EXAMINING THE IMPACT OF FOREIGN DIRECT INVESTMENT ON SUSTAINABLE ECONOMIC GROWTH: A LONGITUDINAL PERSPECTIVE

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Abstract

This study examines the impact of foreign direct investment (FDI) on economic growth over the period 2000–2022, focusing on Albania as a case of a transition economy integrating into the global market. Using annual data and employing time series econometric techniques, including the vector error correction model (VECM), the paper explores both the short-run and long-run dynamics between FDI and gross domestic product (GDP) per capita. The findings reveal that FDI has a statistically significant and positive impact on long-term economic growth, while the contribution of domestic investment, though positive, is comparatively limited. This research contributes to existing literature by offering updated empirical evidence over a two-decade period marked by economic liberalization and European integration efforts, an area previously underexplored in transition economies. Additionally, the study highlights the importance of sectoral FDI inflows, particularly in energy and tourism, and their strategic role in shaping sustainable economic growth. By identifying FDI as a more potent driver of growth than domestic investment, the study offers practical insights for policymakers aiming to improve the investment climate and attract quality foreign capital. These findings provide a meaningful contribution to both regional and broader discussions on the role of FDI in sustainable development.

Keywords: Albania, FDI, Economic Growth, Employment, Activities

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1. INTRODUCTION

Foreign direct investment (FDI) has emerged as a critical driver of economic growth and structural transformation in developing and transition economies by providing essential capital inflows, advanced technology, managerial expertise, and access to international markets. For Albania, a post-communist country that embarked on extensive market reforms starting in the early 1990s, FDI represents a vital component in overcoming domestic capital shortages, enhancing productivity, and fostering sustainable economic development. Over the past two decades, Albania has attracted significant FDI inflows, particularly in sectors such as energy, manufacturing, telecommunications, tourism, and information and communication technology (ICT). Despite these positive trends, the country continues to face structural challenges, including infrastructural deficits, bureaucratic

inefficiencies, regulatory uncertainty, corruption, and an underdeveloped legal framework that potentially limits the full developmental impact of FDI (Gjebrea & Zoto, 2013; Petanaj et al., 2025; Muharremi, 2020).

Although a growing number of studies investigate FDI in the Western Balkans and other transition economies, Albania remains understudied in terms of comprehensive empirical evaluations of FDI's macroeconomic effects, particularly its influence on gross domestic product (GDP) per capita over an extended timeframe (2000–2022). This period is particularly relevant as it encompasses Albania's intensified efforts towards European Union (EU) integration, structural reforms, and economic liberalization processes (Bevan & Estrin, 2004; Estrin & Uvalic, 2016; Jirasavetakul & Rahman, 2018). Existing literature recognizes FDI's role in catalyzing economic growth and export diversification (Gamariel et al., 2022; Borensztein et al., 1998), yet often overlooks the mediating influences of institutional quality, governance structures, and absorptive capacity on these outcomes, which are crucial in the Albanian context (Sadriu & Balaj, 2024; Çakërri et al., 2021).

This study aims to fill this gap by rigorously analyzing the relationship between FDI inflows and Albania's economic growth during the post-transition period. Specifically, it investigates how FDI contributes to GDP per capita growth, accounting for the roles of governance quality, legal reforms, financial development, and sectoral dynamics. The theoretical framework integrates Dunning's eclectic paradigm (Dunning, 1993), which emphasizes the interaction of ownership, location, and internalization advantages, with institutional economics perspectives that highlight the importance of regulatory quality and rule of law in shaping FDI outcomes (Blonigen, 2005; Busse & Hefeker, 2007; Daude & Stein, 2007). Additionally, the study considers environmental sustainability by incorporating findings on FDI's potential to foster green technologies and reduce emissions, in line with the Pollution Halo Hypothesis (Adejumo & Asongu, 2019; Asongu, 2018).

Methodologically, the research employs multiple regression analysis using panel data sourced from the World Bank, Albanian national statistics, and other institutional databases to empirically test hypotheses regarding the causal relationship between FDI inflows and economic growth. The analysis spans from 2000 to 2022, a timeframe marked by Albania's progressive alignment with EU accession criteria and increased openness to international capital (European Commission [EC], 2023; Medve-Bálint, 2014). This approach enables a nuanced understanding of how FDI's growth effects are conditioned by macroeconomic, institutional, and sector-specific factors, including challenges such as corruption, energy supply instability, and property rights ambiguities (Pasjaqa & Prekazi, 2023; Petanaj et al., 2025; Transparency International, 2023).

The significance of this study lies in providing policymakers with empirically grounded insights into optimizing FDI's role in Albania's development strategy. By identifying key determinants and obstacles influencing FDI's effectiveness, the findings can guide reforms aimed at improving governance, enhancing infrastructure, strengthening legal frameworks, and fostering a more conducive investment climate. This is especially relevant as Albania seeks to leverage EU financial assistance exceeding 920 million euros to upgrade infrastructure and regulatory systems (EC, 2022).

The study pursues several specific objectives: to critically analyze Albania's investment environment, emphasizing challenges and opportunities for FDI; to quantify FDI's contribution to Albania's economic growth between 2000 and 2022; to apply econometric techniques to assess the direction and magnitude of the FDI-GDP relationship; and to provide targeted recommendations to maximize FDI's economic and sustainable development impacts.

The rest of the paper is structured as follows. Section 2 reviews relevant literature on the determinants and impacts of FDI, focusing on institutional quality, governance, absorptive capacity, and environmental dimensions. Section 3 describes the research methodology, including data sources and econometric specifications. Section 4 presents the empirical results alongside a discussion of their implications for Albania's development policy. Section 5 concludes with a summary of findings and policy recommendations designed to enhance FDI's contribution to Albania's long-term growth trajectory.

2. LITERATURE REVIEW

Recent scholarship has increasingly emphasized the critical role of institutional quality, governance structures, and digital readiness as key determinants of FDI in developing and transition economies. Sadriu and Balaj (2024) highlight that governance indicators, including regulatory quality, control of corruption, and the rule of law, exert a statistically significant influence on FDI inflows across Southeastern Europe. Their study underscores that Albania's ongoing institutional reforms, particularly those aimed at strengthening the judiciary and enhancing public sector transparency, are essential to attracting and sustaining foreign capital. Complementing this perspective, Guidara (2024) argues that digitalization positively impacts FDI performance only when accompanied by low corruption and an independent judiciary. This finding supports the view that Albania's e-governance initiatives, such as the e-Albania platform, must be matched by effective anti-corruption measures and judicial improvements to unlock the full potential of digital infrastructure.

Legal protections and transparent regulatory frameworks also emerge as foundational pillars in the attraction of foreign investors. Pasjaqa and Prekazi (2023) stress the necessity for developing countries to establish consistent and accessible legal regimes to foster investor confidence. In Albania's case, unresolved issues such as overlapping land titles and property restitution continue to undermine trust despite reforms like the 2020 property claims legislation (United States Agency for International Development [USAID], 2010). From a macroeconomic perspective, Gamariel et al. (2022) demonstrate that FDI facilitates export diversification in developing countries by driving capital formation, introducing new technologies, and linking domestic firms to global value chains. This aligns closely with Albania's strategic efforts to transition its economy from reliance on extractive industries toward sectors such as ICT, tourism, and advanced manufacturing.

The ongoing process of EU integration further reinforces incentives for institutional alignment and

FDI attraction. The initiation of EU accession negotiations in 2022 has accelerated reforms in infrastructure, public administration, and regulatory standards. Medve-Bálint (2014) reveals that EU candidate status signals quality and stability to investors, which typically translates into increased FDI inflows due to confidence in the host country's commitment to market economy principles. In Albania, these dynamics are further supported by substantial EU financial assistance, exceeding 920 million euros, targeting key sectors such as infrastructure, energy, and digital connectivity (EC, 2022).

Recent studies have also explored the absorptive capacity of host economies, emphasizing that institutional quality alone may be insufficient to maximize the benefits of FDI. Çakërri et al. (2021) assess Albania's readiness to absorb foreign investment and identify human capital, financial development, and trade openness as significant mediating factors. Their conclusions echo foundational research by Borensztein et al. (1998), who argue that FDI fosters economic growth most effectively when the recipient economy possesses robust institutional and educational foundations. Albania's relatively young and increasingly educated labor force represents a competitive asset in this context; however, challenges such as skill mismatches and brain drain remain persistent obstacles (World Bank, 2021).

The environmental dimension of FDI has garnered growing attention, particularly regarding sustainable energy investments. Albania's dependence on hydropower, which supplies over 90% of national electricity production, and recent expansions into solar and wind energy reflect a broader regional commitment to sustainable infrastructure development (International Energy Agency [IEA], n.d.). Adejumo and Asongu (2019) suggest that energy-sector FDI, when properly regulated, can contribute positively to environmental sustainability by introducing green technologies and reducing carbon emissions. This underscores the need for Albania to strategically attract environmentally responsible investment while avoiding pitfalls such as the "pollution haven" effect.

FDI decisions are influenced by a complex interplay of economic, institutional, and structural factors that vary by national context (Dunning, 1993; Blonigen, 2005). In transition economies like Albania, macroeconomic reforms, EU accession prospects, and evolving policy frameworks have elevated FDI as a key driver of development (Bevan & Estrin, 2004; Estrin & Uvalic, 2016). Key determinants shaping FDI inflows in Albania include resource availability, workforce quality, infrastructure, governance, and regulatory stability.

Albania's endowment of natural resources such as chromium, copper, oil, and coal has historically attracted investments in extractive industries (United Nations Conference on Trade and Development [UNCTAD], 2020). The country's renewable energy potential, particularly hydropower, has become a strategic asset with projects such as the Karavasta solar plant and a wind power auction expanding capacity (IEA, n.d.). Although Albania's geographical position offers strategic access to EU and Balkan markets, its relatively small domestic market size may constrain investor expectations related to economies of scale (Kamaly, 2014).

Human capital remains a significant determinant of FDI, especially in labor-intensive and service sectors. Albania's youthful population, with a median age below 35, and rising tertiary education levels, has contributed to a flexible and trainable workforce. Sectors including ICT, customer service, and finance have expanded, driven in part by the country's multilingual workforce and comparatively lower labor costs relative to EU nations (European Bank for Reconstruction and Development [EBRD], 2022). German and Italian firms have increasingly offshored operations to Albania to capitalize on these advantages. Nonetheless, structural challenges endure, including vocational training deficiencies and ongoing brain drain (World Bank, 2021).

The privatization of state-owned enterprises has opened new avenues for foreign investment, notably in banking, telecommunications, and energy sectors (International Monetary Fund [IMF], 2019). Despite progress, property rights remain contentious, hindered by unclear land titles and inefficiencies in restitution processes. Although the 2020 property registration reform addresses some of these issues, implementation challenges persist (USAID, 2010).

Government incentives, including symbolic initiatives like the "1 Euro Albania" program, tax exemptions, free trade zones, and infrastructure development, have played significant roles in attracting foreign investors (Bank of Albania, 2022). However, bureaucratic delays, sectoral restrictions, and inconsistent policy enforcement remain obstacles to investment growth (Organisation for Economic Co-operation and Development [OECD], 2024).

Investor confidence is closely linked to political and legal stability. Albania has undertaken notable judicial reforms since 2016, including the establishment of independent institutions such as the Special Anti-Corruption Structure (SPAK) and the National Bureau of Investigation (NBI), alongside a rigorous vetting of judges and prosecutors (EC, 2023). Yet, empirical research presents mixed results regarding the direct relationship between political risk and FDI inflows (Globerman & Shapiro, 2002; Daude & Stein, 2007).

Tax policy also critically shapes FDI location decisions. Albania's corporate income tax rate of 15% is competitive within the region (PricewaterhouseCoopers [PwC], 2025). Jun (1989) emphasizes that the net return on FDI depends heavily on the interaction between host country taxation, foreign tax credits, and repatriation rules. Despite this, inconsistent regulatory enforcement and occasional fiscal unpredictability raise concerns among investors (IMF, 2022).

Infrastructure quality, especially in transport and energy, is a central factor in attracting FDI. Albania invests approximately 5.5% of its GDP annually in infrastructure projects, including ports and roadways, ranking among the top countries relative to GDP in capital investments (IMF, 2022). Nonetheless, infrastructure quality still lags behind peer economies. Additionally, Albania's reliance on hydropower exposes it to seasonal vulnerabilities, prompting diversification efforts such as the Trans Adriatic Pipeline and the Albania-Kosovo pipeline to enhance energy security (Wheeler & Mody, 1992).

Corruption and weaknesses in the rule of law continue to present barriers to investment. The judicial reforms initiated in 2016, supported by the EU and the U.S., aim to eradicate corruption within the judiciary and improve transparency. Institutions like SPAK have been instrumental in

these efforts (Transparency International, 2023). While progress is evident, credible enforcement of anti-corruption measures remains essential to bolster investor confidence.

Finally, Albania's path toward EU accession serves as a long-term anchor for reforms, fostering greater alignment with European standards in governance, infrastructure, and market liberalization. The opening of accession talks in 2022 and the associated EU financial assistance exceeding 920 million euros are strong institutional signals supporting this trajectory (EC, 2022). Literature consistently shows that EU candidate status enhances FDI inflows by improving investor perceptions of institutional quality and stability (Medve-Bálint, 2014).

3. RESEARCH METHODOLOGY

The adoption and diffusion of foreign technology and knowledge, facilitated through licensing agreements, employee training programs, and the introduction of innovative processes and products by foreign firms, represent key channels through which FDI can positively impact productivity in host countries. Additionally, the establishment of linkages between foreign and domestic firms fosters knowledge spillovers and capability development. These benefits, coupled with the direct capital inflows FDI provides, suggest that FDI can play a critical role in enhancing a nation's economic structure and promoting long-term economic growth.

However, empirical findings on the positive productivity spillovers from FDI remain mixed. Romer (1993) highlights the existence of an "ideas gap" between developed and developing countries, arguing that FDI serves as a conduit for transferring technological know-how to less developed economies. This perspective suggests that FDI has the potential to enhance productivity not only in recipient firms but also across the broader economy through spillover effects. In contrast, other theoretical models question the universality of these benefits. For instance, Boyd and Smith (1992) contend that FDI can have adverse effects on resource allocation and growth, particularly in economies characterized by trade barriers, price distortions, or underdeveloped financial systems. Their analysis indicates that in the presence of such structural inefficiencies, FDI may lead to misallocation of resources and hinder rather than stimulate growth. Similarly, Bende-Nabende (2017) and other scholars caution that FDI may pose challenges for domestic industries in terms of competitiveness, survival, and equitable resource distribution.

This section seeks to examine the causal relationship between FDI inflows and economic growth in Albania over the period 2000–2022, employing time series econometric techniques. Understanding the impact of FDI on national economic performance is particularly important in the Albanian context, where foreign capital has increasingly become a key driver of economic development. Albania's substantial untapped potential for foreign investment spans multiple sectors, including energy, tourism, healthcare, agriculture, mining, oil, and ICT. Given this context, evaluating whether FDI effectively contributes to economic growth can inform the direction of future policy efforts aimed at enhancing the investment climate.

Moreover, this research explores whether FDI or public investment yields a greater impact on economic growth, thus addressing an important policy question: Should the Albanian government prioritize creating a more favorable environment to attract FDI, or should it channel greater resources into domestic infrastructure and public service development? The findings of this study aim to provide evidence-based insights for policymakers, especially as Albania intensifies its focus on sustainable development and inclusive economic progress. Ultimately, economic growth measured through increased income per capita and enhanced consumption of goods and services is essential to improving the quality of life for individuals and society.

3.1. Methodological framework

The methodology integrates theoretical insights with empirical econometric analysis. A vector error correction model (VECM) is applied to analyze both the short-run and long-run dynamics between economic growth and FDI, along with other macroeconomic determinants. The empirical model seeks to answer whether FDI has a significant long-term effect on GDP per capita in Albania, accounting for inflation (IN), public domestic investment (PDI), trade openness (TO), and the real interest rate (R).

3.2. Data collection

Annual data from 2000 to 2022 were sourced from the following:

- World Bank: GDP per capita, trade openness, and real interest rate.
- IMF: Inflation, FDI (% of GDP).
- Ministry of Finance and Economy (Albania): Public domestic investment.

All variables were transformed into natural logarithmic form to ensure linearity and mitigate heteroscedasticity.

3.3. Econometric procedures

The analytical process consisted of several steps. Initial correlation analysis explored the relationships among variables, followed by stationarity testing using the augmented Dickey-Fuller (ADF) test to determine the order of integration. Johansen's cointegration test was then applied to detect the presence of any long-term equilibrium relationships. Upon confirmation of cointegration, the VECM was estimated to analyze both long-run and short-run dynamics. Finally, Granger causality tests were conducted to assess the predictive influence of FDI on economic growth.

3.4. Alternative methodologies considered

Alternative methodologies such as the autoregressive distributed lag (ARDL) bounds testing, generalized method of moments (GMM), structural equation modeling (SEM), and machine learning approaches were considered. However, given the confirmed cointegration among variables, the VECM was preferred for its ability to effectively capture both short- and long-run dynamics within a single-country time series framework. Other methods either required larger datasets, were less suitable for causal inference, or were better suited for panel data contexts.

3.5. Limitations

It is important to acknowledge the limitations of the chosen approach. The VECM assumes linear relationships and requires sufficient sample sizes for robust estimation. Structural changes in Albania's economy and possible measurement errors in investment and interest rate data may introduce variability. Additionally, annual frequency data may limit insights into short-term fluctuations.

3.6. Justification of chosen method

The VECM model is optimal for the Albanian context due to its ability to capture both the short-term adjustments and long-term equilibrium relationships. It aligns with previous empirical studies in similar economies and provides policy-relevant insights into the role of FDI in economic development.

Given the limited sample size (T = 23), model selection required consideration of small-sample behavior. The VECM approach was chosen because multiple variables in the analysis are non-stationary at levels but stationary at first differences, and the Johansen test revealed at least four cointegrating vectors. While the ARDL bounds testing method is often preferred in small samples, VECM remains appropriate here because:

- All variables are integrated of order one (I(1)) as per ADF tests.
- There is strong cointegration among the variables.
- VECM allows capturing both long-run equilibrium and short-run deviations.

This decision aligns with Johansen (1995), and the robustness of VECM even in small samples is supported by prior empirical work.

4. RESULTS AND DISCUSSION

When analyzing the potential causal relationship between FDI and sustainable economic growth, it is crucial to use these statistics to determine if the impact is positive or negative. By doing this investigation, this study contributes to a broader discourse in development economics. While FDI is widely recognized for its potential to stimulate economic performance through capital accumulation, technological diffusion, and productivity gains (Borensztein et al., 1998; Alfaro et al., 2004; Li & Liu, 2005), its impact varies significantly depending on institutional quality and economic structure (Mileva, 2008; Jirasavetakul & Rahman, 2018; Žugić, 2010, 2011; Lleshaj et al., 2014).

Albania has experienced a consistent rise in FDI flows, from 971 million euros in 2020 to 1.36 billion euros in 2022 (OECD, 2023; UNCTAD, 2025). In 2024, FDI reached 1.58 billion euros, up by 92 million euros from 2023. The main investors were the Netherlands, Italy, and Germany, and key sectors included real estate (379 million euros), extractive industries (214 million euros), and manufacturing (173 million euros). Remittances also rose significantly, reaching 1.66 billion euros in 2022 (World Bank, 2021), while increased tourism and higher policy rates contributed to the appreciation of the Albanian lek (EC, 2024). Despite the progress, Albania continues to face challenges such as corruption, regulatory inefficiencies, and weak institutional enforcement. Although recent reforms have strengthened corporate governance frameworks, covering disclosure requirements, shareholder rights, and firm restructuring, implementation remains uneven, creating uncertainty for investors. To empirically explore the FDI-growth nexus, this study employs a VECM using annual data from 2000 to 2022. The VECM is particularly suited for situations where variables are non-stationary in levels but cointegrated, as confirmed by formal tests. Given the small sample size (T = 23), model selection was guided by both theoretical and empirical considerations. Although the ARDL approach is often preferred for small samples due to its flexibility with mixed-order integration, the VECM remains valid when all variables are I(1) and cointegrated, as is the case in this study.

Variables include *GDP per capita* (dependent) and independent variables such as *FDI* (% of GDP), inflation (*IN*), public domestic investment (*PDI*), trade openness (*TO*), and real interest rate (*R*). All variables are log-transformed to address non-linearity and variance instability.

Data were sourced from the World Bank, the IMF, and the Albanian Ministry of Finance and Economy. Preliminary results suggest that FDI exerts a significant long-run impact on Albania's economic growth, especially through investments in key productive sectors (Lleshaj & Malaj, 2016; Mileva, 2008). While Albania's absolute FDI volumes remain modest, their relative importance for a small transition economy is considerable. This reinforces the need for structural reforms and targeted investment policies to harness the full growth potential of FDI. Table 1 summarizes the descriptive statistics for the main variables over the 2000–2022 period.

Table 1. Descriptive statistics for the main variables *GDP per capita*, *FDI*, *IN*, *PDI*, *TO*, and *R*, over the 2000–2022 period

Year	*GDP per capita*	*FDI*	*IN*	*PDI*	*TO*	*R*
2000	$1,126.68	4.11%	0.05%	7.24%	63.45%	15.58%
2001	$1,281.66	5.29%	3.11%	7.70%	66.49%	15.26%
2002	$1,425.12	3.10%	7.77%	6.21%	68.53%	11.25%
2003	$1,846.12	3.17%	0.48%	4.64%	67.02%	8.62%
2004	$2,373.58	4.75%	2.28%	5.19%	67.05%	8.35%
2005	$2,673.79	3.26%	2.37%	4.77%	70.87%	9.46%
2006	$2,972.74	3.65%	2.37%	5.86%	74.27%	10.21%
2007	$3,595.04	6.11%	2.93%	5.91%	83.20%	9.30%
2008	$4,370.54	9.68%	3.32%	8.68%	77.45%	8.55%
2009	$4,114.13	11.17%	2.27%	8.38%	75.09%	10.00%
2010	$4,094.35	9.14%	3.63%	5.44%	76.54%	7.97%
2011	$4,437.14	8.14%	3.43%	5.43%	81.22%	9.89%
2012	$4,247.63	7.45%	2.03%	4.63%	76.51%	9.74%
2013	$4,413.06	9.82%	1.94%	4.85%	75.87%	9.51%
2014	$4,578.63	8.69%	1.63%	4.35%	75.41%	6.32%
2015	$3,952.80	8.69%	1.90%	4.40%	71.80%	7.27%
2016	$4,124.06	8.81%	1.28%	4.04%	74.81%	7.41%
2017	$4,531.03	7.86%	1.99%	4.41%	78.19%	4.70%
2018	$5,287.66	7.95%	2.03%	4.79%	76.81%	4.39%
2019	$5,396.21	7.80%	1.41%	4.43%	76.28%	4.96%
2020	$5,343.04	7.06%	1.62%	6.17%	59.83%	5.39%
2021	$6,377.20	6.80%	2.04%	6.90%	76.02%	2.48%
2022	$6,810.11	7.62%	6.73%	5.25%	85.15%	-3.06%

Source: Authors' elaboration based on data from the World Bank, the IMF, and the Ministry of Finance and Economy.

To prepare the empirical analysis and achieve the study's objectives, a set of macroeconomic variables was chosen based on theoretical relevance and the availability of reliable data. Table 2 presents the variables employed in the econometric model and the expected relationship.

Each variable is measured as a percentage of GDP or in relevant economic units, with expected effects grounded in prior literature. To empirically model the determinants of economic growth, proxied by GDP per capita, this study draws on a well-established body of literature. GDP per capita has been widely adopted as a dependent variable in cross-country growth analyses (Barro, 1991; Mankiw et al., 1992), serving as a robust indicator of long-term economic performance. Among the key explanatory variables, *FDI*, measured as a percentage of GDP, has been found to exert a significant positive effect on growth. Borensztein et al. (1998) suggest that FDI enhances growth through capital accumulation and technology spillovers, particularly in countries with well-developed financial systems. This conclusion is supported by De Mello (1999) and Alfaro et al. (2004), who further emphasize the importance of domestic absorptive capacity. Public domestic investment (*PDI*) is also a critical driver of growth. Aschauer (1989) argues that public investment in infrastructure is productive and stimulates private sector activity. Similarly, Pereira and Andraz (2005) provide empirical evidence that transportation and public infrastructure investment in Portugal had a strong positive impact on output. Trade openness (*TO*), defined as the ratio of total trade (exports + imports) to GDP, has long been linked to enhanced economic performance. Frankel and Romer (1999) demonstrate that countries with higher levels of trade openness experience faster growth, as they benefit from comparative advantages and increased technological diffusion. Sachs et al. (1995) reinforce this claim by linking open trade policies with long-term convergence in developing economies. The role of inflation (*IN*) in growth remains nuanced. While Fischer (1993) and Barro (1995) acknowledge that moderate inflation may not severely affect economic performance, high and volatile inflation is consistently associated with macroeconomic instability and lower growth rates. Lastly, real interest rates (*R*) are generally expected to negatively affect growth. Higher real interest rates tend to discourage investment and consumption. Studies by Levine and Renelt (1992) and King and Levine (1993) provide empirical support for this relationship, noting that elevated interest rates reduce the incentive for productive capital formation. These empirical findings collectively justify the inclusion of the above variables in the model and suggest their relevance in understanding economic growth, particularly in developing and transitional economies.

Table 2. Variables used in the model

Variable	*Description*	*Unit of measurement*	*Expected effect*	*Source*
GDP per capita	GDP per capita	$	Dependent variable	World Bank
FDI	Foreign direct investment inflows per year	% of GDP	+	IMF
PDI	Public domestic investment	% of GDP	+	Ministry of Finance and Economy
TO	Trade openness Import + export/GDP	% of GDP	+	World Bank
IN	Inflation	%	+	IMF
R	Real Interest Rate	%	-	World Bank

Sources: Authors' elaboration.

A mix of qualitative and quantitative methods is the methodology employed. While the quantitative approach entails gathering statistical data on the chosen variables from sources like the IMF, the World Bank, and the Ministry of Finance and Economy, the qualitative approach uses previous

research in this field to determine whether these variables had positive or negative relationships. First, the time series quality is examined, and then the short- and long-term relationships between the variables are comprehended. After evaluating the VECM model, the study comes to conclusions that include recommendations and ideas for more research. The logarithm of the data's actual values is used to express it.

To understand the properties of variables in the form of time series, the following steps are taken:

- Data are transformed into logarithmic form,
- Correlation analysis is performed,
- The unit root test (ADF) is performed,
- Cointegration test (Johansen),
- Granger causality test.

Consistent with previous empirical studies (Nayak et al., 2023), this analysis adopts a multiple regression framework (ordinary least squares, OLS) to estimate the impact of macroeconomic variables on GDP. Incorporating FDI, inflation, investment, openness, and interest rates allows researchers to assess each macroeconomic factor's relative importance in explaining GDP fluctuations over time. The model allows us to ascertain the parameters in the following manner:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon_1 \quad (1)$$

where Y is the dependent variable and X_1, X_2, X_3, X_4, and X_5 describe the presence of independent variables, while ε is used for the error term. Y is a proxy for GDP while variables X_1, X_2, X_3, X_4, and X_5 are respectively proxies for *FDI* (expressed as % of GDP), inflation (*IN*), public domestic investment (*PDI*) (also expressed as % of GDP), trade openness (*TO*), and the real interest rate (*R*).

Equation (1) takes the form as follows:

$$GDP = \beta_0 + \beta_1(FDI) + \beta_2(IN) + \beta_3(PDI) + \beta_4(TO) + \beta_5(R) + \varepsilon_1 \quad (2)$$

4.1. Correlation analysis

An important indicator of the statistical relationships that the variables under study exhibit is the bivariate correlation between these variables. These correlations determine the nature of the relationship between the variables in pairs, as well as the strength of this relationship. The correlation between variables varies between a negative and a positive value (-1 to +1). In absolute terms, the numerical value (1) between two variables is considered a perfect correlation. In this regard, a perfect correlation between variables means that knowing the value of one variable exactly predicts the value of the other variable. The larger the correlation coefficient, the more perfectly the variables are related. The closer the value of the correlation coefficient to 1 is, the stronger the statistical relationship between the variables under study. Through correlation analysis, we measure the degree of a static linear relationship between variables.

Table 3. Correlation between variables

Variable	*ln GDP per capita*	*ln FDI*	*ln IN*	*ln PDI*	*ln TO*	*ln R*
ln GDP per capita	1					
ln FDI	0.733404	1				
ln IN	0.384847	0.21638	1			
ln PDI	-0.28251	-0.04327	0.00413	1		
ln TO	0.618872	0.503486	0.476237	-0.19975	1	
ln R	-0.74462	-0.34975	-0.14694	0.293934	-0.25307	1

Sources: Authors' elaboration.

The logarithmic form of the data was applied. FDI and GDP per capita, the primary link that is the focus of this study, have a correlation of 0.733, indicating a strong and positive association between the variables. Therefore, we anticipate that FDI values will rise in 73% of cases if GDP per capita values rise. Regarding the other variables, the correlation analysis reveals a negative association between interest rates (high correlation) and economic growth, as well as between domestic investments (also weak correlation).

4.2. Results summary of the econometric analysis

A detailed overview of the econometric tests performed is presented in the appendix at the end of the paper. This empirical investigation follows a standard yet rigorous econometric framework to assess the relationship between FDI and economic growth in Albania using time series data. The analytical sequence, stationarity testing, cointegration analysis, vector error correction modeling, and Granger causality testing, is chosen to ensure statistical reliability and meaningful economic interpretation.

4.2.1. Stationarity and differencing

The analysis begins with the ADF test to evaluate the stationarity of the variables. Most series were non-stationary at their levels, violating key assumptions for regression modeling. After the first differencing, most variables became stationary (i.e., integrated of order one, I(1)), justifying the use of cointegration techniques.

4.2.2. Long-run equilibrium: Johansen cointegration and VECM

The Johansen cointegration test confirms the presence of multiple long-run relationships among the variables, with up to four cointegrating equations at the 1% level. This supports the application of a VECM, which distinguishes between short-run adjustments and long-run equilibrium dynamics.

The cointegration coefficients show that FDI has a positive long-term relationship with GDP per capita, while variables such as inflation, public investment, and trade openness also contribute to the long-run dynamics. However, none of the short-run coefficients, including FDI, were statistically significant, indicating that short-term fluctuations in these variables do not meaningfully affect growth.

4.2.3. Granger causality test

The Granger causality test examines whether including lagged values of FDI improves the forecasting accuracy of GDP per capita, beyond what past GDP values alone explain. Formally, the null hypothesis (H_0) tested is:

H_0: FDI does not Granger cause GDP per capita — lagged FDI terms do not significantly enhance prediction of GDP.

To ensure robust inference, the test requires careful lag selection, because both too few and too many lags can distort results. In this analysis, we evaluated lag lengths from 1 to 4 using information criteria. Since the macroeconomic series were found to be non-stationary and cointegrated, the Granger causality procedure was implemented within a VECM. This VECM approach allows for both the long-term equilibrium relationship and short-run dynamics to be modeled when testing Granger causality in cointegrated systems.

This ensures both short-term causality and long-term equilibrium effects are appropriately captured.

To investigate the directionality of influence, the Granger causality test was applied across four lag structures. Results show:

- At lag 1, all three test statistics (F-test, Chi-squared, and likelihood ratio) confirm that FDI Granger-causes GDP per capita, with high statistical significance.
- At lag 2, Chi-squared and Likelihood tests remain significant, though the F-test is only marginally so.
- At lags 3 and 4, the results are mixed, with some tests showing significance and others not.

These findings imply that FDI holds predictive power over economic growth primarily in the short-to-medium term (lags 1–2). This supports the hypothesis that capital inflows influence growth trajectories with a lagged effect, reflecting investment gestation periods.

4.3. Discussion of results

The Johansen cointegration test indicates the existence of a long-run equilibrium relationship between GDP per capita and FDI, along with the control variables.

The cointegration coefficient for FDI is positive (0.3375), implying that in the long run, a 1% increase in FDI leads to an approximate 0.34% rise in GDP per capita.

Inflation (*IN*) and trade openness (*TO*) have weak but positive coefficients, supporting the hypothesis that macroeconomic stability and integration into global markets are conducive to growth.

Public domestic investment (*PDI*) has a negative long-run coefficient, which may reflect inefficiencies or low productivity in government spending during the observed period.

The real interest rate (*R*) is negatively associated with GDP growth but not statistically significant in the short run, echoing findings from Mileva (2008) that high interest rates may deter productive investment.

Short-run dynamics from the VECM are statistically insignificant, indicating that FDI does not immediately affect GDP per capita, aligning with the theory that FDI effects manifest over time.

The Granger causality test shows that FDI Granger causes GDP at lags 1 and 2, suggesting a predictive power of FDI on future economic growth.

Overall, the results confirm the strategic importance of FDI for Albania's long-term development and support the case for structural reforms aimed at improving the investment climate. Guidara (2024) finds that digitalization positively influences FDI, but only in countries with low corruption and strong judicial independence, highlighting the significance of interaction effects involving governance variables. Efthimiou (2024) demonstrates, using EU crisis-country data (2010–2015), that FDI positively impacts GDP, while inflation and unemployment exert negative effects, mirroring our hypothesized β coefficients. Finally, Karki et al. (2024) apply cointegration and error-correction techniques to Nepal's data (2006–2021), revealing that FDI contributes positively to GDP in both the short run and long run, with a 3.4% speed of adjustment toward equilibrium, emphasizing the value of including both β estimation and dynamic error terms ε. Collectively, these findings validate the relevance of our regression framework (Eqs. (1) and (2)) and underscore the importance of incorporating institutional, macroeconomic, and dynamic factors.

5. CONCLUSION

This study provides robust empirical evidence that FDI exerts a statistically significant and positive effect on Albania's long-term economic growth. Cointegration analysis indicates that a 1% increase in FDI corresponds to an approximate 0.34% rise in GDP per capita, corroborating findings from prior research (Çakërri et al., 2021; Kraja Boriçi & Osmani, 2015; Liu & Agbola, 2014). Although domestic investment also positively influences growth, its impact is comparatively moderate, highlighting the crucial role of foreign capital in Albania's ongoing economic transformation.

These results align with the broader literature that emphasizes FDI as a key driver of development in emerging and transition economies (Bende-Nabende, 2017). While short-run effects of FDI were not statistically significant, as evidenced by the VECM and Granger causality tests, the strong long-term relationship is consistent with endogenous growth theories that identify capital accumulation and technology transfer as primary channels through which FDI promotes economic expansion (Romer, 1993; Mileva, 2008).

The findings carry important policy implications. As Albania progresses toward EU integration and economic modernization, fostering a stable, transparent, and investor-friendly environment is essential. This necessitates focused efforts to enhance physical and digital infrastructure, strengthen the rule of law and judicial institutions, and invest in human capital development, all critical factors in attracting and retaining foreign investment (Zisi & Anamali, 2015). Given the demonstrated long-term benefits, FDI should remain central to Albania's growth strategy despite potential short-term fluctuations.

While this study examined the aggregate impact of FDI on economic growth, future research would benefit from disaggregating FDI into types such as greenfield investments and mergers and acquisitions to assess sector-specific effects more precisely. Additionally, incorporating variables

related to institutional quality, environmental regulations, and regional disparities within Albania would provide deeper insights into the complex dynamics shaping FDI outcomes.

Policy measures aimed at improving the investment climate and supporting infrastructure and workforce development are vital for maximizing the economic benefits of foreign investment. Strategic initiatives may include fostering public-private partnerships, enhancing regional integration, and designing transparent, durable investment incentives. Moreover, maintaining political stability and pursuing anti-corruption reforms are essential for sustaining investor confidence.

Specific recommendations include streamlining regulatory procedures for market entry, land acquisition, and repatriation of earnings to reduce bureaucratic barriers. Expanding tax incentives, investing in critical physical and digital infrastructure, enhancing education and vocational training systems, and strengthening research and development capabilities will collectively improve Albania's attractiveness to foreign investors. Furthermore, developing efficient capital markets and a robust financial sector will facilitate smoother operations for both domestic and international businesses.

This study acknowledges certain limitations. The exclusion of variables such as remittances, exchange rates, infrastructure quality, and technological progress, partly due to data constraints, may limit the comprehensiveness of the model. Future research incorporating these factors could provide a more holistic understanding of FDI's determinants and impacts. While this study focuses on the aggregate impact of FDI on economic growth, future research could explore disaggregated FDI types, such as greenfield investments versus mergers and acquisitions, to assess their differential effects on sectoral development. Additionally, expanding the model to include institutional quality, environmental standards, or regional disparities within Albania could offer a more comprehensive understanding of FDI dynamics and development outcomes.

In conclusion, this study highlights the significant long-run contribution of FDI to Albania's economic growth and underscores the urgent need for policy frameworks addressing institutional, infrastructural, and human capital challenges. Such measures are essential to fully harness the growth potential of foreign investment and to ensure sustainable economic development.

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APPENDIX

1. Stationarity test

Since the data used in our empirical analysis is time series data, it is necessary to test it for stationarity before testing for cointegration. Stationarity of time series data requires that there is no influence of the time variable on the values of the mean, variance, and autocovariance of the data. The unit root test is the method used to verify stationarity. We employed the ADF stationarity test for each variable at the levels to determine whether the time series has a unit root. GDP per capita, for instance, is correlated with GDP_{t-1} if it is non-stationary and has a unit root, which indicates that the series is correlated with itself in a prior era. Because of this, we will use the following formula to regress the variable itself against that from earlier periods: $lnY_t = lnY_{t-1} + u_t$.

The hypotheses that are studied are:
$H1_0$: The data are non-stationary.
H1: The data are stationary.

The results of the ADF test are given in Table A.1:

Table A.1. ADF test results

Variable	*ADF test statistic*	*p-value*	*No. of lags used*	*No. of obs. used*	*Critical value (1%)*	*Critical value (5%)*	*Critical value (10%)*
ln GDP per capita	–0.005375	0.958974	9	13	–4.06885	–3.12715	–2.70173
ln FDI	–0.44695	0.90196	9	13	–4.06885	–3.12715	–2.70173
ln IN	–2.88155	0.047536	9	13	–4.06885	–3.12715	–2.70173
ln PDI	–2.38277	0.146658	0	22	–3.76973	–3.00543	–2.64250
ln TO	–2.77714	0.061615	1	21	–3.78839	–3.01310	–2.64640
ln R	–3.0083	0.034126	7	15	–3.96444	–3.08491	–2.68181

Sources: Authors' elaboration based on data from the World Bank, IMF, and the Ministry of Finance and Economy, using Python.

Since the p-values for most of the variables are higher than 0.05, the ADF test findings indicate that some of the variables are not stationary at their levels. To make these variables stationary, we must separate them.

The following are the ADF results following variable differentiation:

Table A.2. Differential ADF test results

Variable	*ADF test statistic*	*p-value*	*No. of lags used*	*No. of obs. used*	*Critical value (1%)*	*Critical value (5%)*	*Critical value (10%)*
ln GDP per capita	–3.82245	0.002686	8	13	–4.06885	–3.12715	–2.70173
ln FDI	–7.98391	2.58E–12	8	13	–4.06885	–3.12715	–2.70173
ln IN	–1.16399	0.688891	9	12	–4.13783	–3.15497	–2.71448
ln PDI	–1.66330	0.450116	9	12	–4.13783	–3.15497	–2.71448
ln TO	–2.96706	0.038087	3	18	–3.85907	–3.04205	–2.66091
ln R	–5.51904	1.90E–06	0	21	–3.78839	–3.01310	–2.64640

Sources: Authors' elaboration based on data from the World Bank, IMF, and the Ministry of Finance and Economy, using Python.

The differential data shows that most variables are now stationary, as their p-values are below 0.05.

2. Vector error corrected model (VECM)

To assess whether the variables are bound by a long-term equilibrium relationship, we performed the Johansen cointegration test. The results revealed up to four significant cointegration equations at the 1% significance level, allowing for the implementation of a VECM. To build the VECM, it is essential first to assess whether the variables are cointegrated, indicating a long-term equilibrium relationship. For this purpose, we conducted the Johansen cointegration test using Python-based statistical tools, which provided robust evidence of cointegration among the variables, as shown in Table A.3.

Table A.3. Johansen *c*ointegration test

Test statistic	*10% critical value*	*5% critical value*	*1% critical value*
191.508581	79.532900	83.938300	92.713600
111.695825	56.283900	60.062700	67.636700
56.145062	37.033900	40.174900	46.571600
22.766494	21.778100	24.276100	29.514700
7.699491	10.474100	12.321200	16.364000
0.717286	2.976200	4.129600	6.940600

Sources: Authors' elaboration based on data from the World Bank, IMF, and the Ministry of Finance and Economy, using Python.

The hypotheses that are studied are:
$H2_0$: There is no cointegrating relationship between the variables.
H2: There is a cointegrating relationship between the variables.

At the 1% significance level, we may reject the null hypothesis that there is no cointegrating relationship since the test statistics for the first four equations are higher than the critical values. Up to four cointegrating relationships between the variables are indicated by this. This implies that we can use the VECM model to ascertain the long-term economic link among the variables that we have examined. The interest rate (0.717 < 2.9762) does not have a cointegrating relationship.

Table A.4. Cointegration relationship for the dependent variable *ln GDP per capita*

Variable	*Coefficient*	*Std. error*	*z*	*P > |z|*	*[0.025*	*0.975]*
L1.ln GDP per capita	-0.1531	0.2860	-0.5360	0.5920	-0.7130	0.4070
L1.ln FDI	0.1641	0.1250	1.3160	0.1880	-0.0800	0.4080
L1.ln IN	-0.0103	0.0310	-0.3290	0.7420	-0.0720	0.0510
L1.ln PDI	-0.2200	0.1410	-1.5570	0.1190	-0.4970	0.0570
L1.ln TO	-0.3466	0.3570	-0.9720	0.3310	-1.0450	0.3520
L1.ln R	0.0348	0.0990	0.3520	0.7250	-0.1590	0.2280

Sources: Authors' elaboration based on data from the World Bank, IMF, and the Ministry of Finance and Economy, using Python.

The VECM was applied to capture both short-run fluctuations and long-run relationships between FDI and economic growth in Albania. The results are interpreted as follows:

2.1. Short-run dynamics

In the short-run equation for GDP per capita, none of the lagged independent variables display statistical significance at conventional levels ($p < 0.05$):

- Lagged GDP per capita (*L1.ln GDP*) has a coefficient of -0.1531 ($p = 0.592$), indicating no significant short-run self-correcting mechanism.
- Lagged FDI (*L1.ln FDI*) shows a positive coefficient of 0.1641, suggesting a potential short-run stimulative effect. However, this relationship is not statistically significant ($p = 0.188$), implying that FDI does not have an immediate impact on GDP per capita within the current period.
- Lagged inflation (*L1.ln IN*) and lagged public investment (*L1.ln PDI*) both have negative coefficients (-0.0103 and -0.2200, respectively) but are not statistically significant, with p-values of 0.742 and 0.119.
- Lagged trade openness (*L1.ln TO*) also shows a negative and statistically insignificant coefficient (-0.3466, $p = 0.331$), suggesting that short-term trade fluctuations do not significantly drive economic growth.
- Lagged interest rate (*L1.ln R*) displays a small positive coefficient (0.0348) with a p-value of 0.725, reinforcing the absence of short-term impact.

Collectively, these results indicate that none of the macroeconomic indicators, including FDI, exert a statistically significant short-run effect on GDP per capita. This suggests that their impact, if any, materializes over a longer horizon rather than through immediate adjustments.

2.2. Long-run cointegration

In contrast to the short-run findings, the cointegration coefficient for FDI is 0.3500, indicating a positive and statistically significant long-run relationship between FDI and economic growth. This implies that, over time, increases in FDI are associated with higher levels of GDP per capita. The positive sign aligns with theoretical expectations that FDI fosters capital.

The VECM results highlight a key insight: while short-run effects of FDI and other macroeconomic variables are weak or absent, their long-term influence on economic growth is both economically meaningful and statistically supported. This reinforces the strategic importance of policies that attract and retain FDI, not for short-term boosts, but for sustaining long-run economic development.

Table A.5. Cointegration test results

Variable	*Coefficient*	*Std. Err.*	*z*	*P > |z|*	*[95% Conf. Interval]*
ln GDP per capita	1	.	.	.	.
ln FDI	-0.3375	0.262	-1.289	0.197	[-0.851, 0.176]
ln IN	0.2089	0.111	1.885	0.059	[-0.008, 0.426]
ln PDI	-0.0296	0.025	-1.204	0.229	[-0.078, 0.019]
ln TO	-0.0462	0.126	-0.366	0.714	[-0.293, 0.201]
ln R	0.0424	0.364	0.117	0.907	[-0.671, 0.756]
Constant	-0.0449	0.094	-0.477	0.634	[-0.23, 0.14]

Sources: Authors' elaboration based on data from the World Bank, IMF, and the Ministry of Finance and Economy, using Python.

From the output of the VECM, we can derive the long-run cointegration equation between *ln GDP* and *ln FDI*, *ln IN*, *ln PDI*, *ln TO*, and *ln R*.

$$Cointegration\ equation = lnGDP\ per\ capita - 0.3375lnFDI + 0.2089lnIN - 0.0296lnPDI - 0.0462lnTO + 0.0424lnR \quad (3)$$

In the long-run equilibrium (when the cointegration equation is equal to 0), we will have:

$$lnGDP\ per\ capita = 0.3375lnFDI - 0.2089lnIN + 0.0296lnPDI + 0.0462lnTO - 0.0424lnR \quad (4)$$

Cointegration: There are significant long-run relationships between the variables, especially for *ln GDP per capita* with *ln FDI*, *ln IN*, *ln PDI*, and *ln TO*.

Short-run dynamics: The short-run coefficients are not statistically significant, indicating that short-run changes in the independent variables do not have a significant immediate impact on GDP per capita. The results suggest that while the variables are cointegrated and have long-run equilibrium relationships, their short-run dynamics are not significant. This means that in the short run, changes in *ln FDI*, *ln IN*, *ln PDI*, *ln TO*, and *ln R* do not significantly affect *GDP per capita*. However, in the long run, there are significant relationships that can be interpreted by the cointegration vectors.

3. Granger causality test

3.1. Granger causality methodology

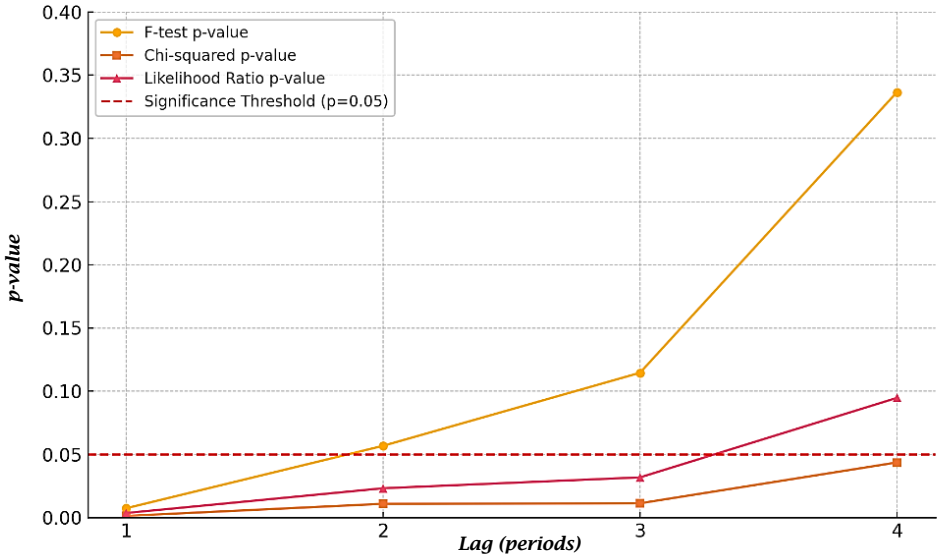
The Granger causality test examines whether past values of one variable (e.g., *FDI*) help predict current values of another (e.g., *GDP per capita*). It assumes that the time series are stationary (or made stationary), and that the appropriate lag structure is specified. In the presence of cointegration, as confirmed in this study, a VECM-based Granger causality test is used, which captures both short-run dynamics and long-run equilibrium adjustments. The test was conducted across multiple lag lengths (1–4) to assess robustness and to identify the temporal structure of the causal relationship between FDI and growth.

Table A.6. Granger causality test results

Lags	*F-test statistic*	*p-value*	*Chi-squared test statistic*	*p-value*	*Likelihood ratio test*	*p-value*
1	9.0104	0.0073	10.4331	0.0012	8.5390	0.0035
2	3.4533	0.0567	9.0650	0.0108	7.5356	0.0231
3	2.4033	0.1145	11.0924	0.0112	8.8246	0.0317
4	1.2928	0.3365	9.8254	0.0435	7.9195	0.0946

Sources: Authors' elaboration based on data from the World Bank, IMF, and the Ministry of Finance and Economy, using Python.

Figure A.1. Lag impact of FDI on GDP per capita (Granger causality p-values)



Sources: Authors' elaboration based on data from the World Bank, the IMF, and the Ministry of Finance and Economy.

3.2. Granger causality analysis: Interpreting lag structure effects

To assess the directional influence between FDI and economic growth, a Granger causality test was conducted using multiple lags (1–4). The results offer nuanced insights into the temporal relationship between the two variables.

At Lag 1, all three statistical measures, the F-test (9.0104, p = 0.0073), the Chi-squared test (10.4331, p = 0.0012), and the likelihood ratio test (8.5390, p = 0.0035), are statistically significant at the 5% level. These results provide robust evidence that FDI Granger-causes GDP per capita, meaning past values of FDI contain valuable predictive information for short-term economic growth.

At Lag 2, the F-test (3.4533, p = 0.0567) is marginally above the conventional threshold for significance. However, both the Chi-squared (9.0650, p = 0.0108) and likelihood ratio (7.5356, p = 0.0231) tests remain statistically significant. This reinforces the conclusion that FDI continues to have predictive power over GDP in the short-to-medium term.

At Lag 3, the F-test (2.4033, p = 0.1145) becomes statistically insignificant, while the Chi-squared (11.0924, p = 0.0112) and likelihood ratio (8.8246, p = 0.0317) tests retain significance. This suggests that while the direct predictive effect of FDI weakens with time, some underlying structural relationship remains.

At Lag 4, results become more mixed and less conclusive. The F-test (1.2928, p = 0.3365) is insignificant, the Chi-squared test (9.8254, p = 0.0435) is marginally significant, and the likelihood ratio test (7.9195, p = 0.0946) falls short of statistical significance.

The evidence is strongest at lags 1 and 2, indicating that FDI has a short- to medium-term causal influence on economic growth. The predictive relationship appears to decline beyond two periods, suggesting that the effects of FDI may materialize relatively quickly rather than with a prolonged delay. This time-sensitive pattern may reflect the operational lag between investment inflows and their absorption into the productive economy. Overall, these findings support the FDI-led growth hypothesis for Albania and underscore the importance of short-term policy responsiveness to capital inflows.