

# **Relationship between Foreign Direct Investment and Economic Growth: A Case of Romania**

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## **Abstract**

Inward Foreign Direct Investment (FDI) occupies a crucial and fundamental importance in the economic growth of any country. In this article we tried to gauge the impact of FDI upon economic growth of Romania. We extracted annual time series data for the dependent variable (GDP per capita growth) and explanatory variables (FDI, Gross Capital Formation and Employment) for the period spanning from 1993 to 2022. To determine the long run relationship between the variables, we used Auto regressive distributed lags (ARDL) bounds test of co-integration via EViews software. The empirical findings revealed the existence of a long-run relationship among the variables of the model. We found that FDI has a significant positive impact upon GDP; furthermore, FDI is also uni-directionally causing the Gross Capital Formation. These insights offer valuable implications for policymakers aiming to optimize the economic impact of FDI; it is recommended that Romania should focus on FDI-led growth policies so that economic growth could be further boosted.

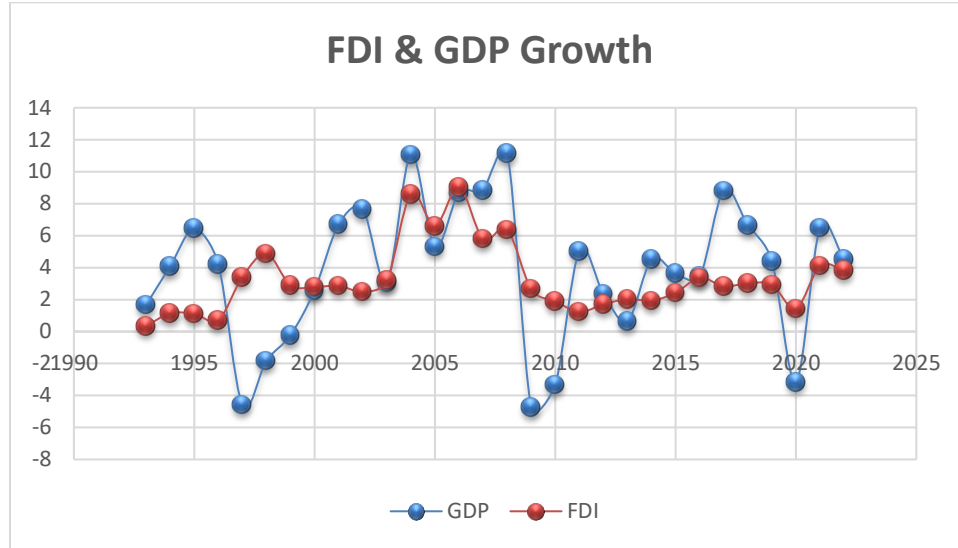
**Keywords:** Romania, FDI, economic growth, capital formation, employment, Eastern Europe.

## **1. Introduction**

Romania has been in transition since the collapse of communism, and the majority of its citizens expect trade liberalization and foreign inflows to have a favorable impact on the country's economy (Cristina & Ioana, 2020). On the other side, the high immigration rate in Romania is a hindrance to the country's capacity to attract foreign investment. While the loss of skilled workers due to emigration has a negative impact on Romania's capacity to attract FDI in the short term, the possibility of returning labor has the potential to increase the country's attractiveness to investment in the long run (Josifidis et al., 2020). Increased human capital generation, technological externality, and entry into new foreign markets have all been noted as possible FDI's spillover effects on the host economy (Ge et al., 2022). International commerce allows for the unrestricted flow of goods, services, and factors of production across national boundaries. The prevailing consensus among

politicians and economists has continually advocated for the superiority of free trade over other trade models. This preference stems from its perceived ability to alleviate poverty, mitigate inflationary pressures, and foster job creation. The health and education industries should be prioritized (Aggarwal & Karwasra, 2023).

Figure 1 (below) shows GDP per capita growth rate (annual %) & Inward FDI (% GDP) to Romania during the period 1990-2023:



**Figure 1: GDP Growth & Inward FDI (Source: WDI 2024)**

Foreign direct investment has emerged as a significant financial resource for several nations committed to promoting free trade and facilitating the growth of multinational organizations. Institutional effects on the growth of international trade and GDP have received more attention in recent years (Wang et al., 2023). The significance of establishing robust institutions cannot be overemphasized. The institutional quality of an economy may be assessed by the extent to which its essential socioeconomic activities and behaviors are effectively managed and shaped by mechanisms such as laws and regulations (Tomizawa et al., 2020). In developing and transition economies, securing FDI is typically considered as a vital driving force since it may boost capital creation and job creation, exports, and transfers. The sector's core is in technical processes and the sustained development of new technologies, as well as the enhancement of management and marketing capabilities to enhance labor efficiency (Faisal et al., 2021). Rather than depending on foreign investment or indigenous economic resources, Romania persists in prioritizing the expansion of larger

enterprises. The proposal to privatize the energy and finance sectors has garnered attention from global investors.

Foreign direct investment has a substantial influence on several dimensions of economic development, including the promotion of nascent technologies, the augmentation of human resource capacities, the encouragement of domestic investments, and facilitating of global commerce (Bajrami & Zeqiri, 2019). FDI is considered as one of the major driving forces behind GDP growth, and it also acts as a means for transferring latest technologies to the host countries (Aysan et al, 2020; Kayani, 2021; Kayani et. al., 2024; Kayani & Gan, 2022; Nawaz et al, 2023). Countries with open economies tend to attract a larger proportion of FDI in comparison to those with stricter governance. This may be attributed to the fact that open economies provide investors the opportunity to access a highly educated workforce and chances for development that beyond the average level (Simionescu & Naroş, 2019). Exerting significant control or influence on the operations of foreign enterprises constitutes a prominent characteristic of FDI (Haudi et al., 2020). The examination of the correlation between inbound FDI and economic growth in Romania plays a crucial role in enhancing comprehension of the nation's economic development dynamics. Understanding this information is of utmost importance for policymakers and investors who are aiming to maximize FDI inflows in order to achieve sustained economic growth.

Gaining insight into the processes by which these spillovers take place enables the development of strategies that bolster the ability of local businesses to absorb and use such spillover effects. The identification of institutional circumstances that facilitate favorable results from FDI may provide guidance to policymakers in establishing a hospitable environment that supports long-term economic development. The study provides academics and policymakers with valuable information that can be used to develop policies aimed at harnessing foreign investments to drive Romania's economic progress.

#### *1.1 Novelty and Research Contribution*

The contribution of the present research to the prior literature on foreign direct investment, capital formation and employment in Romania is as follows. In contrast to prior works which have separately, or at most in simple pairs, focused these factors on their investigation, this research systematically integrates all the elements under consideration. This work is current in presenting information concerning Romania's economic growth and specifically the impact of FDI upon economic growth following the COVID-19 pandemic. Unlike the previous research, this study considered the most recent and updated dataset for the empirical analysis to capture the most recent trends in the study area. In the end, this work not only contributes to the literature on European emerging economies but also offers a methodological approach that could be applicable to other research of this kind in other European emerging economies. Hence, it is proposed that through the analysis of these various factors interacting with each other, this study's goal is to understand policy intervention and investment points. Thus, the research objectives include first, understanding each of these variables and second, how these variables combine can impact

economic growth of Romania's and third, the improvement of policy-making that sufficiently addresses the growth and development of the Romanian economy.

The remainder of the paper is organized as follows. Section 2 discusses the existing literature review; section 3 refers to the data and methodology. Section 4 shares the results and discussion. Finally, section 5 comprises of conclusion and future research directions.

## **2. Literature Review**

Several empirical studies have looked at the connection between FDI influx and GDP growth in different parts of the globe. Kumari et al. (2023), Sinha and Sengupta (2022), Belloumi and Touati (2022) and Zeeshan et al. (2021) are only a few of the studies whose findings may be used as both theoretical and practical underpinnings for this investigation. Using panel data analysis, Kueh and Soo (2020) analyzed the factors that influenced FDI flows into 38 developing countries from 2000 to 2004. The FDI net inflows exhibited negative and significant statistical correlations with both the rate of inflation and tax. Wacker et al. (2016) reported that export-oriented FDI inflows to Sri Lanka have outperformed market-seeking FDI. Negative and statistically significant effects were found for the real effective exchange rate variable. It showed that the real practical exchange rate appreciation lowered the FDI into Sri Lanka. FDI improved political stability significantly. According to the findings of Yusuf et al. (2020), it was shown that open economic policies had a higher degree of effectiveness in attracting FDI as compared to periods characterized by economic restriction. The study findings indicate that to augment FDI inflows, it is imperative to effectively tackle and mitigate existing barriers, diminish policy ambiguity, and boost overall operational effectiveness. The study conducted by Abel et al. (2021) examined the factors of FDI inflows in Zimbabwe throughout the period spanning from 1980 to 2011. There exists a favorable correlation between long-term FDI influx and both transparency in trade and gross fixed capital formation.

The study conducted by Kumari et al. (2023) shown a substantial negative relationship between the inflation rate and the inflow of FDI. Furthermore, in contrast to the conclusions presented in previous studies (Mohsin et al., 2021), the empirical results did not support the notion that trailed GDP, foreign debt, state expenditure, or delayed exports are significant determinants of short-term FDI inflows. Aluko et al. (2023) conducted a study using panel data including 72 nations throughout the period of 1995-2004. The objective of their research was to examine the determinants that foster FDI, explore the relationship between FDI and free trade, and analyze the investment opportunities as seen by foreign firms. The study conducted by RAMOS (2018) identified many important factors that might account for the observed outcomes. The findings indicate that these variables exhibit strong associations with the expected signals. Nonetheless, the analysis revealed no quantitatively significant correlation between the size of the market and the parameters related to human capital regarding FDI. The research undertaken by Asamoah et al. (2019) aimed to analyze the impact of trade liberalization on FDI in the African continent. A

representative group of 34 African nations was chosen by the investigators, including the time frame from 1996 to 2016. The determining factor in this research was the ratio of FDI to GDP. The empirical research conducted using the random effects model demonstrated a positive correlation between trade liberalization and the quantity of FDI inflows. The empirical findings indicate that the effect of capital openness on FDI inflows is positive but limited in magnitude. The paper proposes the implementation of certain capital and socioeconomic indicators. In their study, Shah and Khan (2016) performed an analysis to examine the effects of trade liberalization on FDI in five ASEAN5 countries. The study included a time frame from 1970 to 2013. The analysis used a random effects model. The results suggest that market size and the level of human capital with the entrance of FDI positively correlated. Nevertheless, it is worth noting that the impact of multilateral and regional trading agreements on FDI remains inconclusive, but trade preferences do have a clear effect.

Rathnayaka Mudiyansele et al. (2021) conducted an empirical investigation using a panel data analysis methodology to examine the determinants of FDI inflows in Romania. The study examined the inflow of FDI into Romania from other countries. The analysis included many independent variables, including the country's GDP, export growth of the source nations, relative international exchange rate, and differences in borrowing costs, relative labor costs, and the nation's risk score. The research findings indicate a negative relationship between FDI and the export capabilities of the country of origin. Sabir et al. (2019) conducted a study whereby they examined the impact of institutional quality on FDI inflows using panel data throughout the period of 1996 to 2016. The study was carried out with the methodical Generalized Method. The institutional quality's impact on FDI inflows was assessed while accounting for factors such as inflation, openness to trade, cell phone usage per 100 individuals, GDP per household, and the proportion of agriculture's contribution to GDP in terms of value-added. The empirical findings indicate that institutional quality has a positive impact on FDI across all categories of states. Developed countries had higher levels of the supremacy of legislation, political security, government efficiency, government effectiveness, government voice and accountability, and the amount of foreign direct investment compared to their developing counterparts. The FDI inflows of developed countries experienced a negative impact from various factors, like GDP per capita, the percentage of agriculture value-added in relation to GDP, and inflation. Conversely, FDI inflows into developing countries were positively influenced by factors like GDP per capita, trade openness, the percentage of agriculture value-added in relation to GDP, and infrastructure.

Gunawardhana and Damayanthi (2019) conducted a study that considered various factors that could potentially influence the flow of FDI. The study aimed to analyze the influential factors affecting FDI inflow in the countries belonging to the SAARC, and to assess their impact on economic growth during the period from 1980 to 2018. The results of the study indicate that FDI inflows into the South Asian region are significantly impacted by several factors, including the growth of GDP per capita, the balance of current accounts, the level

of financial deepening (measured by the amount of money and quasi money in circulation), and the degree of trade openness. The coefficient of the INF variable exhibited an upward trend; however, it did not reach statistical significance. This implies that the inflation's impact on the fluctuation of FDI inflows in the region is not significant. Furthermore, the inflow of FDI was shown to be highly impacted by infrastructure, as well as other qualitative attributes. A bidirectional Granger causality relationship between trade and FDI has been identified among seven states within the SAARC region.

Between the years 1989 and 2016, Adewale (2022) used an OLS and Fixed Effect model to assess the determinants of FDI inflows into the Visegrad countries. In the context of the Visegrad states, there exists no substantial correlation between FDI inflows and several economic indicators, such as GDP per capita, inflation rate, unemployment rate, or innovation characteristics. There exists a notable and statistically significant association between the influx of FDI and two key factors: the level of gross earnings and the fraction of the workforce with a minimum of secondary education. The aforementioned factors had a pivotal role in influencing the influencing FDI. The results of this research suggest that the four nations examined placed a higher emphasis on offering investment assistance, like tax advantages and other forms of support, rather than considering essential macroeconomic variables when attempting to attract FDI. In their study, Rao et al. (2023) conducted an analysis of the many variables that contributed to FDI in the regions of South-East Asia and South Asia. The independent determinants of the model encompassed market share, economic stabilization and development prospects, labor cost, infrastructure capacity, freedom of trade, total labor force, and gross capital formation. The study results indicate that many variables may contribute to the inflow of FDI in South Asia. These elements include the size of the industry, the level of trade transparency, labor costs, and the availability of infrastructure facilities, fiscal stability, and development prospects. Nevertheless, the variables of gross capital creation and labor force components did not demonstrate statistical significance. The analysis indicated that the variability in FDI inflows across the years could not be adequately accounted for either by fluctuations in gross capital formation or labor costs.

Aromasodun (2022) conducted a study on the patterns and determinants of FDI in Africa. The researcher used a pooled regression approach to examine the variables that influenced the net inflows of FDI to Africa between 1976 and 1996. The factors that are autonomous in this model include financial consolidation (measured by M2/GDP), tax on revenue global commerce, phone mainlines per 1,000 individuals, aggregate debt, commerce as a share of GDP, fluctuations in exchange rates, and region. Within the framework of this context, the term "region" is used as an integer, serving as a representation of sub-Saharan African areas. The parameters of credit to the private industry, export processing region, and capital gain tax were found to have a highly significant adverse impact. Conversely, the variables of GDP yearly increase and facilities as symbolized by the number of cell

phones per 1,000 individuals, were found to have an empirically noteworthy positive effect. On the contrary, the impact of political and civil liberties, rising prices, economic depth, tariffs on trade, the repayment of debt proportion, and the fluctuation of the currency exchange rate on the inflow of FDI into Africa was shown to be insignificant. Ultimately, it is suggested that the enhancement of infrastructure in African countries should be pursued to augment international investment. In their study, Aremo and Abiodun (2020) examined the relationship between FDI and trade liberalization in 25 sub-Saharan African states. The researchers used panel data spanning the years 1977 to 2009 to explore the Granger causality relationships between these two variables. The results indicated a reciprocal causal association between trade liberalization and FDI in Sub-Saharan nations. Ultimately, it was suggested that African states should enhance their capabilities in exporting and producing to strategically position themselves for the attraction of FDI.

Mwakabungu & Kauangal (2023) employed the autoregressive distributed lag model and found the both long-run and short-run significant positive relationship between FDI & economic growth in case of Tanzania. Fazaaloh (2024) also found the significant positive relationship between FDI & economic growth in case of Indonesia. The study conducted by Hamid and Jena (2020) used Granger causality tests to investigate the relationships amongst FDI and commerce in the context of India. The empirical analysis revealed that China's FDI had a linear causal association with imports, indicating that FDI influenced imports. Conversely, FDI demonstrated a bilateral causal link with exports, suggesting that FDI influenced exports and vice versa. In the context of India, a significant association was seen between FDI and both imports and exports, as well as between exports and imports, indicating a reciprocal link. Camara (2023) used the ARDL Bounds test methodology to analyze the impact of both monetary and non-economic factors on the total amount of FDI. The economic factors included in this study comprise the Treasury bill percentage, retail price index, real GDP, foreign exchange rate, corporate tax, labor cost, and trade accessibility. On the other hand, the political dimensions considered consist of political unpredictability, the occurrence of aggression or terrorist activity, and the level of corruption regulation. The results of the extended-term equation suggest that the size of the economy, as measured by GDP, has a favorable influence on the influx of FDI via the devaluation of domestic currencies, mortgage rates, and wage rates. Furthermore, the remittances also play an important role in the economic growth and poverty reduction of any country (Nawaz et al, 2023).

### **3. Data and Methodology**

#### *3.1. Data and Variables*

We took Gross Domestic Product per capita (GDP) as dependent variable whereas inward FDI as % of GDP (FDI); capital formation as % of GDP (CFM) & Employment as % of total employment (EMP) as independent variables. We took the annual time series data from 1993 to 2022 from World Development Indicators. The further description of the variables is shared below in table 1.

**Table 1: Data and Variables Description**

Variables	Symbols	Description & Measurement Scale	Data Source
Economic Growth	GDP	GDP per capita growth (annual %)	WDI, 2024
Foreign Direct Investment	FDI	Foreign direct investment, net inflows (% of GDP)	WDI, 2024
Capital Formation	CFM	Gross Capital Formation (% of GDP)	WDI, 2024
Employment	EMP	Employment in industry (% of total employment)	WDI, 2024

*3.2. Econometric Model*

In this study we are aiming to assess the impact of inward FDI upon economic growth of Romania. GDP per capita is dependent upon Inward FDI, capital formation & employment etc.

$$GDP_t = f(FDI_t, CFM_t, EMP_t) \tag{1}$$

The general model to be estimated is shared below

$$GDP_t = b_0 + b_1FDI_t + b_2CFM_t + b_3EMP_t + e_t \tag{2}$$

where

- GDP = GDP per capita growth (annual %)
- FDI = Inward Foreign Direct Investment (% of GDP)
- CFM = Gross Capital Formation (% of GDP)
- EMP = Employment in industry (% of total employment)
- t = time from 1993 - 2022
- et = error term

The long-run relationship can be specified via Auto regressive Distributed Lag Model equation as below

$$GDP_t = b_0 + b_1GDP_{t-1} + b_2FDI_{t-1} + b_3CFM_{t-1} + b_4EMP_{t-1} + e_t \tag{3}$$

Where  $GDP_t$  is the GDP per capita growth from 1993 to 2022. Whereas  $b_1, b_2, b_3$  &  $b_4$  are the long-run coefficients and  $e_t$  is the error term. We apply ARDL co-integration when the



variables have mixed integration. But no variable, either dependent or independent should be stationary of level I (2) to avoid the spurious results.

#### 4. Empirical Results

##### 4.1. Descriptive Statistics

The results of descriptive statistics are shared below in the Table 2. The descriptive statistics show that data is normal and there is no issue of outliers.

**Table 2: Summary Statistics for the Selected Variables**

Variables	Mean	Median	Maximum Value	Minimum Value	Standard Deviation
GDP	3.806381	4.304622	11.14421	-4.726893	4.316867
FDI	3.254144	2.848471	9.020061	0.356585	2.150713
CFM	24.65875	24.41143	33.09317	15.64931	3.501996
EMP	29.88610	30.02343	33.09748	25.80259	1.895209

The mean value of GDP is 3.80, with a minimum value of -4.72 and a maximum of 11.14, which indicates significant economic growth in Romania. Inward FDI has a minimum value of 0.35 and a maximum value of 9.02, indicating a significant increase in FDI. Gross capital formation has minimum value of 15.64 and maximum value 33.09. Finally, the minimum and maximum values of employment are 25.80 & 33.09 respectively.

##### 4.2. Augmented Dicky Fuller (ADF) Unit Root Test

To check the stationary of the variables, Augmented Dicky Fuller (ADF) unit root test was proposed by Dickey & Fuller (1979). A series of data is said to be stationary if its statistical properties, such as mean, variance and covariance, are constant or time-invariant. We can proceed with the ARDL bounds test only when the variables of our model are I (0) or I (1); in case the variables are I (2) then we cannot apply ARDL Bounds test. After applying for the ADF test we found that the variables of the model are stationary at I (0) & I (1). As per the table 3, we found that GDP is stationary at the level whereas FDI, CFM & EMP are stationary at the first difference.

**Table3: ADF Unit Root Test for Stationary**

Variable	Symbol	ADF (Level)	ADF (1 <sup>st</sup> Difference)
GDP per capita growth	GDP	Stationary	N/A
Inward Foreign Direct Investment	FDI	Non-Stationary	Stationary
Gross Capital Formation	CFM	Non-Stationary	Stationary
Employment	EMP	Non-Stationary	Stationary

*4.3. ARDL Bounds Test*

The ARDL bounds test is used to estimate the long-run relationship among the variables of a model. The long-run relationship is said to be found if F-statistic exceeds the value of upper bound. If the F-statistics are below the lower bound, it means that there is no co-integration among the variables. If F-statistics are in between the value of upper bound and lower bound, then the result would be in-conclusive.

**Table 4: ARDL Bounds Test Results**

Test Statistics	Value	K
<b>F-statistic</b>	7.868584	3
<b>Critical Value Bounds</b>		
<b>Significance level</b>	<b>I(0)</b>	<b>I(1)</b>
<b>10%</b>	2.72	3.77
<b>5%</b>	3.23	4.35
<b>2.5%</b>	3.69	4.89
<b>1%</b>	4.29	5.61

The table 4 above represents the results regarding the ARDL bounds test. It can be noted that the F-statistics value is greater than both the lower as well as the upper bound value at 10%, 5%, 2.5%, and 1% significance levels, so we can conclude that co-integration exists among the variables of our model.

*4.4. ARDL Long-run Estimates*

After employing unit root tests (ADF), we applied to the Autoregressive Distributed Lag model (ARDL) to investigate the long-run relationships between the dependent & independent variables (GDP, FDI, CFM, EMP). Table 05 represents the results generated from applying the ARDL approach and we can see that FDI has significant positive impact upon economic growth

(the results are compatible with the study of Mwakabungu & Kauangal 2023) whereas CFM & EMP have insignificant impact upon economic growth of Romania.

**Table 5: ARDL Long-run Estimate Results**

Variable	Coefficient	Standard Error	t-statistic	P-value
<b>FDI</b>	0.827854	0.337478	2.453057	0.0240
<b>CFM</b>	0.271074	0.209268	1.295343	0.2107
<b>EMP</b>	-0.043084	0.435002	-0.099044	0.9221

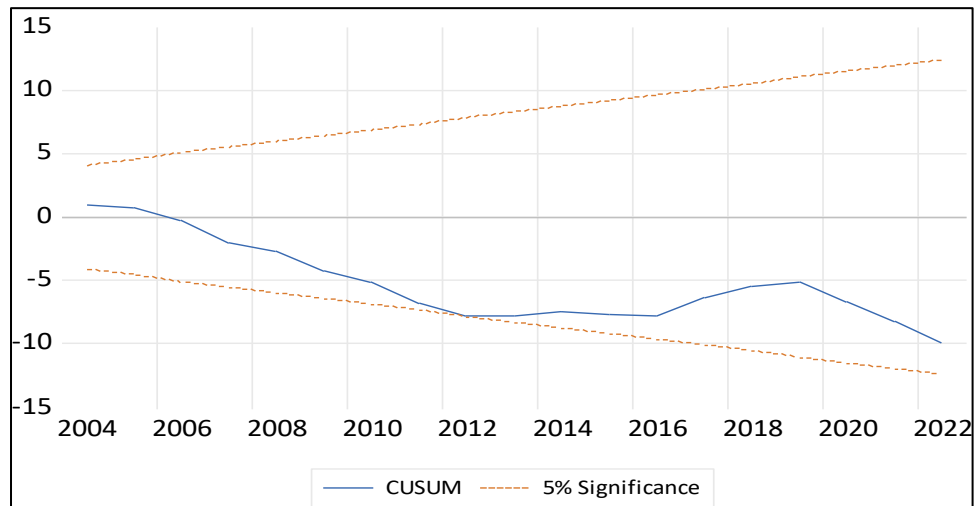
**Note:** Dependent variable = GDP & Independent variables = FDI, CFM & EMP

Based on results of table 5, we can say that when the FDI increases by 1% then GDP growth in Romania is expected to rise by approximately 0.82 % per year in the long run. So, the results are clearly indicating that Romania should continue to implement macroeconomic policies that helps in attracting more FDI for boosting and accelerating the economic growth of the country.

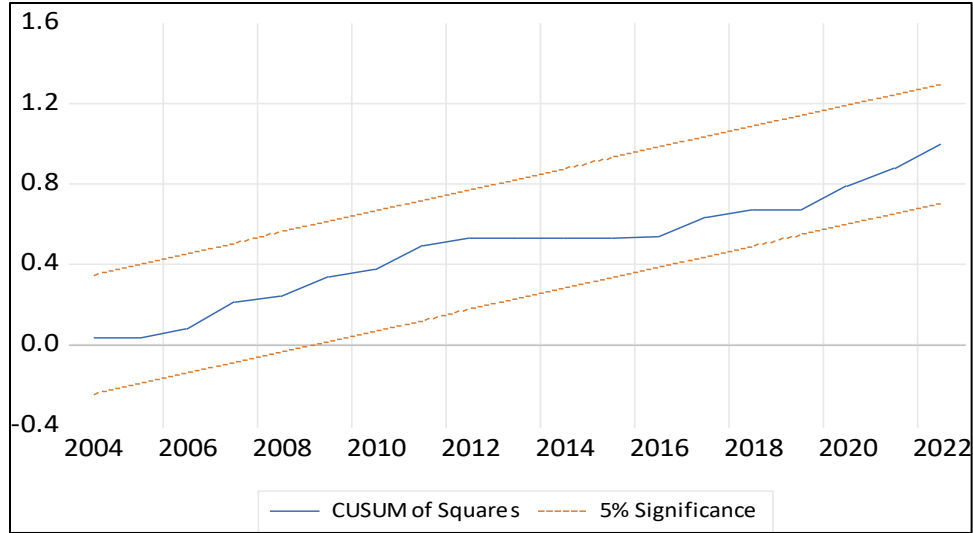
*4.5. Stability Diagnostic Test*

For gauging the stability of long-run model we used the cumulative sum and cumulative sum of square test of recursive residuals (Brown, Durbin & Ewans 1975).

The stability tests (CUSUM and CUSUM SQUARE) in Figures 2 and 3, respectively, show that both graphs of stability tests are within 5% of their critical boundaries. This confirms that our model is stable and hence being reliable for the predictions.



**Figure 2: Cumulative Sum of Recursive Residuals**



**Figure 3: Cumulative Sum of Squares of Recursive Residuals**

*4.6 Granger Causality Test*

For gauging the direction of causality between the dependent and independent variables we use Granger (1969) causality test. The direction of the relationship could be unidirectional, bidirectional or non-causal relationship. In the table 06 below, we can see that FDI is uni-directionally causing gross capital formation whereas there is no causal relationship between FDI-GDP; EMP-GDP; CFM-GDP; EMP-FDI & CFM-EMP.

**Table 6: Granger Causality Test Results**

<b>Variables</b>	<b>F-statistic</b>	<b>P-value</b>	<b>Causality</b>
FDI – GDP	0.72143	0.4976	No
GDP – FDI	1.59018	0.2255	No
EMP – GDP	0.41956	0.6623	No
GDP – EMP	0.77290	0.4733	No
CFM – GDP	1.32978	0.2841	No
GDP - CFM	0.77628	0.4718	No
EMP – FDI	0.13037	0.8784	No
FDI – EMP	0.02396	0.9764	No
CFM –FDI	0.96456	0.3960	No
FDI -CFM	6.45479	0.0060	Yes
CFM –EMP	2.83951	0.0790	No
EMP -CFM	0.00930	0.9970	No

## 5. Discussion, Conclusion and Limitations

In this study we investigated the causal relationship between FDI and economic growth in case of Romania for the period ranging from 1991–2022. The relationship between FDI and economic growth has received considerable attention recently but not work has been carried out in the context of Romania. The analysis has been carried out keeping in view the classical theories of FDI-led economic growth. We employed ADF unit root test to gauge the stationarity of the variables. To find the long-run relationship among the variables we employed the Autoregressive distributed lag-bound testing approach. We found that there is a long-run relationship among the variables of our model; FDI has a significant positive impact upon economic growth of Romania. Furthermore, FDI is also uni-directionally causing gross capital formation in Romania. FDI has played quite an instrumental role in the economic development of many emerging economies over the last 30 - 40 years. FDI possess the spillover effects when the domestic entrepreneurs learn about the innovations and the latest technologies from the foreign firms. Overall, FDI boosts the employment, productivity and the living standards of the people in the host economies. The policymakers should continue to devise the macroeconomic policies to attract FDI to promote economic development. Political stability and continuity also occupy a pivotal place in boosting the confidence of foreign investors to invest in Romania. Moreover, the country's financial system also needs to be modernized to facilitate smooth and fast international business transactions. The only limitation of this study is that it focused only upon Romania from Eastern Europe and the time-series data was available only up to the year 2022. The future research could include the other East European countries so that a comprehensive and comparative panel data analysis could be carried out across the region of East Europe.

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## REFERENCES

- Abel, S., Mukarati, J., Mutonhori, C. & Le Roux, P., 2021, 'Determinants of foreign direct investment in the Zimbabwean mining sector', *Journal of Economic and Financial Sciences* 14(1), a595. <https://doi.org/10.4102/jef.v14i1.595>
- Adewale, S. H. (2022). Does Country Risk Influence Foreign Direct Investment Inflows? A Case of the Visegrád Four. *Economies*, 10(9), 221.
- Aggarwal, V. and Karwasra, N. (2024). A bibliometric analysis on trade openness and economic growth: current dynamics and future direction. *Competitiveness Review*, 34(2), 446-467.

- Aluko, O. A., Ibrahim, M., & Vo, X. V. (2023). On the foreign direct investment–economic growth relationship in Africa: does economic freedom mediate this relationship? *International Journal of Emerging Markets*, 18(9), 3245-3263.
- Arema, A. G., & Abiodun, S. T. (2020). Causal nexus among fiscal policy, economic growth and income inequality in Sub-Saharan African Countries (1995-2016). *African Journal of Economic Review*, 8(1), 1-25.
- Aromasodun, O. M. (2022). Determinants of FDI inflows to West Africa: Prospects for regional development and globalization. *BRICS Journal of Economics*, 3(1), 27-51.
- Asamoah, L. A., Mensah, E. K., & Bondzie, E. A. (2019). Trade openness, FDI and economic growth in sub-Saharan Africa: do institutions matter? *Transnational Corporations Review*, 11(1), 65-79.
- Aysan, A., Kayani, F., Kayani, U.N. (2020), The Chinese inward FDI and economic prospects amid COVID-19 crisis. *Pakistan Journal of Commerce and Social Sciences*, 14(4), 1088-1105.
- Bajrami, H., & Zeqiri, N. (2019). Theories of foreign direct investment (FDI) and the significance of human capital. *International journal of business & management*, 7(1), 11-24.
- Belloumi, M., & Touati, K. (2022). Do FDI inflows and ICT affect economic growth? An evidence from Arab countries. *Sustainability*, 14(10), 6293.
- Camara, A. (2023). The effect of foreign direct investment on tax revenue. *Comparative Economic Studies*, 65(1), 168-190.
- Cristina, J., & Ioana, P. S. M. (2020). Some Determinants of Economic Growth in Romania: Foreign Trade and Foreign Direct Investments. *International Journal of Economics and Finance*, 12(12), 81-88.
- Faisal, F., Rahman, S. U., Chander, R., Ali, A., Ramakrishnan, S., Ozatac, N., Ullah, M. N., & Tursoy, T. (2021). Investigating the nexus between GDP, oil prices, FDI, and tourism for emerging economy: Empirical evidence from the novel fourier ARDL and hidden cointegration. *Resources Policy*, 74, 102368.
- Fazaaloh, A. M. (2024). FDI and economic growth in Indonesia: A provincial and sectoral analysis. *Journal of Economic Structures*, 13(1), 3.
- Ge, M., Kannaiah, D., Li, J., Khan, N., Shabbir, M. S., Bilal, K., & Tabash, M. I. (2022). Does foreign private investment affect the clean industrial environment? Nexus among foreign private investment, CO2 emissions, energy consumption, trade openness, and sustainable economic growth. *Environmental Science and Pollution Research*, 29(18), 26182-26189.
- Gunawardhana, C. S., & Damayanthi, N. (2019). Determinants of Foreign Direct Investment and its impact on Economic Growth: Evidence from South Asian Association

for Regional Corporation (SAARC) Countries. *Kelaniya Journal of Management*, 8, 67-91.

Hamid, I., & Jena, P. K. (2020). Linear and non-linear Granger causality between foreign direct investment and economic growth: evidence from India. *Copernican Journal of Finance & Accounting*, 9(2), 25-44.

Haudi, H., Wijoyo, H., & Cahyono, Y. (2020). Analysis of most influential factors to attract foreign direct investment. *Journal of Critical Reviews*, 7(13): 4128-4135.

Josifidis, K., Supic, N., & Doroskov, N. (2020). Foreign Direct Investment and Income Distribution: Evidence from Post-Communist New EU Member States. *Eastern European Economics*, 58(6), 497-516.

Kayani, F. N. (2021). Renewable energy and economic growth nexus: a case of United Arab Emirates. *International Journal of Energy Economics and Policy*, 11(5), 504-509.

Kayani, F.N, Nasim, I, K. Abu Saleem. (2024). Analyzing the Impact of Governance, Environment and Trade on Inward FDI: A Case of Cambodia, Thailand and Vietnam from ASEAN. *International Journal of Energy Economics and Policy*, 14(2), 423-534.

Kayani, F.N., Gan, C. (2022), Foreign direct investment inflows and governance nexus: Evidence from United States, China, and Singapore. *Review of Pacific Basin Financial Markets and Policies*, 25(4), 1-18.

Kueh, J., & Soo, X.-L. (2020). Macroeconomic determinants of FDI inflows in Cambodia, Laos, Myanmar and Vietnam: panel data analysis. *Thailand and The World Economy*, 38(1), 54-72.

Kumari, R., Shabbir, M. S., Saleem, S., Yahya Khan, G., Abbasi, B. A., & Lopez, L. B. (2023). An empirical analysis among foreign direct investment, trade openness and economic growth: evidence from the Indian economy. *South Asian Journal of Business Studies*, 12(1), 127-149.

Mohsin, M., Ullah, H., Iqbal, N., Iqbal, W., & Taghizadeh-Hesary, F. (2021). How external debt led to economic growth in South Asia: A policy perspective analysis from quantile regression. *Economic Analysis and Policy*, 72, 423-437.

Mwakabungu, B. H. P., & Kauangal, J. (2023). An empirical analysis of the relationship between FDI and economic growth in Tanzania. *Cogent Economics & Finance*, 11(1), 2204606.

Nawaz, F., Abu Saleem, K., & Kayani, U. (2024). The Made in China 2025 strategy: Perceptions and reservations of China's state capitalist economic model [Special issue]. *Corporate & Business Strategy Review*, 5(1), 432-439.

Nawaz, F., Kayani, U., and Aysan, A.F. (2023). Nexus between foreign remittances and poverty alleviation: Empirical investigation of Tajikistan from Central Asia. *Cogent Social Sciences* 9: 2275554.

- Ramos, V. J. R. (2018). On the Effects of Intellectual Property Rights on Foreign Direct Investments in Developing Economies: A System GMM Approach. *carroll round proceedings, vol xiii, (2018), 212-232*
- Rao, D. T., Sethi, N., Dash, D. P., & Bhujabal, P. (2023). Foreign aid, FDI and economic growth in South-East Asia and South Asia. *Global Business Review, 24(1), 31-47.*
- Rathnayaka Mudiyansele, Malsha Mayoshi, Gheorghe Epuran, and Bianca Tescas,iu. 2021. Causal Links between Trade Openness and Foreign Direct Investment in Romania. *Journal of Risk and Financial Management, 14(3), 90.*
- Sabir, S., Rafique, A., & Abbas, K. (2019). Institutions and FDI: evidence from developed and developing countries. *Financial Innovation, 5(1), 1-20.*
- Shah, M. H., & Khan, Y. (2016). Trade liberalization and FDI inflows in emerging economies. *Shah, MH, & Khan, Y.(2016). Trade Liberalization and FDI Inflows in Emerging Economies. Business & Economic Review, 8(1), 35-52.*
- Simionescu, M., & Naroş, M.-S. (2019). The role of foreign direct investment in human capital formation for a competitive labour market. *Management Research and Practice, 11(1), 5-14.*
- Sinha, M., & Sengupta, P. P. (2022). FDI inflow, ICT expansion and economic growth: An empirical study on Asia-pacific developing countries. *Global Business Review, 23(3), 804-821.*
- Tomizawa, A., Zhao, L., Bassellier, G., & Ahlstrom, D. (2020). Economic growth, innovation, institutions, and the Great Enrichment. *Asia Pacific Journal of Management, 37, 7-31.*
- Wacker, K. M., Grosskurth, P., & Lakemann, T. (2016). Foreign direct investment, terms of trade, and quality upgrading: What is so special about South Asia? *Asian Development Review, 33(1), 28-55.*
- Wang, J., Yang, J., & Yang, L. (2023). Do natural resources play a role in economic development? Role of institutional quality, trade openness, and FDI. *Resources Policy, 81, 103294.*
- Yusuf, H. A., Shittu, W. O., Akanbi, S. B., Umar, H. M., & Abdulrahman, I. A. (2020). The role of foreign direct investment, financial development, democracy and political (in) stability on economic growth in West Africa. *International Trade, Politics and Development, 4(1), 27-46.*
- Zeeshan, M., Han, J., Rehman, A., Bilal, H., Farooq, N., Waseem, M., Hussain, A., Khan, M., & Ahmad, I. (2021). Nexus between foreign direct investment, energy consumption, natural resource, and economic growth in Latin American countries. *International Journal of Energy Economics and Policy, 11(1), 407-416.*