1% increase in FDI will drive an increase in GDP of 16.80%. Economically, an increase in the exchange rate reflects a depreciation of the local currency, which actually encourages growth. The results of this discovery are supported by the theory. The Washington Consensus, with its concept of a stable and competitive exchange rate, is one of the main pillars of its recommended policies. The Washington Consensus explicitly warns that overvaluation can undermine export competitiveness, encourage excessive imports, and weaken the domestic industrial sector. Conversely, a competitive exchange rate, often reflected in

moderate undervaluation, is seen as capable of encouraging the expansion of the tradable sector, increasing international competitiveness, and accelerating economic growth. Research conducted (Krekó & Oblath, 2020) in European Union countries found that The exchange rate has a negative effect if it is overvalued or too strong, and a positive effect if it is undervalued or weak. However, the positive effect of undervaluation is limited and is weakened if it is excessive. The exchange rate plays a role in determining the prices of domestic goods in the global market and the cost of importing raw materials and capital goods. When the domestic exchange rate weakens, the prices of exports become more competitive in the international market, potentially increasing demand and encouraging foreign investment. On the other hand, a weakening exchange rate can also increase import costs and create inflationary pressures. However, if imports do not significantly exceed exports, the impact on economic growth is relatively small. Increased import costs can even reduce dependence on foreign goods, which in turn supports domestic economic development. This is supported by research conducted in Nigeria, where the dynamic exchange rate, as proxy for the official exchange rate, has a significant positive long-term effect on Nigeria's real GDP but an insignificant positive effect in the short-term (Nyeche, 2024). In the ASEAN context, the findings in this study are in line with the results of research (Imleesh et al., 2025) which concluded that exchange rate stability has a positive effect on economic growth in 10 ASEAN countries. Therefore, each country needs to create exchange rate policies appropriate to its respective economic conditions so that exchange rates can have a positive effect on GDP.

The Effect of Inflation on GDP

Based on the estimation results in this study, it was found that inflation has a negative and insignificant effect on Gross Domestic Product in five ASEAN countries with a coefficient value of -0.0091, which means that every 1% increase in FDI will drive a decrease in GDP by -0.91%. The estimation results in this discovery are in accordance with the Inflation Threshold Theory (Threshold Effect Theory) developed by economists Sarel (1996) and Khan and Senhadji (2001) (Nasrullah, 2023). This theory explains that inflation only has a significant negative impact on economic growth after it passes a certain threshold. Inflation may not appear to affect GDP when the inflation rate is in the low-moderate range and relatively stable, so that variations in output growth are largely explained by other factors such as trade, investment, physical capital, and monetary-fiscal policy. This research aligns with research (RCY Putra & Soebagiyo, 2023). This indicates that inflation in ASEAN member countries did not significantly impact growth during the 2001-2022 study period. Other research in the ASEAN region also demonstrates that uncontrolled inflation can lead to slow economic growth (Imleesh et al., 2025).

The regression coefficients in this study indicate the negative pressure of inflation on the economy, occurring through two main channels: first, reducing people's real income; second, inhibiting investment. This is caused by an increase in the money supply that is not matched by real output growth, thus only driving

price escalation. This is consistent with the Quantity Theory of Money proposed by Irving Fisher. High inflation, in turn, erodes people's purchasing power by reducing real income and creates uncertainty for businesses, which leads to delays in investment expansion. Outside the ASEAN region, research in Nigeria also supports these findings. Rising inflation, coupled with a weakening exchange rate and high interest rates, leads to a decline in per capita income and private investment. Thus, inflation not only erodes purchasing power but also creates uncertainty that weakens the investment climate (Mary Obiageli & Ndubuisi Felix, 2024). Thus, every country needs to pay attention to every policy taken to avoid excessively high inflation.

The Impact of the Digital Economy on GDP

Based on the estimation results in this study, it was found that the Digital Economy has a positive and significant effect on Gross Domestic Product in five ASEAN countries with a coefficient value of 0.0065 units, which means that every 1% increase in the Digital Economy will drive an increase in GDP by 0.65%. The results of this study confirm several economic theories such as Solow-Swan which states that in addition to capital and labor, technological progress plays a role as a multiplier effect on economic growth through total factor productivity (TFP). This finding is also strengthened by Don Tapscott's digital economy theory, where the increase in GDP is explained through networked intelligence and business webs that reduce transaction costs, accelerate innovation, and enable global production at low marginal costs, as well as digital capital which also boosts total factor productivity (FA Putra & Anindyntha, 2024). From a Keynesian perspective on an open economy, the digital economy acts as a new engine in the economy, contributing to GDP in two main ways: by boosting aggregate demand and increasing productivity. First, the digital economy triggers increased consumption and investment through e-commerce, digital services, and ICT infrastructure and startups, which directly impact output growth and job creation (Adya, 2024). Second, the digital economy strengthens the export competitiveness of ICT-based goods and services while simultaneously reducing domestic production costs through the import of digital services. This combination ultimately boosts exports and stimulates GDP growth in the medium term. Empirical evidence from the ASEAN region itself supports this finding. Research in seven Southeast Asian countries from 1997–2013 shows that internet users and trade drive faster economic growth, as internet adoption can expand businesses locally and internationally (orhamizah Abdul Wahaba, Sabri Nayanb, 2020). In ASEAN itself, the growth of internet users is driving other sectors such as education, health, and transportation to undergo digital transformation, so that the effects spread throughout the economy (FA Putra & Anindyntha, 2024). Research in Indonesia also found that the more people connected to the internet, the greater their contribution to digital economic activities that drive GDP growth (Adya, 2024). Similar findings were also found outside the ASEAN region. A study in Ethiopia also stated that technological innovation, transportation, and internet usage are starting to emerge as important variables in driving growth, energy consumption, and even CO2

emissions (Hordofa, 2023). Therefore, every country needs to create policies supporting the digital economy to increase its effectiveness in boosting GDP.

CONCLUSION AND RECOMMENDATION

FDI has been shown to drive GDP growth through foreign capital inflows, technology transfer, and increased production capacity. The exchange rate also has a positive effect by increasing export competitiveness or stabilizing import costs. Conversely, inflation showed a negative but insignificant effect, indicating that price increases were not strong enough to disrupt stable economic growth during the observation period. Meanwhile, the digital economy had a positive and significant impact on GDP, becoming a new driver of growth through increased productivity, market expansion, and economic efficiency.

ASEAN-5 governments need to promote a conducive investment climate through bureaucratic reform, equitable infrastructure, and the development of superior human resources, as well as directing FDI to productive sectors. Exchange rates must be kept competitive by avoiding overvaluation and managing depreciation in a controlled manner to encourage exports. Inflation needs to be stabilized within the 3–5% range by controlling the money supply to prevent it from exceeding critical thresholds that hamper growth. Furthermore, governments must accelerate digital infrastructure, improve digital literacy, create innovation ecosystems, and integrate digitalization across all sectors.

With these measures, the digital economy can become a key engine of sustainable GDP growth. Macroeconomic stability and the effectiveness of ICT policies must be maintained to ensure optimal and equitable positive contributions from FDI, exchange rates, and the digital economy to GDP across all ASEAN-5 member countries.

ADVANCED RESEARCH

For future researchers, it is recommended to expand the scope of the study by adding other variables such as political stability, institutional quality, and trade openness, and extending the research period to capture more comprehensive long-term dynamics. Further research could also compare the effectiveness of exchange rate policies between developed countries (Singapore) and developing countries (Indonesia, the Philippines, Thailand, and Malaysia) in more depth, and use other methodological approaches such as panel ARDL or non-linear analysis to test non-linear relationships between variables.

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