

Original Article

A GMM Application to FDI inflows Case of EU and non-EU Member States in the Balkans

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Abstract: Foreign direct investments are extensively studied under the scope of international finance since they are thought to be important drivers of growth, especially in developing countries. Given the technological innovation they bring to the host economies, job creation opportunities, increased competition, and capacity building, inward FDI is expected to positively contribute to economic development. In this paper, a random sample of Balkan countries is selected to investigate the main financial variables that steer FDI and to shed light on the potential endogeneity of GDP. To answer the research objective, secondary data is collected over a 10-year time frame, 2012-2021, for the following countries: Greece, Albania, Romania, Bosnia and Herzegovina, and the Republic of North Macedonia. The dependent variable, FDI inflows, is regressed on a set of three independent financial variables and two dummies: EU membership and COVID-19. One aim is to check whether EU membership affects a country's attractiveness to foreign investors. It would also be useful to see if COVID-19, a pandemic which brought a toll on the global economic climate, had any impact on investors' decisions. The empirical analysis relied upon GMM estimation, thus testing both the endogeneity and dynamism. Results showed that real GDP per capita exerts a positive impact on FDI, but in turn, FDI does shape real GDP per capita as well. Real interest rates proved to be statistically significant in explaining the variability in FDI. At the same time, the financial development index turned out to have no impact regardless of the chosen significance level. When comparing EU vs. non-EU Balkan countries, it was seen that no differences could be spotted. The last dummy, Covid-19, resulted in a significant impact on FDI. This study's findings could interest investors, governments, managers, and other stakeholders.

Keywords: EU, Financial Variables, FDI Inflows, GDP, GMM.

I. INTRODUCTION

Within the ever-evolving landscape of global finance, Foreign Direct Investments (FDIs) hold a significant role as catalysts for economic growth, especially in shaping the development paths of emerging nations. FDIs, marked by the infusion of capital, technological innovation (Dorakh, 2020) and, transfer (Borensztein et al. 1998), job creation, and increased competition, play a central role in fostering positive economic progress. This paper investigates FDI trends in the Balkans, examining both member and non-member states of the European Union (EU) pre- and post-COVID-19 pandemic, aiming to untangle the complex web of financial variables guiding these investments.

FDIs are generally perceived as positively impacting the host country (Ciobanu et al., 2020). This is attributed to the fact that FDI opens avenues for host countries to access capital and managerial know-how. Nevertheless, it might also be a point of concern, considering it can introduce risks such as dependence on foreign entities, increased market volatility, and potential exploitation (Carkovic & Levine, 2002). Furthermore, it can alter market dynamics, at times promoting competition and, at other times, consolidating market dominance. In an era of digitalization of both people and processes, FDIs not only serve as a catalyst for economic growth but also foster technological advancements. This combination of knowledge sharing and foreign capital stimulates innovation and can expand market reach, ultimately leading to a ripple effect on job creation.

Anyway, there is some "reciprocity" between FDI and economic growth. Not only do FDI inflows increase economic growth, but a country with higher economic growth also tends to attract more FDI inflows (Saha, 2005). Nations with high economic growth rates are often seen as attractive investment destinations due to the potential for robust returns. Conversely, countries with low growth rates may struggle to attract substantial FDIs, as investors typically seek dynamic markets with promising growth prospects. This paper delves into the exploration of these dynamics.

Nonetheless, a macroeconomic analysis alone is insufficient. Other geopolitical and societal factors must be considered for a more comprehensive perspective. Notably, a distinguishing feature of Balkan countries is their EU accession process, which often enhances their appeal as host countries for FDI (Stojkov & Warin, 2018). Countries like Greece and Romania,



having joined the EU, frequently experience increasing FDI due to improved market access, regulatory alignment, and increased investor confidence. In addition to EU accession, societal challenges, such as the COVID-19 pandemic, have introduced a new dimension to FDI dynamics and have impacted the economic balances of countries in financial terms and more (Ciobanu et al., 2020). While initial disruptions and uncertainties led to declining FDI inflows, the evolving landscape also presents opportunities. The growing reliance on digitalization and global supply chain dynamics shifts may influence FDI decisions, underscoring the need to adapt to a rapidly changing economic environment. This is why these two factors were also considered in this study.

The selected Balkan countries for this study are Albania, Greece, Bosnia & Hercegovina, Romania, and North Macedonia, hence bringing “diversity” to the analysis due to their varying economic landscapes and development trajectories. Greece and Romania, as EU members, offer insights into the impact of integration on FDI, while the other non-EU member states provide a different perspective.

In the subsequent sections, an overview of the existing literature is given to delve into a comprehensive analysis of these components, exploring the complexities of FDI and its multifaceted impact on economic landscapes. The chosen model is based on the Generalized Method of Moments (GMM) econometric estimation, which addresses endogeneity and dynamism.

The methodology consists of regressing FDI inflows against three independent financial variables and two dummy variables—EU membership and COVID-19. The study examines whether EU membership significantly influences a country's attractiveness to foreign investors and explores the potential impact of the global pandemic on FDI. The empirical analysis sheds light on the interplay between real GDP growth rate, real interest rate, and the financial development index in shaping FDI patterns.

In conclusion, this study not only enhances our understanding of FDI financial determinants but also offers valuable insights for investors, governments, managers, and various stakeholders. As developing nations, particularly those on the path to EU integration, seek ways to stimulate growth, the positive implications of FDI, both economically and socially, become increasingly evident. In a digital age that demands adaptability and innovation, FDI emerges as a pivotal enabler capable of guiding nations toward sustainable development and helping them embrace transformative initiatives.

II. LITERATURE REVIEW

Foreign Direct Investment (FDI) is a subject of extensive exploration within the scholarly landscape, with researchers delving into its multifaceted impacts on economic growth, financial development, real interest rates, and various influencing factors. This literature review synthesizes existing knowledge, presenting an overview of key themes and findings across different dimensions of FDI. It gives an overview of what FDIs are and how their inflows impact economic growth while also being affected by their financial development index and real interest rate.

Motivations range from resource-seeking and market-seeking to efficiency-seeking, each influencing the decision-making process of investors. Researchers have highlighted the role of government policies, market size, political stability, financial infrastructure and even transport infrastructure as critical drivers shaping FDI patterns across different countries (Parashar, 2015). In fact, a division is made between drivers in developing and developed countries (Saini & Singhania, 2018), which list trade openness, market size and workforce education as the most prominent drivers, as supported by other authors (Han et al., 2021).

According to (Zaimaj, 2023), the corruption index, real growth rate and political stability index were statistically significant drivers of FDI. The results showed that an increase in corruption tends to lower FDI inflows. On the other hand, an increase in political stability and real GDP growth rate tend to increase FDI inflows. Jurčić et al. (2020) have added another perspective to the pool of studies. Their exploratory study found that institutional quality variables, such as political stability, rule of law or corruption, do not determine FDI inflows. Decisive drivers are GDP per capita or average gross wage instead, especially in the case of Croatia. The same is supported by Tian et al. (2017), who share the viewpoint that politically stable countries do not necessarily attract more FDI.

However, not only the factors influencing FDI are important, but also the influence that FDI exerts is to be studied. Numerous studies have examined the pivotal role of FDI in contributing to economic growth (Zhang & Ram, 2002), particularly in developing countries. The infusion of foreign capital facilitates technology transfer, increases productivity, and stimulates overall economic activity. Scholars often emphasize the positive spillover effects, including job creation, knowledge diffusion, and enhanced competitiveness, underscoring the transformative potential of FDI. Not only economic growth but, according to Basu & Guariglia (2007), FDI inflows also enhance the situation with regard to educational inequalities.

While it is generally accepted that FDI inflows accelerate economic growth in developing countries (Ciobanu et al., 2020), opponents do not lack. Johnson (2006) stated that the same is not valid, for instance, in the case of developed countries. In less developed or developing countries, financial development impacts the FDI inflow, a precondition for the FDI to impact economic growth positively (Hermes & Lensink, 2003). Furthermore, Turkcan & Yetkiner (2010) used a panel dataset for 23 OECD countries during the period 1975-2004 to conclude that FDI growth and economic growth are significant determinants of each other and have an endogenous relationship despite the country being in an early development stage or not. The endogenous relationship between FDI and economic growth has accelerated since the mid-1980s (Li & Liu, 2005) and has been tested via different tests and econometric methods. In line with this goes Saha (2005). In a study conducted on twenty Latin American countries throughout 1990-2001, the author found an endogenous relationship between FDI and economic growth.

On the other hand, there are also some studies in which FDI has had a rather negative impact on the economic growth of developing countries (Bornschier et al., 1978). Studies also show that FDI alone has no statistically significant effect on economic growth (Carkovic & Levine, 2002). The same is questioned even in the extensive study of (Alfaro et al., 2002), who considered two different samples of 20 OECD countries across two different time frames. It was concluded that FDI alone has an ambiguous effect on economic growth. However, the more developed the financial market of a country, the higher the benefits that can be reaped from increased FDI inflows.

According to Reisen & Soto (2001), FDI combined with portfolio investments positively impact economic growth. This study builds on a dynamic panel regression analysis, which effectively deals with endogeneity and missing variable problems. The results hint at a positive relationship between FDI and portfolio equity flows and subsequent economic growth rates. In academic papers studying economic growth, researchers often use various proxies or indicators to measure and analyze its different dimensions. Some widely used indicators are Gross Domestic Product (GDP), Gross Fixed Capital Formation (GFCF), Real GDP Growth Rate, GDP per Capita, GDP per Capita Growth rate or even investment rates, so the proportion of GDP invested in capital. Generally, it is assessed that rate indicators contribute to better models, given that nominal figures do not support the comparability between countries. There are several papers considering real GDP per capita when analyzing the relationship with FDI or even testing endogeneity. Previous studies consistently highlight a strong positive impact of real GDP per capita on FDI, suggesting that economically prosperous countries attract higher levels of foreign investment (Hakizimana, 2015). Moreover, the reciprocal relationship between FDI and real GDP per capita unveils a dynamic interplay where FDI contributes to and is also shaped by economic growth.

Apart from economic growth, the real interest rate is also seen as a critical determinant in explaining FDI variability. Scholars employ econometric techniques to establish the statistical significance of the real interest rate in shaping the investment climate. The implications of these findings extend beyond the realm of FDI, influencing broader discussions on monetary policy, financial markets, and the attractiveness of host countries to foreign investors. Alie Faroh et al. (2015) analyzed data from 1985 to 2012 and found that trade openness and interest rates positively and significantly influence FDI flows in Sierra Leone, suggesting that the government should support the private sector to enhance foreign investment. Conversely, a study in Kenya found that real interest rates and exchange rates negatively and significantly influence FDI inflows into Kenya. This suggests that higher real interest rates and less favorable exchange rates are translated into reducing foreign direct investments (Musyoka & Ocharo, 2018).

In addition, to understand the endogeneity and dynamism of FDI, its links to the real interest rate and the financial development index need to be assessed. The real interest rate influences investment decisions, with lower rates typically attracting more FDI. Meanwhile, a robust financial development index indicates a conducive environment for foreign investors, facilitating capital flow and economic growth (Hossain et al., 2021). As the authors mention, the progress of the financial sector serves as a signal of reliability and attractiveness to potential new investors, as well as an effective channel for resource allocation for current investors (Khatun & Ahamad, 2015). Nonetheless, there is a limited number of studies indicating that more FDI flows to countries with less developed financial systems. This tendency may be attributed to the presence of adventurous foreign investors and cautious domestic entrepreneurs who are risk-averse. Overall, it seems that there is a tendency for financial development to have varied effects across different regions (Wang & Liu, 2017). That is why the authors suggest regional policies for FDI spillovers to be beneficial to a greater extent.

Regarding regional policies or cooperation desks, an important factor to consider when analyzing FDI, especially in Europe, is the EU membership factor. Does EU membership affect a country's attractiveness to foreign investors, and to what extent?

In a gravity model analysis covering 39 countries from 1991-2017, Dorakh (2020) found out that EU membership has a significant positive impact on FDI inflows. In fact, Dorakh (2020) claims that EU enlargement made FDI inflows concentrate

in EU member states and much less on countries outside the EU. Similarly, Bruno et al. (2021), in another similar study on annual bilateral FDI data, claim that EU membership increases by 60% FDI from countries outside the EU to host economies and by 50% FDI inflows from countries within the EU. This might be attributed to the perceived soundness of the EU climate and expectations of its longevity. Moreover, it can come as a consequence of higher customs duties on trade from outside the Union (Baldwin and Wyplosz, 2022).

In the study conducted by Stojkov and Warin (2018), the findings of the empirical analysis indicate a noticeable trend of increasing European financial integration. However, it is acknowledged that this integration faced challenges due to the global financial crisis. Despite these challenges, the study observes an overall positive influence of European Monetary Union (EMU) membership on Foreign Direct Investment (FDI), estimating the impact to be in the range of 22.4% to 28.5%. Notably, this positive effect persisted even in the face of the disruptive effects of the 2008 financial crisis (Stojkov & Warin, 2018). However, after the UK exited the EU and especially with the emerging geopolitical tensions and crises, EU membership is insufficient to ensure higher FDI inflows.

For instance, the unprecedented global shock of COVID-19 introduced a unique, new variable into FDI studies. Since FDI is not assessed in the short term, more time is needed to draw correct conclusions on how the COVID-19 crisis affected or will impact FDI. Nevertheless, many researchers incorporated the pandemic's influence in their models to examine the effect on investors' decisions. Hayakawa et al. (2022) differentiated FDI flows via two different entry modes, greenfield FDI and Mergers and acquisition. Their results showed that COVID-19 exerts different impacts based on its entry mode or sector. As such, the severity of COVID-19 in host countries seemed to affect FDI in the manufacturing sector adversely, yet such statistics were found insignificant.

On the other hand, in the service sector, the severity of COVID-19 in both host and home countries has exerted a significant negative impact on greenfield FDI but not on cross-border M&A. Syarifuddin & Setiawan (2022) in a panel VAR model in Indonesia, also found variations in the impacts of the COVID-19 pandemic on FDI among sectors. Hence, the impact of COVID-19 appeared to be statistically significant, but the magnitude and direction of impact differed across various sectors. Another perspective on the negative impact that the COVID-19 crisis had on FDI inflows comes from (Ciobanu et al., 2020). As was confirmed in their study, the COVID-19 crisis not only negatively impacts FDI inflows but can contribute to an overall financial contraction of the economy in the Central Eastern European (CEE) region. The impact of COVID-19 needs more observation as it seems to be subject to controversy and ambiguity.

To conclude, this literature review serves as a comprehensive synthesis of existing knowledge on FDI, spanning conceptual frameworks, drivers, empirical studies, econometric methodologies, and the nuanced relationships with financial variables. It sets the stage for the empirical analysis conducted in this study, offering a foundation for understanding the intricate dynamics that shape FDI patterns in the context of economic growth, financial development, and external shocks.

III. RESULTS AND DISCUSSION

A) Data & Methodology

This study builds on secondary, annual data covering a 10-year time frame, 2012-2021. Data is collected from reliable sources: Real interest rate and FDI are retrieved from the World Bank Database; the financial development index is accessed via the IMF database; and real GDP per capita (annual growth rate, %) is retrieved from the United Nations SDG database. The main goal was to estimate a model that properly captures the host countries' financial and economic climate. Given that the region has long been shown to suffer from poor levels of financial development (when considering financial literacy, financial deepening, and financial infrastructure in general), the model focuses specifically on indicators that capture these growth aspects. It is also to be underlined that for those countries still in progress with the EU integration process, the economic and financial climate is under scrutiny, as it receives a major deal of importance in determining the status of negotiations.

Furthermore, it is interesting to investigate whether EU membership shapes, to any extent possible, the investors' confidence and trust they put in host countries. For that reason, a binary variable is generated (equal to 1 for EU Balkan countries and 0 otherwise) to see whether statistics support this mindset. Lastly, the region battled the COVID-19 pandemic not long ago. Considering the engulfing impact that the pandemic had over the majority of industries and areas of life, it is intriguing to examine the role that it might have played in defining the volume of inward FDI in the region. The dynamic panel data regression model is presented below:

$$\text{Inward FDI}_{it} = \beta_0 + \beta_1 * \text{Real Interest Rate}_{it} + \beta_2 * \text{Financial Development Index}_{it} + \beta_3 * \text{Real GDP per Capita Growth}_{it} + \beta_4 * \text{Inward FDI}_{it-1} + \beta_5 * \text{COVID 19} + \beta_6 * \text{EU Membership} + u_{it}$$

Where:

i – stands for countries under study

t – stands for years under study

u – stands for the disturbance term

For simplicity, abbreviations will be used in the following sections when referring to the variables under study. Table 1 presents these in detail.

Table 1: Regression Variables

	Variable	Label
X1	Annual Growth Rate of Real GDP per capita	GRGDP
X2	Financial Development Index	INDFD
X3	Real Interest Rate	RIR
Y	Net Inflows of FDI (% GDP)	INFDI

a. Descriptive Statistics

Table 2 below shows the main descriptive statistics' measures of the regression variables. With respect to INFDI, it is seen that the minimum was reached in Romania in 2020, and the highest FDI inflow was recorded in Albania in 2013. The real interest rate, which captures the true purchasing power once inflation has been accounted for, reaches the lowest point in Bosnia and Hercegovina and the highest in Greece. IMF publishes the Financial Development Index, aggregating two dimensions: the degree of development in financial markets and financial institutions in any given country. INDFD records the peak in Greece and the minimum value in Albania. Given the lack of stability in the Greek economy during the last decade, it comes as no surprise that both the minimum and the maximum value of GRGDP are recorded in Greece. Even though all countries in the sample are Balkan countries, thus pretty similar in different aspects, their macroeconomic and financial climate is defined by a different past and different levels of progress/development, which explain the variability and dispersion as captured by standard deviation.

Table 2: Descriptive Statistics

	FDI (Net Inflows) %	Real Interest Rate (%)	Financial Development Index	GDP per Capita (Annual Growth Rate)
Average	3.6016	4.7088	0.3039	2.3480
Minimum	0.0622	-1.5821	0.1897	-8.5000
Maximum	9.8163	10.2100	0.6154	9.1000
St.Deviation	2.5698	3.1911	0.1250	3.6388

b. Preliminary Tests

Testing the regression variables for a unit root is extremely important when an empirical analysis uses time series or panel data. Unless the stationarity of the series is tested and proved at the chosen significance level, the reliability of the estimation output will be under the question mark. With regard to the regression variables presented in Table 1, it can be said that none of them resulted to be non-stationary in levels. Using a 95 % confidence level, the null hypothesis favouring a unit root was rejected in all four cases. For the specific results, please refer to Table 3 below:

Table 3: Unit Root Test

Series	t-stat	Prob.
GRGDP	40.3862	0.0000
INDFD	22.4178	0.0131
INFDI	23.0254	0.0107
RIR	-3.5496	0.0002

Another important check is that of multicollinearity. Regressors must prove they are free from perfect collinearity; otherwise, the estimation results will be flawed. The 0.8 correlation coefficient threshold is employed to examine the lack of multicollinearity, as suggested in the literature. As presented in Table 4, no pair of variables exhibits a stronger correlation than 0.8; hence, no need arises to drop out any of the independent variables or increase the sample size further.

Table 4: Correlation Table

Series	GRGDP	INDFD	RIR
GRGDP	1.0000	-0.3568	-0.4752
INDFD		1.0000	0.3285
RIR			1.0000

B) Research Results

In this paper, a dynamic panel specification is used to achieve the three objectives of the study: identifying to what extent and in what direction the chosen financial variables define FDI inflows in the region; examining, testing, and interpreting the potential endogeneity of GDP variable; and lastly analyze the persistence of FDI, i.e., the degree at which the

inward FDI from the past define the current FDI inflows in the host countries under consideration.

GMM (Generalized method of moments) estimation technique is especially useful in the presence of simultaneity, endogeneity, and unobserved heterogeneity. As the literature suggests, the economic infrastructure and overall macroeconomic climate can play a central role in determining the amount of FDI a country receives. Investors would be more likely to choose a destination where the growth prospects are high and development is steady, hence expecting to generate the desirable rates of return. If this is the case, GDP, especially real GDP per capita, which is a useful proxy of a country's standard of living and true economic state, would be expected to define to some extent the inward FDI that a country receives. Dellis et al. (2017), in a working paper of the European Central Bank, stated that economic structures play an important role in supporting higher FDI inflows.

Moreover, Turkcan & Yetkiner (2010) examined the endogeneity of GDP in FDI regressions and vice versa, only to conclude that the empirical evidence was stubborn in proving the existence of an endogenous relationship. Furthermore, dynamism is something that is widely discussed in literature. Investors are expected to act rationally; thus, they would be more prone to “settle” in one jurisdiction over considerable time intervals. Thereby, they would be able to reap the benefits of the investments while getting a certain maturity in that market and taking advantage of a market that is no longer unfamiliar but whose consumer trends and preferences, laws, and regulations they are well informed of. Seetanah & Rojid (2011) and Khadaroo & Seetanah (2009) are only some papers in which the dynamism of FDI is empirically proved.

The regression analysis presented and interpreted next is conducted using E-Views XI. Considering all the reviewed papers and the economic knowledge in the field, the GMM estimation method is used. Table 5 below presents the result from the endogeneity test. As expected, this variable was shown not to be exogenous, as the null hypothesis could be rejected with a 95 % confidence level. An instrumental variable, the lagged term, is used, whose validity is tested and proved accordingly. Next, in Table 6, is provided the GMM estimation output. The results from AR (2), serial correlation in residuals, are also presented, suggesting no autocorrelation of the second order in the series. That said, the robustness of the model and the appropriateness of the findings can be ascertained.

Table 5: Endogeneity Test

Null hypothesis:	
ANNUAL_GROWTH_RATE_OF_REAL_GDP_PER_CAPITA__ is exogenous	
Probability	0.0368

The regression model explains around 60 % (or exactly 59.28 %) of the total variability in FDI inflows. The following results suggest that the financial development index is statistically speaking insignificant regardless of the chosen significance level. A strong reason behind the high P-value can be related to poor levels of financial development in the region. Even though progress has been made, such countries continue to fall behind in terms of the maturity, complexity and penetration of financial products, services and institutions.

Real interest rate and GDP per capita appear to positively and significantly impact FDI inflows. For each percentage change in the real interest rate, FDI inflows are expected to increase by 0.3637 % ceteris paribus. If GDP per capita increases by 1 %, FDI inflows are expected to rise by 0.4956 % ceteris paribus. GDP was found to be endogenous and was treated as such, as explained earlier. This suggests that FDI and GDP are two sides of the same coin, thus, policies must be conducted considering this form of relationship and dependence.

Table 6: GMM Estimation Output

Dependent Variable: NET_INFLOWS_FDI (inFDI)				
Method: Generalized Method of Moments				
Standard errors and covariance were computed using an estimation weighting matrix.				
Instrument specification:				
RIR grGDP(-1) indFD inFDI(-1) c Covid19 EU_Member_State				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
RIR*	0.3637	0.1204	3.0209	0.0046
grGDP*	0.4956	0.1542	3.2129	0.0027
indFD	-1.0863	2.2275	-0.4877	0.6287
inFDI*	0.7026	0.0951	7.3880	0.0000
c	-1.9011	1.1835	-1.6064	0.1167
COVID_19*	1.7632	0.8366	2.1075	0.0419
EU_Member State	0.0830	0.3611	0.2299	0.8270
R-squared	0.5928			

Adjusted R-squared	0.5378			
*Statistically significant with a 95 % confidence level				
AR (2) Test				0.2322

Dynamism is also present. This is the second reason why GMM estimation was necessary to capture the full picture and information from the data. About 70.26 % of the current FDI comes from existing FDI in the sample countries.

As far as the dummy variables are concerned, we see that EU Member States in Balkan countries have no difference compared to non-EU states regarding inflows of FDI that they receive. It means that investors, at least for a region which is characterized by somehow similar structures and levels of development, do not consider membership status as decisive for their investment decisions. Lastly, it is surprising that although very small in magnitude, the COVID-19 dummy has a significant impact. Maybe the reason can be traced to the governmental measures and reforms taken before the pandemic and the fact that such economies never truly “closed”. Given the fragile economy, a full closure and interruption would have been devastating. Hence, this stance in the face of the pandemic might have set the region apart from the developed countries, which were more prudent, drastic, and determined in their measures regarding the prohibition of movement, doing business, isolation, and similar. However, recognizing the engulfing impact of COVID-19, a better perspective on the matter can be drawn once its impact is evaluated by comparing three periods: before, during and after this external shock.

IV. CONCLUSION

Foreign direct investments are extensively studied under the scope of international finance since they are thought to be important drivers of growth, especially in developing countries. Given the technological innovation they bring to the host economies, job creation opportunities, increased competition, and capacity building, inward FDI receive massive attention from governments, policy makers, practitioners, media, academicians, and alike.

In this paper, a random sample of Balkan countries is selected in an attempt to investigate the main financial variables that steer foreign investments, as well as to shed light on the potential endogeneity of GDP and the dynamism of FDI. To answer the research objective, secondary annual data are collected over a 10-year time frame, 2012-2021, for the following countries: Greece, Albania, Romania, Bosnia and Herzegovina, and the Republic of North Macedonia. The dependent variable FDI inflows, are regressed on a set of three independent financial variables (real interest rate, financial development index and GDP) and two dummies. Data on the regressors is collected from the World Bank, UN, and IMF. On the other hand, the two dummy variables capture the EU membership and COVID 19 pandemic. Using the first binary variable, the study aims to check whether or not EU membership affects a country’s attractiveness to foreign investors. Moreover, it would be useful to see if COVID-19, a pandemic which brought a toll on the global economic climate, also had a negative impact on investors’ decisions.

Data is analyzed using E-Views 11 econometric package and GMM estimation technique. This estimation method is useful in the presence of unobserved heterogeneity, dynamism of the dependent variable and endogeneity. The findings from the empirical analysis suggested that such a phenomenon was present: current FDI is defined to a considerable extent by past FDI. At the same time, GDP is endogenous in the FDI regression. Moreover, it was concluded that real interest rate drives higher inflows, as it captures expectations and prospects of a better future economic climate. The existing state of the economy, as captured by real per capita GDP, is also important as it not only captures the development stage and economic potential of the host country but also determines the possibility of investment being successful. As far as the dummies are concerned, no distinction was found between EU and non-EU Balkan countries; however, the Covid 19 impact, on the other hand, resulted to be significant, yet really small in magnitude. Given that the pandemic continued over a considerable time interval of no less than 3-5 years, its implications can be better assessed in the future when the impact has fully vanished, and a pre-, during, and post-effect analysis can be conducted.

Considering the results from the empirical analysis, it could be stated that special attention has to be paid to financial and economic development, making the region more appealing in the eyes of foreign investors. Governments in the region should work hard and conduct effective reforms that target financial illiteracy, outdated infrastructure, competitiveness in the financial system, and the brain drain phenomena directly affecting a country’s GDP. This paper sheds light on the dynamics of the matter over the last decade, thus contributing to the existing literature that targets the region by providing a comprehensive empirical analysis. The findings of this study could be of interest to investors, governments, managers, and other stakeholders.

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