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Asian Macroeconomic Dynamics: The Role of Exchange Rates on Gross Domestic Product (*GDP) and Exports*

Dinamika Makroekonomi Asia: Peran Kurs Terhadap Gross Domestic Product (GDP) dan Ekspor

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Abstract

This study examines the simultaneous relationship between GDP and exports in Asian countries and investigates the roles of FDI, inflation, CO_2 emissions, and exchange rates within the economic system. This topic is important because GDP and exports are key indicators of development that interact closely in an increasingly integrated global economy. The study employs panel data from selected Asian countries and applies the 3SLS method to address endogeneity and simultaneity problems. The results indicate that exports have a positive and significant effect on GDP, while GDP also positively influences exports. FDI, inflation, and CO_2 emissions positively affect GDP, whereas inflation and exchange rates positively influence exports. These findings confirm the existence of a reciprocal relationship between GDP and exports, supported by macroeconomic stability, investment expansion, and international trade competitiveness, providing important implications.

Studi ini meneliti hubungan simultan antara PDB dan ekspor di negara-negara Asia dan menyelidiki peran FDI, inflasi, emisi CO_2, dan nilai tukar dalam sistem ekonomi. Topik ini penting karena PDB dan ekspor merupakan indikator utama pembangunan yang berinteraksi erat dalam ekonomi global yang semakin terintegrasi. Studi ini menggunakan data panel dari negara-negara Asia terpilih dan menerapkan metode 3SLS untuk mengatasi masalah endogenitas dan simultanitas. Hasil menunjukkan bahwa ekspor memiliki pengaruh positif dan signifikan terhadap PDB, sementara PDB juga berpengaruh positif terhadap ekspor. FDI, inflasi, dan emisi CO_2 berpengaruh positif terhadap PDB, sedangkan inflasi dan nilai tukar berpengaruh positif terhadap ekspor. Temuan ini menegaskan adanya hubungan timbal balik antara PDB dan ekspor, yang didukung oleh stabilitas makroekonomi, ekspansi investasi, dan daya saing perdagangan internasional.

INTRODUCTION

Asia has emerged as one of the world's most dynamic economic regions, making substantial contributions to global trade, foreign investment, and manufacturing activities. Over the past decades, economies such as China, Japan, India, Indonesia, and Malaysia have become major drivers of global economic growth through expanding exports, rising domestic consumption, and increasing inflows of Foreign Direct Investment (FDI). However, the post-COVID-19 period has been characterized by significant macroeconomic challenges, including geopolitical tensions, global supply chain disruptions, inflationary pressures, exchange rate volatility, and heightened economic uncertainty, all of which have affected economic stability across the region (IMF, 2023).

These global economic disruptions have increased the vulnerability of many Asian economies, particularly developing countries that remain highly dependent on international trade and foreign capital inflows. Financial market volatility, currency depreciation, and fluctuations in international investment flows have intensified macroeconomic instability, thereby affecting both domestic and external economic performance. In this context, exchange rate dynamics have become a strategic determinant of economic resilience because they directly influence export competitiveness, import costs, foreign investment decisions, and overall economic growth.

Exchange rates constitute one of the most important macroeconomic indicators in open economies. Currency depreciation may enhance export competitiveness by reducing the relative price of domestic goods in international markets, thereby stimulating external demand. Conversely, exchange rate instability can increase imported inflation, discourage investment, and undermine macroeconomic stability (Krugman *et al*., 2018; Syarifuddin, 2022). Consequently, maintaining exchange rate stability has become a critical policy challenge for Asian economies amid persistent global uncertainty.

The economic environment in Asia during 2021–2025 illustrates these challenges. China experienced a decline in GDP growth from 8.45% to 4.85%, accompanied by weaker export performance and depreciation pressures on the yuan due to slowing global demand. Indonesia faced a depreciation of the rupiah from IDR 14,308 to IDR 15,600 per US dollar, which improved export price competitiveness but simultaneously increased the cost of imported intermediate and capital goods. Pakistan encountered even more severe economic pressures, including inflation reaching 29.18%, a substantial depreciation of its currency from 152.27 to 255.28 per US dollar, GDP growth slowing to 0.29%, and weakening export performance. These developments highlight the critical role of exchange rate stability, inflation control, and export competitiveness in sustaining economic growth across Asia (W. Bank, 2025).

Persistent exchange rate instability has generated broader macroeconomic consequences. Rising import costs for energy, food, and industrial inputs have intensified domestic inflationary pressures, weakened household purchasing power, and constrained economic recovery in several Asian economies (World Bank, 2024). At the same time, slowing global demand and disruptions in international supply chains have reduced export performance, particularly in manufacturing and commodity-based sectors, thereby limiting foreign exchange earnings (IMF, 2023). Furthermore, geopolitical uncertainty, trade tensions, and tighter global monetary conditions have increased investment risks and contributed to fluctuations in FDI inflows, restricting industrial expansion and employment creation in many developing economies (UNCTAD, 2023). Furthermore, exchange rate depreciation and persistent inflationary pressures have increased the external debt burden across many Asian economies by raising the cost of servicing foreign-currency-denominated debt, particularly in developing countries that rely heavily on external financing (A. D. Bank, 2024). These challenges are further exacerbated by the dependence of several Asian countries on imported food, energy, and industrial inputs, which heightens their vulnerability to external shocks and global market volatility. If sustained over the long term, such conditions may undermine financial sector stability, weaken investor confidence, reduce economic productivity, and hinder the achievement of inclusive and sustainable economic growth across the region (OECD, 2023).

Existing studies have demonstrated the importance of exchange rates, inflation, and FDI in shaping export performance and economic growth. Sumiyati (2020) found that exchange rates, inflation, and FDI significantly influence manufacturing exports in developing economies. Similarly, Rudatin & Dhiafajri (2025) reported that FDI, inflation, imports, and exchange rates are important determinants of export performance in ASEAN countries. From a theoretical perspective, exchange

rates, economic growth, exports, and FDI are interconnected through complex and mutually reinforcing relationships. Economic growth can stimulate exports and attract foreign investment, while exports and FDI can enhance growth through productivity improvements, technology transfer, and job creation. Azizah & Ma'ruf (2026) further demonstrated the asymmetric relationships among GDP, exports, exchange rates, and FDI in Indonesia, suggesting that domestic economic conditions significantly influence external sector performance.

Despite the growing literature, several research gaps remain. Most previous studies have examined these relationships in isolation, focused on individual countries, or overlooked the substantial economic heterogeneity across Asian economies. Moreover, empirical evidence covering the post-pandemic period remains limited, despite the unprecedented economic volatility observed between 2021 and 2025. Methodologically, many existing studies rely on conventional estimation techniques that may not adequately address cross-country heterogeneity and dynamic interactions among macroeconomic variables.

This study contributes to the literature by providing an empirical analysis of the relationships among economic growth, exports, exchange rates, and FDI across Asian countries during the post-pandemic period. By employing a panel-data simultaneous equation framework, the study offers a more comprehensive understanding of the interdependence among these variables. The findings are expected to provide valuable insights for policymakers in designing strategies to strengthen macroeconomic stability, enhance export competitiveness, attract foreign investment, and promote sustainable economic growth throughout Asia.

Economic growth, commonly proxied by Gross Domestic Product (GDP), represents a fundamental indicator of a country's economic performance and development. Classical and endogenous growth theories suggest that economic growth is driven by capital accumulation, technological progress, international trade, investment, and human capital development (Mankiw, 2021). In developing economies, Foreign Direct Investment (FDI) plays a crucial role in accelerating economic growth through capital inflows, technology transfer, managerial knowledge diffusion, and productivity enhancement (Abbes *et al*., 2015). Within an open-economy framework, exports constitute a key engine of economic growth. The export-led growth hypothesis argues that expanding exports stimulates aggregate demand, increases production capacity, generates employment opportunities, and enhances productivity through economies of scale and international market integration (Krugman et al., 2018). Empirical evidence supports this proposition. Kalaitzi, A. S., & Chamberlain (2020) found that exports positively contribute to economic growth in developing countries by strengthening industrial competitiveness and productive efficiency. Similarly, Azizah, L., & Ma'ruf (2024) reported a significant long-run relationship between exports and economic growth in Indonesia.

In addition to exports, FDI serves as an important catalyst for economic expansion. FDI contributes to economic growth by increasing productive capacity, facilitating technological upgrading, generating employment, and improving infrastructure development (Todaro & Smith, 2020). Evidence from developing Asian economies indicates that FDI significantly enhances economic performance through efficiency gains and industrial competitiveness improvements (Nguyen, T. H., Tran, P. T., & Le, 2023) Consistent findings have also been documented in Indonesia, where FDI positively affects economic growth (Dari & Astuti, 2025).

Environmental factors have increasingly become an important consideration in economic development. According to the Environmental Kuznets Curve (EKC) hypothesis, economic growth in the early stages of development is often associated with rising carbon dioxide (CO_2) emissions due to industrialization and increasing energy consumption (Darwin et al., 2022). Zhang et al., (2023) found that CO_2 emissions positively correlate with economic growth in the short run, reflecting higher industrial activity, although excessive emissions may undermine sustainable development in the long term. Similar evidence has been reported by Pratama, R., & Firmansyah (2022) for the Indonesian economy.

Inflation also plays a critical role in determining economic performance. Keynesian theory suggests that moderate inflation may stimulate economic activity by encouraging production and investment, whereas excessive inflation reduces purchasing power, increases production costs, and generates macroeconomic instability (Mankiw, 2021). Empirical studies generally indicate that high inflation adversely affects economic growth in developing countries by increasing uncertainty and

reducing productive investment (Bawa, S., Abdullahi, I., & Ibrahim, 2022; Sari, N., & Nugroho, 2021).

From the perspective of international trade, economic growth itself can stimulate export performance. Higher GDP reflects greater production capacity and improved industrial competitiveness, enabling countries to expand their presence in international markets (Salvatore, 2018). Negara dengan pertumbuhan ekonomi yang tinggi cenderung memiliki kemampuan produksi dan daya saing ekspor yang lebih baik di pasar internasional. Tang, C. F., Tiwari, A. K., & Shahbaz, (2021) demonstrated that economic growth positively influences exports across Asian economies, while Rudatin, A., & Dhiafajri (2024) found similar evidence among ASEAN countries.

Macroeconomic stability is equally important for export performance. Inflation influences export competitiveness through its impact on production costs and relative prices. Higher inflation tends to reduce export competitiveness by increasing domestic production costs and raising export prices in international markets (Krugman, P., & Obstfeld, 2018). Empirical studies have documented a negative relationship between inflation and exports due to declining trade competitiveness (Bussière, M., Gaulier, G., & Steingress, 2021; Sumiyati, 2020). Exchange rate movements represent another crucial determinant of export performance. Currency depreciation generally improves export competitiveness by lowering the relative price of domestic goods in foreign markets. However, excessive exchange rate volatility may increase uncertainty and discourage international trade activities (Asteriou, D., Masatci, K., & Pilbeam, (2021). Empirical evidence suggests that exchange rate depreciation positively affects exports, particularly in developing economies, by strengthening international price competitiveness (Bahmani-Oskooee, M., & Gelan, 2020; Rudatin, A., & Dhiafajri, 2024).

Based on the theoretical and empirical literature, economic growth and exports are expected to exhibit a simultaneous and mutually reinforcing relationship. Furthermore, FDI, inflation, carbon emissions, and exchange rates are likely to influence the dynamics of economic growth and export performance across Asian economies.

METHODOLOGY

This study employs a quantitative research approach using panel data analysis. The objective of this study is to examine the effects of exports, Foreign Direct Investment (FDI), inflation, and carbon dioxide (CO_2) emissions on Gross Domestic Product (GDP), as well as to investigate the effects of GDP, inflation, and exchange rates on exports in Asian countries. The study utilizes panel data from selected Asian economies, namely China, Indonesia, Malaysia, the Philippines, India, Japan, Pakistan, Bangladesh, Iraq, and Brunei Darussalam, covering the period from 2005 to 2025. The selection of the study area and research period was based on the completeness and availability of data for each country included in the analysis. These countries were selected because they provide complete and consistent data for the period 2005–2025.

The study relies on secondary data obtained from internationally recognized institutions. Data on GDP, exports, inflation, exchange rates, FDI, and CO_2 emissions were collected from the World Bank and the World Development Indicators (WDI) database. Data collection was conducted through documentation and literature review techniques by accessing official publications, academic journals, and international economic reports related to the variables under investigation.

To ensure measurement accuracy and analytical consistency, each variable was operationally defined as follows. First, Gross Domestic Product (GDP) was measured using real GDP at constant 2010 prices (in billion US dollars), representing economic growth and national economic performance while controlling for price fluctuations. Second, exports were measured by the value of exports of goods and services as a percentage of GDP or total annual exports. Third, Foreign Direct Investment (FDI) was represented by net FDI inflows (in billion US dollars), reflecting the volume of foreign direct investment entering a country. Fourth, inflation was measured by the annual percentage change in the Consumer Price Index (CPI). Fifth, the exchange rate (ER) refers to the price of a domestic currency relative to foreign currencies and serves as an indicator of international competitiveness and trade stability; in this study, it was measured using the real exchange rate index. Finally, carbon dioxide (CO_2) emissions were measured by per capita CO_2 emissions or total annual CO_2 emissions, representing the level of industrial activity and energy consumption within an economy.

Simultaneous Equation Model

This study employs a simultaneous equation framework estimated using the Three-Stage Least Squares (3SLS) method with panel data and fixed effects specifications. The 3SLS approach is appropriate because economic growth and exports are hypothesized to have a bidirectional relationship, resulting in potential endogeneity among the endogenous variables. Compared with single-equation estimation methods, 3SLS accounts for both simultaneity and cross-equation error correlations, thereby producing more efficient and consistent parameter estimates. To control for unobserved heterogeneity, the model incorporates both country-fixed effects and time-fixed effects. Country-fixed effects capture time-invariant characteristics specific to each country, such as institutional quality, economic structure, and geographical conditions, whereas time-fixed effects account for common shocks affecting all countries during a particular period, including global economic fluctuations, financial crises, and policy changes. The inclusion of these fixed effects helps reduce omitted-variable bias and improves the reliability of the estimated coefficients (StataCorp, 2021).

The empirical model consists of two structural equations. The first equation explains economic growth as a function of exports, foreign direct investment (FDI), inflation, and carbon dioxide (CO_2) emissions. The second equation explains export performance as a function of economic growth, inflation, and exchange rates. The structural equations are specified as follows:

$$lnGDP_{it} = \alpha_0 + \alpha_1 \widehat{EXP}_{it} + \alpha_2 lnFDI_{it} + \alpha_3 INF_{it} + \alpha_4 lnCO_{2it} + \varepsilon_{1it} \quad \text{.....(1)}$$

$$EXP_{it} = \beta_0 + \beta_1 \widehat{lnGDP}_{it} + \beta_2 INF_{it} + \beta_3 ER_{it} + \varepsilon_{2it} \quad \text{.....(2)}$$

Where, GDP denotes Gross Domestic Produc, EXP represents exports, INF refers to inflation, CO_2 denotes carbon dioxide emissions, and ER represents the exchange rate. The subscripts i = 1, 2,…, N and t = 1,2,…, T denote the cross-sectional units (10 Asian countries) and the time periods of observation, respectively. The parameters α_0 to α_4 and β_0 to β_3 are unknown coefficients to be estimated, while ε represents the stochastic error term.

Uji Validitas Instrumen

The initial stage of the analysis involved a series of diagnostic tests to ensure that the instruments satisfied the assumptions of relevance and exogeneity prior to model estimation. Specifically, the Hansen/Sargan test was employed to assess instrument validity, while the First Stage F-statistic and Cragg Donald Wald F-statistic were used to evaluate instrument strength. In addition, the Durbin Wu Hausman test was conducted to detect the presence of endogeneity within the model. Instruments were considered valid when the Hansen/Sargan test produced a p-value greater than 0.05, indicating that the instruments were uncorrelated with the error term. Instrument relevance and strength were confirmed when the F-statistic exceeded the conventional threshold value of 10 (Hansen, 1982; Sargan, 1958; Staiger & Yogo, 2005; StataCorp, 2021; Donald & Cragg, 1993). After satisfying these requirements, parameter significance was assessed using the t-test for individual coefficient significance, the F-test for joint significance, and the coefficient of determination (R^2) to evaluate the explanatory power of the model.

RESULT AND DISCUSSION

Instrument Validity Test Results

The initial stage of the analysis involved testing instrument validity and strength as prerequisites for estimating the simultaneous equation model using the Three Stage Least Squares (3SLS) method. The Hansen J-Test results indicate that the instruments employed are valid, as all p-values exceed 0.05, confirming that the instruments are not correlated with the error term. Furthermore, the First-Stage F-Statistic values are 12.1253 for the economic growth equation (LnGDP) and 15.8585 for the export equation (EXP), both exceeding the threshold value of 10, suggesting that the instruments are sufficiently relevant and free from weak instrument problems.

The Durbin Wu Hausman test yields p-values of 0.0000 for all equations, indicating the presence of endogeneity and confirming the simultaneous relationship between economic growth and exports. These findings are further supported by the Cragg Donald Wald F-Statistic values, which exceed the 10% critical value of 11.59, demonstrating that the selected instruments are adequately

strong. Therefore, the model satisfies the necessary conditions for estimation using the 3SLS approach. The estimation results of the simultaneous equation model are presented in Table 1.

Table 1. Simultaneous Equation Estimation Results.

Variable	Gross Domestik Product (LnGDP)	Exports (EXP)
Gross Domestic Product (LnGDP)		0.075*
		(-0.573)
Ekxports (EXP)	0.719*	
	(0.093)	
Foreign Direct Investment (LnFDI)	0.102***	
	(0.063)	
Inflation (INF)	0.011**	0.009**
	(0.017)	(0.004)
CO_2 Emissions ($LnCO_2$)	0.139**	
	(0.067)	
Exchange Rate (ER)		0.014***
		(0.039)

Source: Authors' compilation and estimation results (2026).

Note: *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively. Standard errors are reported in parentheses.

Simultaneous Relationship between Gross Domestic Product and Exports in Asia

Based on the simultaneous equation estimation results presented in Table 1, exports (EXP) exert a positive and statistically significant effect on economic growth (LnGDP), with a coefficient of 0.719 at the 10% significance level. This result indicates that a 1% increase in exports is associated with a 0.719% increase in economic growth. The finding suggests that exports remain one of the primary drivers of economic growth across Asian economies. An expansion in exports increases demand for domestically produced goods and services, thereby stimulating production, investment, employment creation, and national income. Beyond generating foreign exchange earnings, exports provide access to larger international markets, enhance productivity, and strengthen economic competitiveness. The development experiences of countries such as China, South Korea, Vietnam, Malaysia, and Thailand demonstrate that export-oriented growth strategies can effectively promote sustained economic expansion. This finding is consistent with the study of Kalaitzi, A. S., & Chamberlain (2020), who reported that exports have a positive and significant impact on GDP in developing countries by improving industrial productivity and international competitiveness.

Based on the estimation results of the simultaneous equations presented in Table 1, the economic growth variable (LnGDP) exhibits a positive effect on exports (EXP), with a coefficient of 0.075. This finding indicates that a 1 percent increase in GDP tends to increase exports by 0.075 percent. In the export equation, economic growth (LnGDP) is found to have a positive and statistically significant effect on exports. These results suggest that higher levels of economic activity are associated with greater national capacity to produce goods and services for international markets. Economic growth stimulates the expansion of productive capacity, industrial productivity, and improvements in technological efficiency, enabling output not only to satisfy domestic demand but also to be exported. Furthermore, sustained economic growth is typically accompanied by improvements in infrastructure, human capital quality, and industrial competitiveness, which collectively strengthen export performance in Asian economies within the global market. This finding is consistent with the study by Tang, C. F., Tiwari, A. K., & Shahbaz (2021) which demonstrates that GDP has a positive impact on exports in Asian countries, as increases in domestic output enhance international trade capacity.

The Impact of Foreign Direct Investment (FDI), Inflation, and CO_2 Emissions on Gross Domestic Product (GDP) in Asia

In the first-stage analysis presented in Table 1, Foreign Direct Investment (FDI) is identified as a crucial source of development financing that plays a significant role in enhancing production capacity, facilitating technology transfer, generating employment opportunities, and integrating national economies into global markets. In the context of Asian countries, FDI inflows have become increasingly important in line with rising economic globalization and the relocation of industries from developed to developing economies. The estimation results indicate that FDI (LnFDI) has a positive and statistically significant effect on economic growth (LnGDP), with a coefficient of 0.102 at the 1% significance level (α = 1%). This finding implies that a 1 percent increase in FDI leads to a 0.102 percent increase in economic growth, ceteris paribus. These results suggest that FDI enhances economic activity through the accumulation of physical capital, the development of production infrastructure, improvements in managerial efficiency, and the transfer of technology from multinational corporations to domestic firms. The presence of foreign investors also contributes to higher labor productivity through skill and knowledge transfer, which ultimately leads to an increase in national output. Moreover, FDI is often export-oriented, thereby strengthening international competitiveness and expanding access to global markets for host countries. This study further indicates that FDI plays a catalytic role in upgrading industrial structures and fostering economic modernization in developing Asian economies. These findings are consistent with Nguyen, T. H., Tran, P. T., & Le (2023), who demonstrate that FDI exerts a positive effect on GDP in developing Asian countries by improving production efficiency and enhancing the competitiveness of domestic industries.

The estimation results indicate that inflation (INF) has a positive and statistically significant effect on economic growth (LnGDP), with a coefficient of 0.011 at the 5% significance level (α = 5%). This finding suggests that a 1 percent increase in inflation is associated with a 0.011 percent increase in economic growth, ceteris paribus. These results imply that inflation in Asian countries during the observed period remains at a relatively moderate level, such that it supports economic activity without generating substantial macroeconomic instability. The positive relationship between inflation and economic growth can be explained through an expansion in aggregate demand, which encourages firms to increase production capacity in order to meet rising market demand. This, in turn, leads to higher levels of production activity, employment, investment, and national income. Such a pattern is frequently observed in developing Asian economies undergoing industrialization and economic expansion, where increases in domestic demand are often accompanied by price adjustments that remain within a manageable range. In this context, moderate inflation may serve as an indicator of strengthening economic activity and improving business confidence regarding future economic prospects. This result is consistent with the findings of Bawa, S., Abdullahi, I., & Ibrahim (2022) who report that inflation exerts a negative effect on GDP in developing countries, primarily through increased economic uncertainty and higher production costs.

Carbon dioxide (CO_2) emissions are commonly used as an indicator of a country's economic activity and level of industrialization. Increases in production activities, fossil fuel consumption, and industrial expansion are generally accompanied by higher carbon emissions. The estimation results indicate that CO_2 emissions ($LnCO_2$) have a positive and statistically significant effect on economic growth (LnGDP), with a coefficient of 0.139 at the significance level (α = 5%). This finding suggests that a 1 percent increase in CO_2 emissions is associated with a 0.139 percent increase in economic growth, ceteris paribus. These results imply that economic growth in Asian countries remains heavily dependent on industrial sectors and energy consumption based on fossil fuels. Higher levels of production and industrialization are associated with increased energy use, which in turn contributes to higher carbon emissions. In other words, economic expansion continues to be accompanied by greater environmental pressure, indicating a trade-off between growth and environmental sustainability. This finding is consistent with Darwin et al., (2022) , who argue based on the Environmental Kuznets Curve (EKC) hypothesis that in the early stages of development, economic growth tends to increase CO_2 emissions due to intensive industrial activity and fossil fuel consumption. Many developing Asian economies are still in an industrialization phase characterized by high energy intensity, which explains the persistently positive and statistically significant relationship between CO_2 emissions and economic growth.

The Impact of Inflation and Exchange Rates on Exports in Asia

In the export equation, inflation is found to have a positive and statistically significant effect on exports, with a coefficient of 0.009 at the 5% significance level (α = 5%). This result indicates that a 1 percent increase in inflation is associated with a 0.009 percent increase in exports, ceteris paribus. These findings suggest that inflation in Asian countries remains at a relatively controlled level, reflecting expanding production activity and stronger aggregate demand. Such conditions encourage an increase in domestic production capacity, which in turn enhances a country's ability to meet international market demand. Moreover, as long as inflationary pressures are accompanied by improvements in productivity and production efficiency, export competitiveness can be maintained, thereby supporting continued growth in export performance. This result contrasts with the findings of Bussière, M., Gaulier, G., & Steingress (2021), who report that inflation negatively affects exports by increasing production costs and reducing international trade competitiveness. The difference in findings is likely attributable to variations in country characteristics, study periods, and macroeconomic conditions, which allow inflation in Asian countries to continue stimulating production activities and international trade.

The exchange rate (ER) is found to have a positive and statistically significant effect on exports, with a coefficient of 0.014 at the 1% significance level (α = 1%). This result indicates that a 1 percent increase in the exchange rate is associated with a 0.014 percent increase in exports, ceteris paribus. This finding suggests that exchange rate movements, particularly currency depreciation, enhance the price competitiveness of export goods in international markets. When the domestic currency depreciates, export prices become relatively cheaper for foreign consumers, thereby increasing demand for goods and services produced by Asian economies. This condition provides incentives for domestic firms to expand production capacity, strengthen international marketing networks, and increase export volumes in response to higher global demand. Beyond relative price effects, the exchange rate also plays a crucial role in determining export profitability, as foreign currency revenues yield higher domestic value when converted into local currency. Consequently, exchange rate depreciation can further stimulate export performance through improved financial returns for exporting firms. This result is consistent with Bahmani, M., & Gelan (2020), who find that exchange rate depreciation has a positive impact on exports in the short run in developing countries.

CONCLUSION

The results of this study indicate the existence of a positive simultaneous relationship between economic growth and exports in Asian countries. Exports have a positive effect on economic growth, while economic growth also contributes to improved export performance. In addition, Foreign Direct Investment (FDI), inflation, and CO_2 emissions are found to have positive effects on economic growth, whereas inflation and the exchange rate positively influence exports. These findings suggest that international trade activities, foreign investment, and macroeconomic stability play a crucial role in promoting economic growth and export competitiveness in the Asian region. Therefore, policy measures are required to enhance productivity, strengthen the export sector, and create a conducive investment climate to achieve sustainable economic growth.

SUGGESTION

Based on the findings, governments in Asian countries are encouraged to strengthen policies aimed at improving export competitiveness through the development of production capacity, diversification of export products, and improvement of trade infrastructure. In addition, efforts to attract high-quality Foreign Direct Investment (FDI) should be continuously enhanced, as it has been proven to contribute positively to economic growth. Macroeconomic stability, particularly inflation control and the maintenance of a competitive exchange rate, must also be preserved to support both export performance and sustainable economic growth. Future studies are recommended to incorporate institutional variables, human capital quality, and technological innovation in order to provide a more comprehensive understanding of the determinants influencing the relationship between economic growth and exports in Asian countries.

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