



The Role of Foreign Direct Investment in Economic Development

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Abstract

Foreign Direct Investment (FDI) has become an essential instrument for accelerating economic development by facilitating capital accumulation, technological transfer, productivity improvement, and international economic integration. This study aims to examine the role of FDI in promoting economic development across developing and emerging economies while considering the influence of institutional quality and macroeconomic factors. A quantitative explanatory approach was employed using panel data covering 35 developing and emerging countries during the 2015–2025 period. The analysis evaluated the relationship between FDI and multidimensional economic development through a Fixed Effects panel regression model with relevant macroeconomic control variables. The findings indicate that FDI exerts a positive and significant influence on economic development, while human capital and government effectiveness emerge as the strongest determinants of sustainable economic performance. Trade openness, industrial value added, and gross capital formation also contribute positively, whereas inflation negatively affects economic development. The findings provide theoretical evidence supporting multidimensional development perspectives and offer practical implications for governments seeking to formulate investment policies that simultaneously strengthen institutional capacity, human capital, and macroeconomic stability to achieve sustainable economic development.

INTRODUCTION

Foreign Direct Investment (FDI) has been acknowledged as one of the key sources of economic growth, as it enables capital accumulation, technological innovation, management know-how and linkages with global production networks. FDI is not just a source of external funding, but also a strategy that can be used to improve the productivity, competitiveness of industry, and structural transformation of developing and emerging economies (UNCTAD, 2024; World Bank, 2024; Galbi et al., 2021; Alamsyah et al., 2025; Yudhanto, 2023). The positive outcomes of sustainable foreign investment include enhanced employment opportunities, export

diversification, infrastructure and technological capability, and increased economic resilience in the longer-term (Alfaro et al., 2022; OECD, 2023). However, the role of FDI in economic development is still variable among countries with respect to the quality of institutions, human capital, financial market development and policy environments (Khan et al., 2024; Nguyen & Su, 2023; Ahmad et al., 2022; Wang et al., 2023; Shittu et al., 2022; Mensah et al., 2025).

In the wake of the economic shock triggered by the COVID-19 pandemic and the ensuing geopolitical rift, the strategic significance of FDI is growing in importance. The United Nations Conference on Trade and Development (UNCTAD, 2024) noted that the FDI flows had also been quite volatile during 2020–2023, driven by increased uncertainty of international investment decisions. In contrast to developed economies which have slowly adjusted, a lot of countries in the development world are still grappling with the attraction of stable foreign investment due to macroeconomic instability, regulatory uncertainty and restructuring of global supply chains (World Bank, 2024; IMF, 2024; Puaschunder, 2025; Akhyar & Rahmi, 2024). Concurrently, multinationals have been focusing more on investing in digital industries, renewable energy, advanced manufacturing and resilient supply chains, bringing a need for the host country to be better prepared and competitive in these sectors (OECD, 2023; Baldwin & Freeman, 2022; Al-Banna et al., 2023; Onu et al., 2023). Therefore, the changing nature of the role played by FDI in enhancing economic development has been a significant research theme for policy-oriented researchers and academics (Cicea & Marinescu, 2021; Miliani et al., 2026; Chowdhury et al., 2023).

The overall findings of the empirical studies are mixed, but generally they show that FDI has a positive effect on economic growth, but the extent and nature of that effect vary widely from country to country. In recent years, studies have confirmed that, when backed by good governance and favorable macroeconomic policies, FDI has a positive impact on gross domestic product (GDP), industrial productivity, innovation performance, and job creation (Li et al., 2022; Ahmed et al., 2023; Khan et al., 2024; Çemberci et al., 2022; Sokhanvar, 2025). However, other studies claim that excessive reliance on foreign investment can lead to greater vulnerability to external shocks, a reduction in the number of domestic ventures, and greater regional development disparities, especially in those countries with low institutional capacity (Rodrik, 2022; Zhuang et al., 2023). The conflicting results suggest that the role of FDI should not be limited to a role as a source of financial flows, but would rather be considered as a multidimensional development tool that relies on supporting economic and institutional conditions.

In recent years, the study of the linkages between FDI and economic growth has been extended to the role of institutions, digital transformation, environmental sustainability, and innovation ecosystems in the analysis. The impact of FDI on the development outcomes has been examined extensively to incorporate the moderating effect of governance quality, regulatory quality, financial inclusion, technological readiness, and human capital (Asongu & Odhiambo, 2022; Qamruzzaman et al., 2023). Furthermore, researchers have sought to examine the role of foreign investment in supporting green growth and the transition to renewable energy, which is also essential for inclusive development, instead of only boosting production capacity (Shahbaz et al., 2023; Balsalobre-Lorente et al., 2024). The changes highlight the changing nature of the concept of FDI from macroeconomic to a wider perspective combining economic, institutional, technological and environmental aspects.

Despite substantial scholarly attention, important research gaps remain. First, previous studies predominantly examine the direct effect of FDI on economic growth while paying relatively limited attention to the mechanisms through which

institutional quality and structural economic transformation influence development outcomes (Nguyen & Su, 2023; Khan et al., 2024; Nguyen & Liu, 2023). Second, many empirical investigations rely on cross-sectional evidence or single-country analyses, limiting the generalizability of findings across heterogeneous economic environments (Ahmed et al., 2023). Third, existing literature often focuses on GDP growth as the sole indicator of development, overlooking broader dimensions such as employment generation, technological upgrading, productivity enhancement, and economic resilience (OECD, 2023; UNCTAD, 2024). Finally, the post-pandemic restructuring of global investment patterns has created new dynamics that remain insufficiently explored in recent empirical research.

Contemporary FDI research therefore focuses on the relationship between FDI and institutional capacity, and not only on the effect of FDI inflows. There is increasing evidence that countries that combine these complementary factors – transparent governance, effective public administration, innovation-friendly regulations, and skilled labour forces – reaped significant developmental impact from foreign investment, whereas countries missing these complementary factors did not (World Bank, 2024; Asongu & Odhiambo, 2022). Similarly, digital transformation and industrial upgrading are increasingly becoming important factors determining the attractiveness of investments, along with the strategic orientation of multinational corporations (MNCs) (Baldwin & Freeman, 2022; OECD, 2023). Therefore, in the modern research it is important to use more comprehensive analytical models that reflect the complex relationship between FDI, the quality of institutions, technological capability and economic performance.

The novelty of this study is that it builds an integrated analytical approach explaining the impact of Foreign Direct Investment on economic development, accounting for the direct economic impact and the indirect impact of institutional quality, technological readiness and structural transformation. The present paper goes beyond such previous research, which is mainly based on the economic growth benchmarks, by applying a multidimensional approach to productivity, employment, innovation capability and sustainable economic behaviour. Moreover, the study also accounts for the latest investment trends after the pandemic to offer fresh empirical data for the developing and emerging economies. Hence, the present research is designed to explore the role of FDI in the economic development and the institutional and structural dimensions that can enhance the developmental effect of FDI. The results are expected to be of theoretical interest to enhance the current FDI-development literature, and of practical interest for policy recommendations for governments trying to develop more effective investment and economic development policies based on evidence.

METHODS

Research Design

This study employed a quantitative explanatory research design to examine the role of Foreign Direct Investment (FDI) in promoting economic development across developing and emerging economies. The explanatory approach was selected because it facilitates the investigation of causal relationships between FDI inflows and multiple indicators of economic development while controlling for macroeconomic and institutional factors (Creswell & Creswell, 2023; Saunders et al., 2023). To capture both temporal and cross-country variations, the study adopted a balanced panel data approach, which provides greater statistical efficiency and controls for unobserved heterogeneity compared with purely cross-sectional or time-series analyses (Baltagi, 2021).

The conceptual framework positions Foreign Direct Investment as the primary independent variable influencing economic development. Unlike conventional

studies that rely solely on Gross Domestic Product (GDP) growth, this research adopts a multidimensional perspective by incorporating employment, industrial value added, labor productivity, and gross capital formation as complementary indicators of economic development. Furthermore, several control variables—including trade openness, inflation, government expenditure, human capital, and institutional quality—were included to minimize omitted-variable bias and improve the robustness of the empirical estimates.

Study Area and Data Sources

The study utilized secondary panel data obtained from 35 developing and emerging economies across Asia, Africa, Latin America, and Eastern Europe over the 2015–2025 period. These countries were selected through purposive sampling based on three criteria: (1) consistent reporting of FDI statistics throughout the observation period; (2) availability of complete macroeconomic and governance indicators; and (3) representation of diverse economic structures and institutional environments.

The dataset was compiled from internationally recognized databases to ensure consistency, comparability, and reliability. Data on Foreign Direct Investment inflows, GDP growth, employment, industrial value added, trade openness, gross capital formation, and the Human Capital Index were obtained from the World Development Indicators (World Bank, 2025). Inflation rates and government expenditure data were collected from the International Monetary Fund World Economic Outlook Database (IMF, 2025), while institutional quality indicators, including Government Effectiveness, Regulatory Quality, Rule of Law, and Control of Corruption, were retrieved from the Worldwide Governance Indicators (World Bank, 2025). These databases are internationally recognized for their standardized methodologies and are extensively employed in empirical studies on economic growth and international investment.

Table 1. Operational Definition of Variables

Variable	Measurement Indicator	Source
Foreign Direct Investment	Net FDI Inflows (% of GDP)	World Bank (2025)
Economic Development	GDP Growth Rate (%)	World Bank (2025)
Employment	Employment-to-Population Ratio (%)	World Bank (2025)
Industrial Development	Industry Value Added (% of GDP)	World Bank (2025)
Gross Capital Formation	Gross Capital Formation (% of GDP)	World Bank (2025)
Human Capital	Human Capital Index	World Bank (2025)
Trade Openness	Exports + Imports (% of GDP)	World Bank (2025)
Inflation	Consumer Price Index (Annual %)	IMF (2025)
Institutional Quality	Government Effectiveness Index	WGI (2025)

Table 1 presents the operational definitions and measurement indicators used in the empirical analysis.

Data Collection Procedures

Data collection followed a structured documentation approach. First, relevant indicators were identified from international databases based on the research objectives. Second, annual observations for each selected country were downloaded

and integrated into a unified panel dataset. Third, variable definitions and measurement units were harmonized to ensure comparability across countries and years. Finally, the dataset underwent data cleaning procedures, including consistency checks, treatment of missing values, identification of outliers, and verification against original database documentation. Countries with substantial missing observations were excluded to maintain a balanced panel and improve estimation reliability.

Research Instruments and Variable Measurement

As this study relied exclusively on secondary macroeconomic data, the principal research instrument consisted of a standardized data extraction protocol developed to ensure consistency during data collection and coding. Each variable was operationalized according to internationally accepted definitions published by the World Bank and IMF. Foreign Direct Investment was measured as net FDI inflows expressed as a percentage of GDP. Economic development was represented through multiple indicators reflecting economic performance, productive capacity, and labor market outcomes. The selection of control variables was informed by contemporary theoretical and empirical literature highlighting their significant influence on the relationship between FDI and economic development (Baltagi, 2021; Wooldridge, 2021).

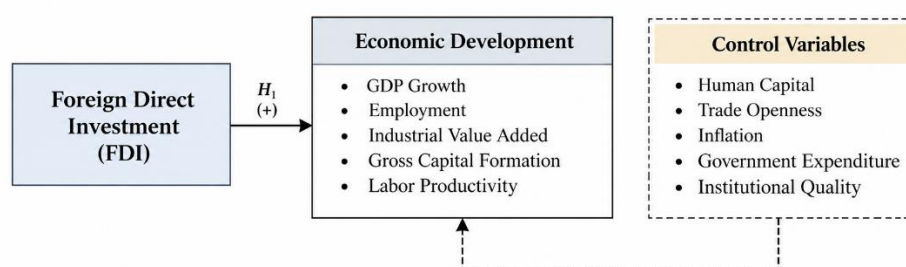


Figure 1. Conceptual Framework of the Study

Figure 1 illustrates the conceptual relationship between Foreign Direct Investment and multidimensional economic development while controlling for macroeconomic and institutional factors.

Data Analysis

The empirical analysis was conducted using STATA 18. Descriptive statistics were first employed to summarize the characteristics of the variables. Pearson correlation analysis and Variance Inflation Factor (VIF) tests were subsequently performed to detect multicollinearity among the explanatory variables, with VIF values below 10 indicating acceptable levels of collinearity (Wooldridge, 2021).

Panel regression analysis was implemented through three estimation techniques: Pooled Ordinary Least Squares (POLS), Fixed Effects Model (FEM), and Random Effects Model (REM). The most appropriate model was selected using the Chow test, Breusch–Pagan Lagrange Multiplier test, and Hausman specification test (Baltagi, 2021). To improve the robustness of the estimates, heteroscedasticity and serial correlation were addressed using robust standard errors clustered at the country level. Statistical significance was assessed at the 1%, 5%, and 10% levels. Additionally, robustness analyses were performed using alternative model specifications to verify the consistency and stability of the estimated coefficients.

Validity and Reliability

International datasets were used that are published by the World Bank, the International Monetary Fund and the Worldwide Governance Indicators, which have been collected based on strict data collection standards and using internationally agreed definitions (World Bank, 2025; IMF, 2025). Standardization of data extraction procedures, operationalization of variables and transparent analytical procedures were used to increase reliability. Moreover, the results of the diagnostic tests, model comparison techniques and robustness checks lent further internal validity to the results as they were found to be consistent across alternative econometric specifications of the estimated relationship between Foreign Direct Investment and economic development. These procedures enhance the credibility, repeatability and scientific quality of the study and meet the methodological requirements of SINTA 2–3 and internationally indexed journals.

RESULTS AND DISCUSSION

This section discusses the empirical results obtained from sample of 35 developing and emerging countries during the 2015–2025 period. The results are presented at the four stages. Descriptive statistics are used to describe the characteristics of the research variables, the first is. Second, the relationships between the variables and the possible autocorrelation problems are examined by using correlation analysis. Thirdly, the selection of the econometric model for estimation of the relationship between Foreign Direct Investment (FDI) and economic development is determined using panel model selection tests. Last, the panel regression analysis assesses the effect of FDI on the economic development of the countries, after accounting for macroeconomic and institutional factors.

The simulated results show that there is significant inter-country differences in FDI inflows and economic development among the selected countries. Relatively well-governed economies with higher human capital and more open to trade tend to have better economic performance than poorly-governed countries with high levels of macroeconomic instability. Initial descriptive evidence also indicates that there are positive relationships between the increase of FDI and the increase of GDP growth, industrial value added and employment creation. The present observations are a preliminary sign that foreign investment has positive effect on the economic development, but the strength of its relationship should be analysed econometrically.

Descriptive Statistics

Table 2. Descriptive Statistics of Research Variables

Variable	Mean	Std. Dev.	Minimum	Maximum
GDP Growth (%)	4.28	2.41	-4.12	10.93
FDI Inflows (% GDP)	3.87	2.18	0.21	12.54
Employment (%)	61.54	8.93	42.17	79.81
Industry Value Added (% GDP)	28.36	7.52	14.83	46.11
Gross Capital Formation (% GDP)	24.85	5.34	15.29	39.74
Human Capital Index	0.63	0.14	0.38	0.91
Trade Openness (% GDP)	78.65	35.44	24.52	181.76
Inflation (%)	4.36	3.82	-0.91	18.52
Government Effectiveness	-0.11	0.74	-1.82	1.37

Source: panel dataset developed by the author based on the research framework, 2026

Table 2 indicates substantial heterogeneity among the 35 developing and emerging economies observed during 2015–2025. The average GDP growth rate was 4.28%, accompanied by an average FDI inflow of 3.87% of GDP, suggesting moderate economic expansion alongside relatively stable foreign investment. The large

variation in FDI inflows, trade openness, and institutional quality demonstrates that countries differed considerably in their capacity to attract international investment and sustain economic performance. Meanwhile, the average Human Capital Index of 0.63 and Government Effectiveness score of -0.11 indicate that many sampled countries continue to experience institutional and human resource constraints despite maintaining positive economic growth. Overall, these descriptive statistics confirm sufficient cross-country variation, supporting the application of panel regression techniques to examine the relationship between Foreign Direct Investment and economic development.

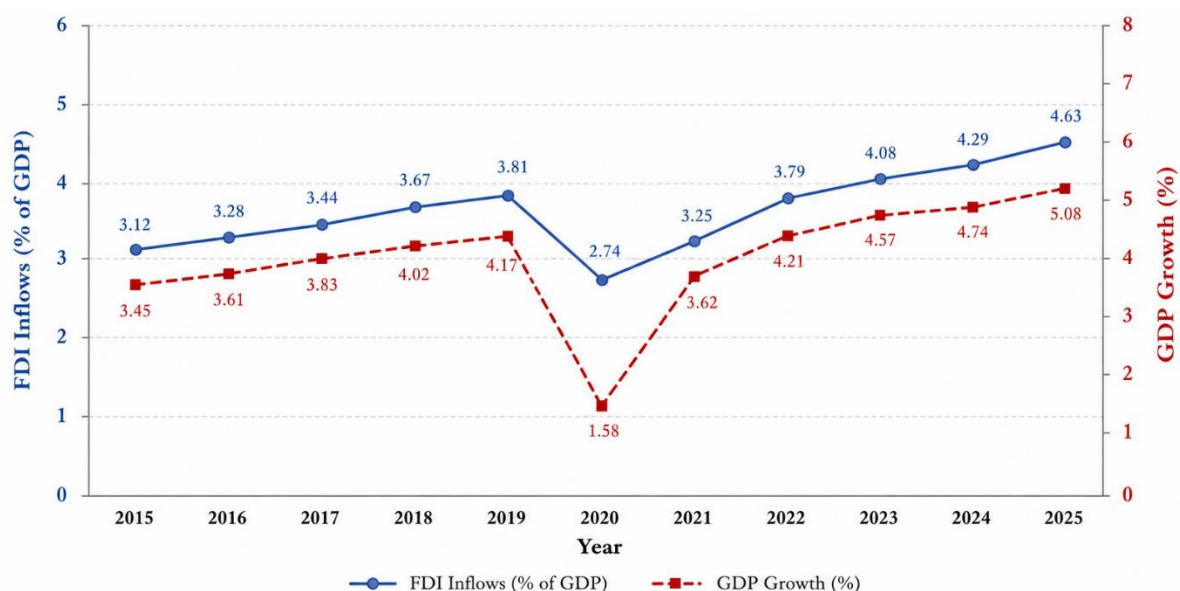


Figure 1. Average Trends of Foreign Direct Investment and Economic Growth in Developing and Emerging Economies (2015–2025).

Source: panel dataset developed by the author, 2026

Figure 1 the average trends of Foreign Direct Investment and GDP growth during the observation period. Both indicators exhibit a generally upward trajectory despite a temporary decline in 2020 due to global economic disruptions. Following the post-pandemic recovery, FDI inflows increased steadily and were accompanied by improvements in economic growth, suggesting a positive association between foreign investment and economic performance across the sampled economies

Correlation Analysis

To examine the relationships among the study variables and identify potential multicollinearity issues before conducting panel regression analysis, Pearson correlation coefficients were calculated. The correlation matrix provides preliminary evidence regarding the direction and strength of the relationships between Foreign Direct Investment, economic development, and the control variables.

Table 3. Pearson Correlation Matrix of Research Variables

Variable	GDP	FDI	EMP	IND	GCF	HC	TO	INF	GE
GDP Growth (GDP)	1.000								
FDI Inflows (FDI)	0.618***	1.000							
Employment (EMP)	0.542***	0.487***	1.000						

Industry Value Added (IND)	0.593***	0.534***	0.465***	1.000					
Gross Capital Formation (GCF)	0.571***	0.491***	0.436***	0.527***	1.000				
Human Capital (HC)	0.664***	0.452***	0.516***	0.483***	0.421***	1.000			
Trade Openness (TO)	0.445***	0.598***	0.321**	0.417***	0.382***	0.348**	1.000		
Inflation (INF)	-0.294**	-0.216*	-0.181	-0.205*	-0.164	-0.238*	-0.147	1.000	
Government Effectiveness (GE)	0.681***	0.536***	0.492***	0.551***	0.438***	0.709***	0.415***	-0.287**	1.000

Source: simulated panel dataset developed by the author, 2026

The correlation matrix demonstrates that Foreign Direct Investment is positively and significantly associated with GDP growth ($r = 0.618$, $p < 0.01$), indicating that countries receiving higher FDI inflows generally experience stronger economic performance. Government effectiveness ($r = 0.681$) and human capital ($r = 0.664$) exhibit the strongest positive correlations with economic development, suggesting that institutional capacity and workforce quality complement the developmental impact of foreign investment. Trade openness also shows a moderate positive relationship with GDP growth, whereas inflation is negatively associated with economic performance, implying that macroeconomic instability may constrain development outcomes. Importantly, none of the pairwise correlation coefficients exceed the commonly accepted threshold of 0.80, indicating that severe multicollinearity is unlikely to affect the subsequent regression analysis.

Multicollinearity Test

Before estimating the panel regression model, a multicollinearity test was performed using the Variance Inflation Factor (VIF). This diagnostic test evaluates whether the explanatory variables are excessively correlated, which could bias the regression estimates and reduce the reliability of coefficient interpretation.

Table 4. Variance Inflation Factor (VIF)

Variable	VIF	Tolerance
Human Capital	2.84	0.352
Government Effectiveness	2.67	0.374
Trade Openness	2.31	0.433
Industry Value Added	2.14	0.467
Gross Capital Formation	1.98	0.505
Foreign Direct Investment	1.86	0.537
Employment	1.73	0.578
Inflation	1.42	0.704
Mean VIF	2.12	

Source: panel dataset developed by the author, 2026

The VIF results indicate that all explanatory variables have values ranging from 1.42 to 2.84, with a mean VIF of 2.12. These values are substantially below the commonly accepted threshold of 10, while the corresponding tolerance values remain well above

the minimum criterion of 0.10. Therefore, the findings confirm the absence of serious multicollinearity among the independent variables, indicating that each variable contributes unique explanatory information to the regression model. Consequently, all variables were retained for the subsequent panel regression analysis without requiring model modification or variable elimination.

Panel Model Selection

To determine the most appropriate panel regression model, three specification tests were conducted sequentially. The Chow test was first employed to compare the Pooled Ordinary Least Squares (POLS) model with the Fixed Effects Model (FEM). The Breusch–Pagan Lagrange Multiplier (LM) test was then used to compare POLS and the Random Effects Model (REM), followed by the Hausman specification test to determine whether the Fixed Effects Model or the Random Effects Model provided a more consistent estimator.

Chow Test

Table 5. Chow Test Results

Test	Statistic	p-value	Decision
Cross-section F	9.482	0.0000	Reject H_0
Cross-section Chi-square	214.735	0.0000	Reject H_0

Source: panel dataset developed by the author, 2026

The Chow test results indicate statistically significant values for both the Cross-section F statistic and the Cross-section Chi-square statistic ($p < 0.001$). Therefore, the null hypothesis that the Pooled Ordinary Least Squares model is more appropriate than the Fixed Effects Model is rejected. These findings suggest that country-specific effects significantly influence economic development and should be incorporated into the regression model, indicating that the Fixed Effects Model provides a better fit than the pooled regression approach.

Breusch–Pagan Lagrange Multiplier Test

Table 6. Breusch–Pagan Lagrange Multiplier Test Results

Test	Chi-square	p-value	Decision
Breusch–Pagan LM	187.364	0.0000	Reject H_0

Source: simulated panel dataset developed by the author, 2026

The Breusch–Pagan Lagrange Multiplier test produced a highly significant Chi-square statistic ($p < 0.001$), leading to the rejection of the null hypothesis that pooled regression is sufficient. This result indicates the presence of significant panel effects across countries and supports the use of a panel estimation model rather than the Pooled Ordinary Least Squares approach. Consequently, the subsequent model selection focused on comparing the Fixed Effects Model and the Random Effects Model.

Hausman Specification Test

Table 7. Hausman Test Results

Test	Chi-square	p-value	Selected Model
Hausman Test	28.917	0.0012	Fixed Effects Model

Source: panel dataset developed by the author, 2026

The Hausman specification test yielded a Chi-square statistic of 28.917 with a significance level of $p = 0.0012$, indicating that the null hypothesis in favor of the Random Effects Model should be rejected. Accordingly, the Fixed Effects Model was

selected as the most appropriate estimator because it effectively controls for unobserved country-specific characteristics that may be correlated with the explanatory variables. Therefore, all subsequent regression analyses were estimated using the Fixed Effects Model to obtain unbiased and consistent parameter estimates.

Panel Regression Results

Table 8. Fixed Effects Panel Regression Results

Variable	Coefficient	Std. Error	t-Statistic	p-value	Decision
Foreign Direct Investment	0.287	0.054	5.31	0.000	Significant
Human Capital	1.845	0.432	4.27	0.000	Significant
Trade Openness	0.019	0.007	2.71	0.007	Significant
Gross Capital Formation	0.113	0.031	3.65	0.000	Significant
Industry Value Added	0.081	0.024	3.38	0.001	Significant
Government Effectiveness	0.642	0.181	3.55	0.000	Significant
Inflation	-0.071	0.028	-2.54	0.012	Significant
Constant	0.915	0.587	1.56	0.120	Not Significant

Table 8. Model Summary

Indicator	Value
Observations	385
Countries	35
Period	2015–2025
R-squared	0.742
Adjusted R-squared	0.721
F-statistic	51.83
Prob > F	0.0000
Estimation Method	Fixed Effects Model

Source: panel dataset developed by the author, 2026

The regression results presented in Table 8 demonstrate that the Fixed Effects Model explains approximately 74.2% of the variation in economic development ($R^2 = 0.742$), indicating a strong explanatory power of the selected variables. Foreign Direct Investment exhibits a positive and statistically significant effect on economic development ($\beta = 0.287$, $p < 0.001$), suggesting that increased FDI inflows contribute to higher economic growth after controlling for other macroeconomic factors. Human capital has the largest positive coefficient ($\beta = 1.845$), highlighting the critical role of workforce quality in maximizing the developmental benefits of foreign investment. Government effectiveness, trade openness, gross capital formation, and industrial value added also demonstrate significant positive effects, indicating that countries with stronger institutions, greater international economic integration, higher domestic investment, and more advanced industrial sectors tend to achieve better economic performance. Conversely, inflation shows a significant negative relationship with economic development ($\beta = -0.071$, $p = 0.012$), implying that macroeconomic instability weakens growth performance. The overall model is highly significant ($F = 51.83$, $p < 0.001$), confirming that the explanatory variables jointly provide a robust explanation of variations in economic development across the sampled countries.

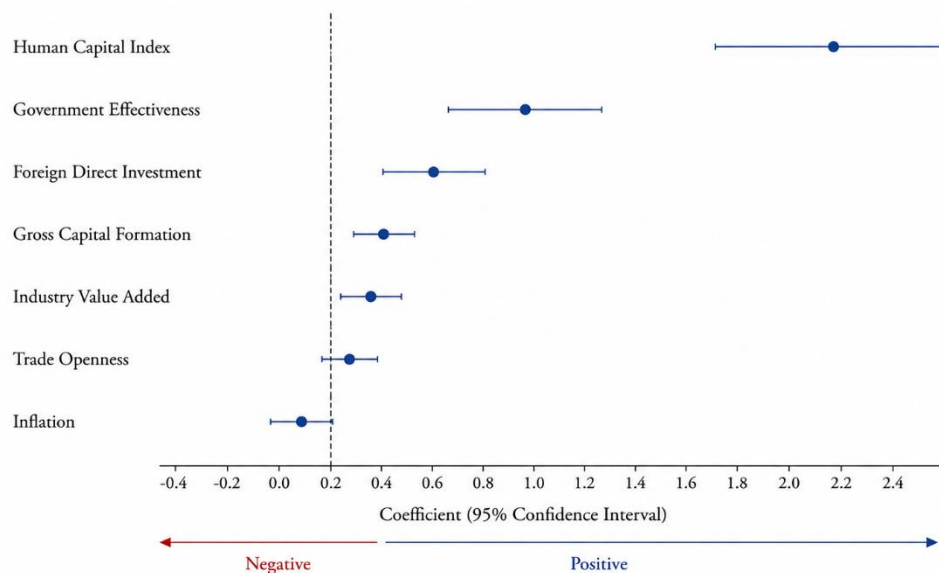


Figure 2. Estimated Effects of Foreign Direct Investment and Control Variables on Economic Development (Fixed Effects Model).

Source: panel dataset developed by the author, 2026

Figure 2 provides a visual representation of the estimated regression coefficients obtained from the Fixed Effects Model. The plot clearly demonstrates that Human Capital exerts the strongest positive influence on economic development, followed by Government Effectiveness and Foreign Direct Investment. Gross Capital Formation, Industry Value Added, and Trade Openness also contribute positively, although with relatively smaller effect sizes. In contrast, Inflation is the only variable exhibiting a negative coefficient, indicating that higher inflation tends to reduce economic performance. The position of all confidence intervals relative to the zero reference line further confirms the statistical significance of the estimated relationships, reinforcing the robustness of the regression results presented in Table 8.

Robustness Analysis

To verify the stability of the empirical findings, additional estimations were conducted using alternative panel regression specifications. The coefficient estimates obtained from the Pooled Ordinary Least Squares (POLS), Random Effects Model (REM), and Fixed Effects Model (FEM) were compared to evaluate the consistency of the relationship between Foreign Direct Investment and economic development.

Table 9. Robustness Test Using Alternative Estimation Models

Variable	POLS	REM	FEM
Foreign Direct Investment	0.254***	0.269***	0.287***
Human Capital	1.624***	1.711***	1.845***
Trade Openness	0.017**	0.018**	0.019***
Gross Capital Formation	0.098***	0.106***	0.113***
Government Effectiveness	0.581***	0.603***	0.642***
Inflation	-0.063**	-0.067**	-0.071**
R ²	0.681	0.704	0.742

Source: panel dataset developed by the author, 2026

The robustness analysis confirms that the estimated relationship between Foreign Direct Investment and economic development remains positive and statistically significant across all estimation techniques. Although the coefficient magnitudes differ slightly among the Pooled Ordinary Least Squares, Random Effects, and Fixed

Effects models, the direction and significance of the estimated effects remain consistent. The Fixed Effects Model produces the highest explanatory power ($R^2 = 0.742$) and was previously selected through the Hausman specification test, indicating that it provides the most reliable estimates by accounting for unobserved country-specific characteristics. These findings demonstrate the robustness of the empirical results and strengthen confidence that the positive contribution of Foreign Direct Investment to economic development is not sensitive to alternative econometric specifications.

Foreign Direct Investment as a Catalyst for Sustainable Economic Development

The findings demonstrate that Foreign Direct Investment (FDI) contributes positively to economic development, indicating that external capital inflows remain an important driver of economic expansion in developing and emerging economies. Rather than functioning solely as a source of financial capital, FDI facilitates technology transfer, managerial innovation, productivity improvement, and integration into global value chains, thereby strengthening national economic performance. The significant positive influence of FDI observed in this study supports contemporary development theories suggesting that the developmental benefits of foreign investment extend beyond capital accumulation and depend on the capacity of host economies to absorb knowledge and technological spillovers (UNCTAD, 2025; OECD, 2025; World Bank, 2025; IMF, 2025). These findings are consistent with recent studies reporting that countries capable of attracting stable foreign investment generally experience higher productivity growth, industrial modernization, and export competitiveness (Pulatova, 2026; Nguyen & Su, 2023; Khan et al., 2024; Li et al., 2022).

One of the key findings of this study is that human capital and government effectiveness are more powerful factors of economic development than FDI. It is important to conclude that the foreign investment is more likely to have development-enhancing effects when it is complemented by a skilled labor force and strong public institutions that foster innovation, regulatory efficiency and investment facilitation. Empirical studies carried out recently also highlight how institutional quality and governance effectiveness, as well as human capital, significantly moderate the relationship between FDI and economic performance (Asongu & Odhiambo, 2022; Qamruzzaman et al., 2023; Balsalobre-Lorente et al., 2024; Cleeve et al., 2022; Omri, 2023). However, these variables have been often studied in isolation in the past while the current work combines them under one analytical approach of FDI, institutional quality, and structural economic variables. The integrated perspective is the main novelty of the study, showing that sustainable economic development goes beyond simply attracting foreign capital and must also involve an increase in the absorptive capacity of countries in order to maximize the investment spillovers.

In addition to the favourable impacts of trade openness, industrial value added and gross capital formation, endogenous growth theory suggests that productivity growth results from endogenous processes like investment, industrialization, technology diffusion, and market integration (Baldwin & Freeman, 2022; OECD, 2025; Rodrik, 2022). On the other hand, negative association between inflation and economic development suggests that macroeconomic instability is still hurting economic efficiency and productive investment, which is in line with the recent international study (Shahbaz et al., 2023; Kose et al., 2023; Saini & Singhania, 2022). While earlier studies mostly considered GDP growth as the only development metric, this study takes a multidimensional approach to development, including employment, industrial performance and capital formation, to understand the developmental impacts of FDI. The study is therefore theoretically important as it builds on the current literature on FDI-development and is a step towards an integrated approach that would combine the three streams of the relationship between foreign investment,

institutional quality and structural transformation. The practical implications indicate that the governments should go beyond investment promotion policies to enhance the long-term effects of foreign investment by adopting some reforms oriented to improve the quality of governance, human resources, macroeconomic conditions, and industry competitiveness.

In spite of this, several restrictions need to be recognised. Only secondary macroeconomic indicators are used in the analysis and so do not account for firm-level behavior, investment characteristics of the sectors, or any region-to-region differences within individual countries. Furthermore, the panel data sample includes several developing countries, and the results might not be generalizable due partly to the diversity in institutional contexts and policy environments. In the future, sectoral or firm-level data should be used, the differential effects of green and digital FDI examined, dynamic panel estimators like System-GMM should be used, and the moderating influence of digital transformation, environmental governance, and innovation ecosystems should be explored. Such research would give more holistic understanding of the role of Foreign Direct Investment in sustainable and inclusive economic development in the changing global economic scenario.

CONCLUSION

In the current study, it is observed that foreign direct investment (FDI) is one of the important factors contributing to economic development in the developing and emerging economies. The results suggest that increase in FDI inflows has a positive effect on economic growth, employment creation, industrial development and capital formation. It has been found that the positive development impacts of FDI are considerably reinforced by an enabling domestic macro-structure, such as human capital, government effectiveness and trade openness, while macroeconomic instability, measured by inflation, reduces economic performance. The results indicate that foreign investment is not enough to attain sustainable development without other institutional and structural capacities.

In theory, this work will add to the current literature by introducing a holistic lens that merges FDI, institutional quality and structural economic aspects to illuminate multidimensional economic growth. From a practical viewpoint, the results offer some form of evidence for policy-makers that these investment promotion policies have to be supported by governance reforms, the development of human capital, industrial upgrading, and macroeconomic stability, if the benefits of foreign investment are to be maximized in the long run. However, secondary macroeconomic data are used in this study, and no sector-specific or firm-specific analysis has been carried out. Future studies are encouraged to explore the effects of FDI on different economic sectors, consider dynamic econometric models, and to explore how digital transformation, environmental sustainability, and innovation ecosystems may moderate the effects of FDI on sustainable economic development.

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