Foreign Direct Investment and Economic Growth: Evidence from OECD Countries (2010-2023)

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This study analyzes the impact of foreign direct investment (FDI) on economic growth in OECD countries, using secondary data from the World Bank, International Monetary Fund, and OECD for 2010–2023. For empirical analysis, fixed- and random-effects models, as well as multiple linear regression, were employed. The results show that FDI, trade openness, and inflation positively influence economic growth, whereas government expenditures negatively affect it, highlighting the need for improved public financial management. Consequently, the study recommends that policymakers shift public spending to productive investments and adopt strategies that promote long-term growth and sustainability. The originality of this study stems from the use of reliable data and empirical analysis focused on developed OECD countries.

DOI
https://doi.org/10.18690/um.epf.7.2026.31

ISBN
978-961-299-166-1

Keywords:
foreign direct investment, economic growth, OECD countries, trade openness, public financial management

University of Maribor Press

1 Introduction

Foreign Direct Investment (FDI) is recognized as a significant driver of economic growth in many countries, primarily through capital inflows, technology transfer, productivity gains, and employment generation. Economic growth theories suggest that FDI serves not only as a source of capital but also as a mechanism for accelerating development by expanding capital stock and enhancing technological capabilities in host countries (Solow, 1956; Romer, 1994).

Empirical literature substantiates that FDI positively and significantly drives economic growth, especially in developed economies where institutions and economic conditions support such investment. FDI boosts output by spreading knowledge, enhancing managerial skills, and connecting host economies to global markets. With sound macroeconomic policies and effective governance, foreign investment fosters sustainable economic growth (Ghosh, 2025).

However, FDI's impact on economic growth differs across countries and varies with structural and institutional factors. Empirical studies yield mixed results, indicating that FDI's ability to boost growth depends on human capital, financial market maturity, trade openness, and institutional quality. Without these conditions, FDI may not deliver significant growth benefits and can even crowd out domestic investment (Alfaro et al., 2004).

In this context, assessing how foreign direct investment shapes economic growth in developed countries remains a complex research task. A thorough approach is essential one that considers not only foreign capital inflows, but also domestic economic structures, institutional frameworks, and policy environments, all of which can intensify or reduce FDI's effects on economic performance.

2 Literature Review

The economic literature associates the impact of foreign direct investment (FDI) on economic growth with both classical and modern growth theories. Solow's (1956) neoclassical growth model highlights the significance of capital accumulation and technological progress in sustaining long-term growth, positioning FDI as an additional source of capital that can increase output levels. Nevertheless, within this

framework, the effect of FDI is primarily regarded as short-term, since marginal returns to capital diminish over time.

Endogenous growth theories contend that FDI exerts a long-term impact by facilitating the transfer of technology, managerial expertise, and innovation. According to Romer (1990, 1994) and Lucas (1988), the expansion of human capital and the diffusion of knowledge are central to sustaining economic growth. Through these mechanisms, FDI can enhance total factor productivity in host countries.

Early empirical studies report mixed findings regarding the impact of foreign direct investment (FDI) on economic growth. Borensztein (1998) presents a widely cited analysis, indicating that FDI positively influences economic growth only when the host country possesses a minimum threshold of human capital, clarifying that economic benefits are conditional on sufficient skills in the workforce. The study further asserts that FDI is more effective than domestic investment when the host country has the requisite skills to absorb foreign technology, again reinforcing this conditional relationship.

Balasubramanyam (1996) argues that FDI's long-term benefits for economic growth are greater in open economies with liberal trade policies, and that these effects rely on specific policy settings. Conversely, Carkovic and Levine (2005) question whether FDI directly and lastingly promotes long-term economic growth, arguing that its effect instead depends on institutional factors and the host country's policies, emphasizing its conditional nature.

A substantial body of literature supports the view that FDI's long-term effects on economic growth are conditional, depending on specific country characteristics. For example, Alfaro et al. (2004) show that FDI promotes long-term growth mainly in countries with developed financial markets, where robust systems enable efficient capital allocation and productive activities.

Hermes and Lensink (2003) reach similar conclusions, arguing that weak financial systems limit the benefits of FDI and, in some cases, may lead to negative outcomes. Similarly, Agosin and Machado (2005) identify cases where FDI may substitute domestic investment ("crowding out"), particularly in economies with limited absorptive capacity.

Recent empirical research shows that foreign direct investment (FDI) boosts economic growth. Country-specific conditions shape this effect. For example, Ghosh and Saha (2025) report that FDI increases GDP growth in developing countries, especially when institutional quality is high. Chizema (2025) finds that FDI inflows drive economic development in South and Southeast Asia by enabling technology transfer and integration into global value chains. Studies also indicate that FDI's impact on income inequality depends on human capital and governance (Li, 2025). Systematic reviews confirm that FDI can drive growth, but its success depends on internal capacities and policies. In developed countries, FDI tends to have more stable but sometimes smaller marginal effects on growth due to already advanced markets and technologies (Alfaro et al., 2004). Systematic reviews confirm that FDI can drive growth, but its success depends on internal capacities and policies.

The impact of FDI on sustainable growth is determined not only by capital inflows, technology transfer, and market access, but more importantly by complementary factors such as human capital, financial market development, and governance quality. For example, Azman-Saini et al. (2019) show that strong institutions significantly enhance the positive effects of FDI on growth implying that without such factors, the benefits of FDI may be limited.

Moreover, recent reports by UNCTAD (2023) emphasize that the quality of FDI, particularly investments in manufacturing and high-technology sectors, is more likely to generate sustainable growth than resource-driven FDI. Therefore, while FDI can be a catalyst for economic development, its positive impact is not automatic and varies significantly across countries depending on absorptive capacity and policy frameworks.

This section presents a comprehensive summary of the literature review that integrates findings from multiple studies through statistical synthesis guided by a systematic methodological approach. The central argument is that synthesizing these studies provides a clearer understanding of overarching trends, as detailed in the accompanying table summarizing the authors, publication years, variables, methods, and key findings.

Table 1: Summary of papers

Author	Year	Variables	Method	Findings
(Ikani, 2024)	(1991-2022)	FDI, inflation rate, trade openness, labor force, domestic credit to the private sector.	PMG Model	Foreign direct investment (FDI) plays a complex role in West Africa's economic development, showing a non-significant positive effect on long-term growth, a significant negative short-term impact, and an increase in unemployment rates over both periods. Thus, while FDI slightly benefits long-term growth, it worsens short-term growth and unemployment overall.
(Nuzhat, 2009)	(1980-2006)	FDI, labor force, real inflation rate.	GMM Model	The findings show that as Pakistan's GDP increases, FDI inflows tend to decrease. This suggests that to make FDI more beneficial for economic growth, Pakistan should focus on improving infrastructure, investing in human capital, fostering local entrepreneurship, and creating conditions that encourage productive investment.
(Ahmed. Khder, 2018)	(1980-2012)	FDI, domestic investment, export and import, and trade liberalization.	Vector Autoregression Model (VAR)	An empirical analysis using a vector autoregression model indicates that there is no long-term relationship between foreign direct investment and economic growth in Turkey.
(Hlaváček & Beata Bal, 2016)	(2000-2012)	Foreign direct investment, gross capital, inflation rate.	The Endogenous Growth Model.	Similarly, the findings indicate that foreign direct investment contributes to economic growth in Central and Eastern European countries. However, as production costs rise in specific locations within these countries, firms tend to shift their investments to other areas within Central and Eastern Europe that offer lower costs or higher value-added opportunities. This movement illustrates firms' efforts to maximize efficiency and returns by relocating within the region.
(Kyuntae & Hokyung, 2008)	(1975 - 2006)	Foreign direct investment, exports and imports, government spending.	Panel data model.	In addition, the results demonstrate that foreign direct investment and domestic capital are statistically significant in both the long and short run, exerting positive effects on economic growth in Ireland. The analysis also reveals a bidirectional Granger causality between GDP and foreign direct investment, supporting the validity of the FDI-led growth hypothesis for the Irish economy.

Source: Data processed by the authors

The summary of the literature review indicates that foreign direct investment (FDI) serves as a significant source of capital and contributes to infrastructure development, job creation, increased productivity, export growth, and the dissemination of technology and knowledge. Consequently, FDI influences economic development and sustainable growth however, these benefits depend on

careful management and the implementation of appropriate strategies by host countries to maximize advantages and mitigate potential risks.

3 Materials and Methods

The purpose of this scientific research is to analyze the impact of several macroeconomic factors on the economic growth of OECD countries. Specifically, the study focuses on the roles of foreign direct investment, trade openness, the inflation rate, and government expenditure in promoting economic growth, while also examining how these factors mitigate the risks of economic instability.

The research analyzes the period 2010–2023. The sample includes OECD members at varying levels of development, such as Poland, the Czech Republic, Turkey, Germany, France, Spain, Italy, the Netherlands, Sweden, and Greece. The study uses annual secondary data from official sources, including the OECD, IMF, and World Bank. This ensures comparability across countries and time.

To analyze the data and derive empirical results, econometric models and statistical tests will be employed using SPSS and Microsoft Excel. The main methods include linear regression, random-effects models, fixed-effects models, and linear trend analysis. These methods will help assess the relationship and impact of the independent variables on economic growth.

3.1 Research Questions

This section presents the main research questions examining the impact of foreign direct investment and key macroeconomic factors on economic growth, as well as differences in these effects across the studied countries.

- What is the impact of FDI and other macroeconomic factors on economic growth?
- How do FDI and government expenditure affect economic growth?
- Does the impact of FDI and macroeconomic factors differ among the studied countries?

3.2 Research Hypothesis

The following hypotheses are established to assess the impact of foreign direct investment on economic growth in OECD countries.

H0: Foreign Direct Investment has no statistically significant impact on economic growth in OECD countries.
H1: Foreign Direct Investment has a statistically significant impact on economic growth in OECD countries.

3.3 Specification of the econometric model

To evaluate the impact of foreign direct investment on economic growth in developed countries, the following multiple econometric model is proposed:

$$GDP = \beta 0 + \beta 1 FDI + \beta 2 TO + \beta 3 IR + \beta 4 GE + \varepsilon \quad (1)$$

3.4 Description of Variables

The table presents a detailed description of the variables included in the study, clarifying their roles and significance within the econometric analysis.

Table 2: Description of the variables included in the econometric model

Variable	Description	Data Source
Dependent variable (Y_1)	Economic growth (GDP)	World Bank/OECD (2010-2023)
Independent variable (X_1)	Foreign direct investment (FDI)	World Bank/OECD (2010-2023)
Independent variable (X_2)	Trading opening (TO)	World Bank/OECD (2010-2023)
Independent variable (X_3)	Inflation rate (IR)	World Bank/OECD (2010-2023)
Independent variable (X_4)	Government Expenditure (GE)	World Bank/OECD (2010-2023)

Source: Data processed by the authors

Gross Domestic Product (GDP) – Refers to the increase in the total production of goods and services in an economy over a given period, measured by Gross Domestic Product.

Foreign Direct Investment (FDI) – Represents long-term investments made by foreign entities that provide significant control or influence over the economic activities of the host country.

Trade Openness (TO) – Indicates the degree of an economy's integration into international trade through imports and exports.

Inflation Rate (IR) – Represents the general and sustained increase in price levels, which reduces the purchasing power of money.

Government Expenditure (GE) – Refers to the funds spent by the government to finance public services and economic activities.

4 Results

This chapter presents the data analyses and study results, including descriptive statistics, histograms, probability plots, fixed- and random-effects models, and linear regression. All analyses were conducted in SPSS, enabling clear, detailed interpretation of the data and the identification of relationships and impacts among the variables under study.

Table 3: Descriptive statistics

	Mean	Std. Deviation	N
Gross Domestic Product.	1.62	4.096	140
Foreign Direct Investment	2.988	8.6293	140
Trade Openness	88.131	34.3242	140
Inflation Rate	4.00	10.323	140
Government expenditure	20.64	3.438	140

Source: Authors' calculations in SPSS program

The table of descriptive statistics presents the behavior of the main variables across 140 observations, where GDP and FDI exhibit relatively high standard deviations, indicating pronounced fluctuations over the analyzed period, while trade openness shows a high mean reflecting a considerable level of integration into international trade, albeit with noticeable variability. The inflation rate displays significant

instability, as evidenced by a high standard deviation relative to its mean, whereas government expenditure appears more stable, with lower variation compared to the other variables, suggesting a more consistent fiscal role in the economy.

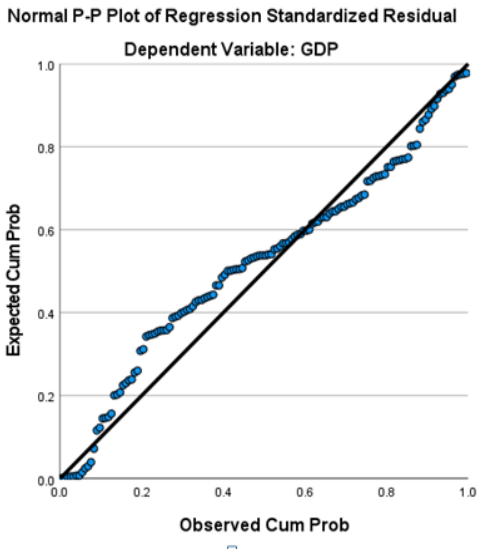

Figure 1: Macroeconomic indicators
Source:Authors' calculations in SPSS program

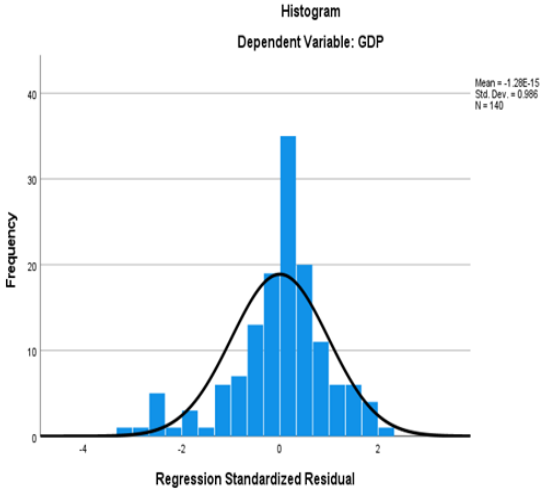

Figure2: Graphical representation of the histogram
Source:Authors' calculations in SPSS program

According to the probability plot, we can observe a very strong linear relationship between GDP and the independent variables (FDI, trade openness, inflation rate, and government expenditures), as the data points are positioned very close to the regression line. This indicates that the independent variables have a clear and consistent impact on GDP, suggesting that changes in each of these factors are closely associated with changes in the gross domestic product.

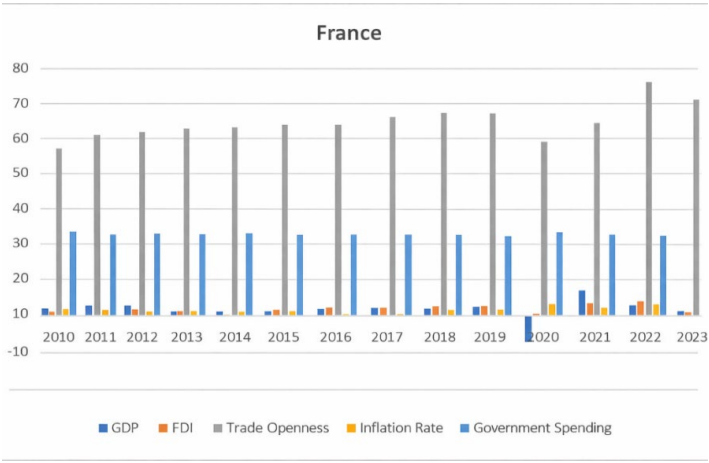

Figure 1:Macroeconomic Indicators in France (2010–2023)
Source: Authors' calculations using Microsoft Excel

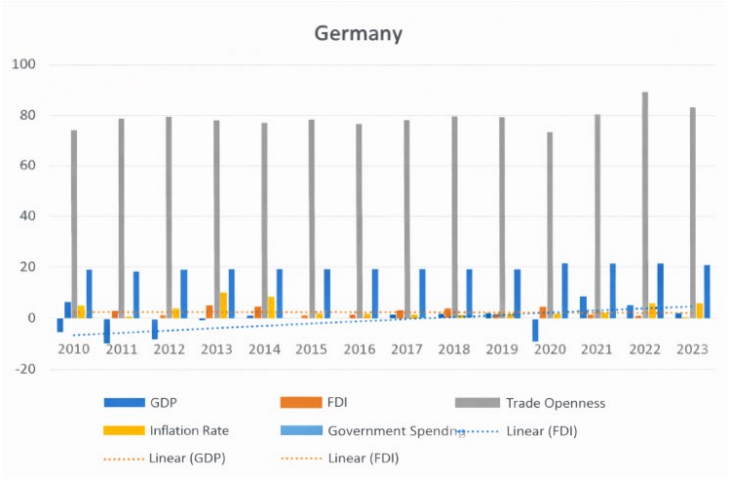

Figure 2:Macroeconomic Indicators in Germany (2010–2023)
Source: Authors' calculations using Microsoft Excel

The chart shows that from 2010 to 2023, France's economy experienced steady GDP growth, except for a sharp decline in 2020 due to COVID-19, followed by a strong recovery. Foreign Direct Investment remained positive with minor fluctuations, reflecting a stable investment climate. Trade openness trended upward over the long term, indicating growing international integration, with only a temporary dip during the global crisis. Inflation stayed low until 2020, then rose significantly by 2023. Throughout, high government spending underscored the state's active economic support.

The chart illustrates Germany's economic performance from 2010 to 2023. Over most of the period, GDP growth remained relatively stable, though there were noticeable contractions in 2011 and a sharp decline in 2020 caused by the COVID-19 pandemic; subsequent years saw a strong recovery. Similarly, Foreign Direct Investment (FDI) exhibits moderate fluctuations, indicating varying investor confidence across the period but an overall stable trend. Trade openness also remains consistently high, highlighting Germany's strong integration into global trade, despite a temporary decline around 2020. Inflation stayed low and stable for most years, but rose significantly after 2021 due to global supply shocks and energy price pressures. Finally, government spending shows a steady, slightly increasing trend, reflecting the active role of fiscal policy in supporting economic stability and the post-crisis recovery.

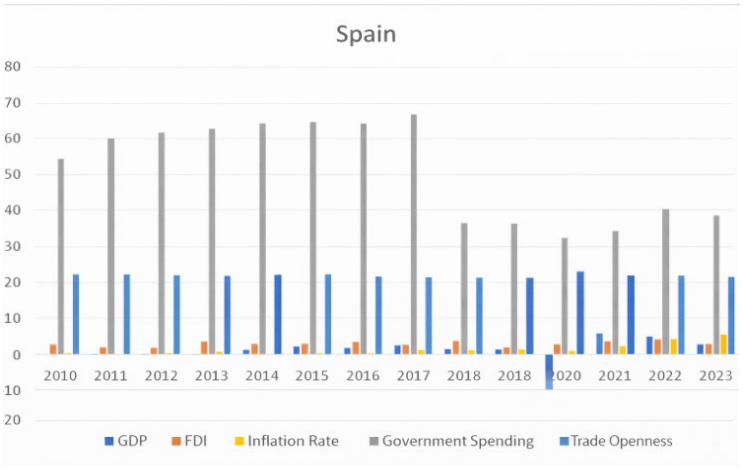

Figure 3:Macroeconomic Indicators in Spain (2010–2023)
Source: Authors' calculations using Microsoft Excel

The chart shows Spain's economic developments from 2010 to 2023, highlighting a generally stable GDP trend with moderate growth over most of the period. This is followed by a sharp contraction in 2020 due to the COVID-19 pandemic, followed by a gradual recovery thereafter. Meanwhile, Foreign Direct Investment (FDI) remains positive but relatively volatile, reflecting changes in investor confidence across different years. Government spending increases steadily until around 2017, then declines noticeably after 2018, indicating a shift toward fiscal consolidation, meaning efforts to reduce government deficits and debt levels with renewed support during the post-pandemic period. Similarly, trade openness remains relatively stable throughout the period, underlining Spain's continued integration into international markets. Inflation stays low for most of the years but rises significantly after 2021, reflecting broader global inflationary pressures linked to energy prices and supply chain disruptions.

Table 4:Fixed effect regression

GDP	Coef.	Robus Std.Err.	T	P>|t|	[95% Conf.	Interval
FDI	.0355384	.0100954	3.52	0.007	.0127011	.0583757
TO	.1414654	.0643034	2.20	0.055	-.0039989	.2869297
IR	-.0777734	.0206976	-3.76	0.005	-.1245947	-.0309521
GE	-1.073025	.9820935	-1.09	0.303	-3.294675	1.148624
_cons	11.49681	24.67979	0.47	0.652	-44.33275	67.32638

Source:Authors' calculations in SPSS program

The fixed-effect regression results show that increased FDI significantly raises GDP ($\beta = 0.0355$, $p = 0.007$), emphasizing FDI's positive contribution to economic growth. Trade openness has a positive, marginally significant effect ($p = 0.055$), suggesting a possible role in promoting GDP growth. The inflation rate exerts a negative, statistically significant effect ($\beta = -0.0778$, $p = 0.005$), which means higher inflation restricts economic growth. Government expenditure has a negative but statistically insignificant effect ($p = 0.303$), suggesting minimal impact on GDP. The constant term is also not statistically significant, confirming that GDP variations are mainly explained by the model's variables.

Table 5:Random effect regression

GDP	Coef.	Robus Std.Err.	Z	P>|t|	[95% Conf.	Interval]
FDI	.0217086	.0119805	1.81	0.070	-.0017727	.04519
TO	.038258	.0206323	1.85	0.064	-.0021807	.0786966
IR	.0003665	.0302886	0.01	0.990	-.0589979	.059731
GE	-.5222785	.2906768	-1.80	0.072	-1.091994	.0474375
_cons	8.956337	5.360218	1.67	0.095	-1.549497	19.46217

Source:Authors' calculations in SPSS program

The random effects model shows that FDI and trade openness positively affect GDP. These effects are marginally significant, with p-values of 0.070 and 0.064. This means the relationship is suggestive but not conventionally significant ($p < 0.05$). The inflation rate does not significantly affect economic growth ($p = 0.990$), whereas government spending has a negative, nearly significant effect ($p = 0.072$), which may restrain GDP growth. The constant term is not significant, so the variables only partially explain GDP variations.

Table 6:Multiple linear regression

GDP	Coef.	Robus Std.Err.	T	P >|t|	[95% Conf.	Interval]
FDI	.0233382	.0216257	1.08	0.282	-.0194307	.0661071
TO	.0226998	.0086927	2.61	0.010	.0055083	.0398914
IR	.0460701	.027695	1.66	0.099	-.0087021	.1008422
GE	-.3434809	.1049896	-3.27	0.001	-.5511181	-.1358437
_cons	6.450297	2.086496	3.09	0.002	2.323849	10.57674

Source:Authors' calculations in SPSS program

The results of the multiple linear regression indicate that trade openness has a positive and statistically significant effect on GDP ($\beta = 0.0227$, $p = 0.010$), meaning that, holding other variables constant, a one-unit increase in trade openness is associated with a 0.0227-unit increase in GDP. Government expenditure shows a negative, statistically significant effect ($\beta = -0.3435$, $p = 0.001$): a one-unit increase in government spending is associated with a 0.3435-unit reduction in GDP. The

inflation rate shows a positive effect (β = not reported) at the threshold of significance (p = 0.099), indicating that a one-unit increase in inflation is associated with a marginal rise in GDP. FDI does not have a significant impact on GDP (p = 0.282). The constant term is positive and statistically significant, representing the baseline GDP level when all other variables are zero.

5 Conclusions

This study analyzed the impact of foreign direct investment (FDI) on the economic growth of OECD developed countries over approximately 14 years. Based on the analyses, we found that most variables are clearly interrelated and statistically significant, except for government expenditures, which showed a negative association with economic growth.

According to the findings, three variables foreign direct investment, trade openness, and inflation rate are particularly significant for economic growth. These results highlight the importance of policies that strengthen these factors. Prioritizing such strategies will not only sustain economic growth but also enhance long-term resilience and competitiveness among OECD countries.

Regarding government expenditures, the analysis indicates the need for a more targeted and effective approach. It is recommended that governments focus on spending that supports long-term economic development, develop strategies for productive investments, and manage financial resources efficiently to enhance economic stability and sustainability.

This study analyzed the impact of foreign direct investment (FDI) on the economic growth of OECD developed countries over approximately 14 years. The results indicate that most variables are interrelated; however, their statistical significance and direction vary across different model specifications. Government expenditures generally show a negative association with economic growth.

The findings suggest that foreign direct investment, trade openness, and inflation may play an important role in economic growth. However, the impact of FDI is not consistently statistically significant across all models, and the effect of inflation appears sensitive to model specification, showing both positive and negative

relationships. These mixed results imply that the relationship between these variables and economic growth is complex and context-dependent.

Regarding government expenditures, the analysis indicates the need for a more targeted and efficient approach. It is recommended that governments prioritize spending that supports long-term economic development, promote productive investments, and manage financial resources effectively to enhance economic stability and sustainability.

Additional recommendations based on the study results:

- Encourage policies that attract and facilitate foreign direct investment through incentives and improved investment climate.
- Promote trade liberalization while ensuring a balanced approach to protect domestic industries.
- Maintain moderate and stable inflation through sound monetary policies to support economic growth.
- Optimize government spending by prioritizing infrastructure, education, and innovation, which have long-term economic benefits.
- Develop monitoring mechanisms to regularly evaluate the impact of fiscal policies and public investments on economic performance.

In summary, this study presents robust and persuasive findings that enhance understanding of the primary determinants of economic growth in OECD countries, including clear evidence of any negative effects, and offers actionable guidance to inform the development and implementation of more effective economic policies.

References

Agosin, M. R. (2005). Foreign investment in developing countries: Does it crowd in domestic investment? *Oxford Development Studie, 33*(2), 149-162.

Ahmed. Khder, A. (2018). The Impact of Foreign Direct Investment on Economic Growth: A Case Study of Turkey 1980–2012. *International Journal of Economics and Finance.*

Alfaro, L., Chanda, A., Kalemli-Ozcan, S., & Sayek, S. (2004). FDI and Economic Growth: The Role of Local Financial Markets. *Journal of International Economics, 64*(1), 89-112.

Azman-Saini, W. N., Law., S. H., & Ahmad., A. H. (2019). Foreign direct investments, institutional quality and economic growth. *J. of International Trade & Economic Development, 28*(5), 561-579.

Balasubramanyam, V. N. (1996). Foreign direct investment and growth in EP and IS countries. *The Economic Journal, 106*(434), 92-105.

Borensztein, E. D.-W. (1998). How does foreign direct investment affect economic growth? *Journal of International Economics, 45*(1), 115-135.

Carkovic, M., & Levine. (2005). Does foreign direct investment accelerate economic growth? *In P. Aghion & S. Durlauf (Eds.),. Handbook of Economic Growth ,* 1725-1771.

Chizema, R. (2025). The impact of foreign direct investment on economic development in South and Southeastern Asia. . *Economies,* 13(6), 157.

Ghosh, S. & Saha, K. Sumanta (2025). Impact of foreign direct investment on economic growth in developing countries: The role of institutional quality. *Sustainable Economies,* 3(1), 389. https://doi.org/10.62617/se389

Hermes, N. &. (2003). Foreign direct investment, financial development and economic growth. *Journal of Development Studies, 40*(1), 142-163.

Hlaváček, P., & Beata Bal, D. (2016). Impact of Foreign Direct Investment on Economic Growth in Central European Countries. *Engineering Economics, 27*(3), 294-303.

Ikani, K. S. (2024). The impact of foreign direct investment inflows on unemployment and economic growth in West Africa. *NURTURE*.

Kyuntae, K., & Hokyung, B. (2008). The Impact of Foreign Direct Investment on Economic Growth: A Case Study of Ireland. *KIEP Working Paper 08-04*.

Li, J. (2025). The impact of Foreign Direct Investment (FDI) on Economic Growth and Income Inequality in Developing Countries.*Advances in Economics, Business and Management Research .DOI: 10.2991/978-94-6463-874-5_53*

Lucas, R. E. (1988). On the mechanics of economic development. . *Journal of Monetary Economics, 22*(1), 3-42.

Nuzhat, F. (2009). Impact of Foreign Direct Investment on Economic. *International Review of Business Research Papers, 5*(5), 110-120.

Romer, P. M. (1994). The Origins of Endogenous Growth. *Journal of Economic Perspectives, 8*(1), 3-22.

Solow, R. M. (1956). A Contribution to the Theory of Economic Growth. *Quarterly Journal of Economics, 70*(1), 65-94.

UNCTAD. (2023). *World Investment Report 2023: Investing in Sustainable Energy for All.*