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Article

Does Economic Growth Attract FDI Inflows? A Dynamic Panel Analysis

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Abstract: Economic growth is deemed to be a conducive factor in attracting foreign direct investment (FDI) as it often confers location advantage to host countries and fosters business confidence. This paper examines the short-run and the long-run effects of economic growth on FDI inflows. The empirical analysis is conducted through the Generalized Method of Moments (GMM) System estimator for dynamic panel models. The main results show significant positive effects of economic growth on FDI inflows, and they indicate that the magnitudes of these effects are statistically comparable over time and do not diminish with higher economic growth levels. They also reveal important variations in the magnitude of these effects across geo-economic regions and over pertinent economic variables such as economic development level, international trade and foreign investment openness, and endowment in natural resources. These findings underscore the significance of developing growth-enhancing policies that are designed on the basis of the economic and geo-economic characteristics of host countries. Such policies could be coupled with international trade and foreign investment openness directions to stimulate stronger responses of FDI inflows to economic growth and mitigate the implications of unfavorable global and regional political conditions.

Keywords: economic growth; foreign direct investment; multinational enterprises; dynamic model; panel data



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1. Introduction

Foreign direct investment (FDI) is a major aspect of economic globalization, and it is widely recognized as an important catalyst for promoting economic growth in host countries (Borensztein et al. 1998; Alfaro et al. 2004; Pegkas 2015). FDI often stimulates capital formation and industrial agglomeration in host countries (Lucas 1988; Grossman and Helpman 1991; Krugman 1991; Barro et al. 1995), and it performs as a vector that transmits knowledge and disseminates new technology and organizational practices to domestic firms (Borensztein et al. 1998; Alfaro et al. 2004; Javorcik 2004). In addition, FDI tends to raise market competition, and it motivates domestic firms to innovate in production processes and product characteristics in order to maintain competitiveness against foreign affiliates of multinational enterprises (MNEs) (Blomström et al. 1994). The causality could also run in the reverse direction since economic growth constitutes an important factor in attracting FDI (Tsai 1994; Markusen 1995; Zhang and Markusen 1999; Shan 2002; Iamsiraroj and Doucouliagos 2015). This causal direction is commonly characterized as growth-led FDI in the literature (Tsai 1994; Zhang 2001; Shan 2002; Hansen and Rand 2006). The significance of this relationship is further emphasized with the outbreak and the aftermath of the COVID-19 pandemic, which inflicted significant disruptions to global supply and demand and altered the international patterns of economic growth (Baldwin and Di Mauro 2020; The World Bank 2021), and with the rising global political tensions and regional conflicts, which have brought about adverse implications for economic growth (Fajgelbaum and Khandelwal 2022; Campos et al. 2023; Liadze et al. 2023).

The effects of economic growth on FDI inflows can be basically expressed through the eclectic paradigm as outlined by the Ownership–Location–Internalization (OLI) framework (Dunning 1977, 1980, 1981). MNEs that are characterized by ownership of firm-specific assets (e.g., proprietary information, product development, and organizational structures) realize their competitive advantages in foreign markets. MNEs select host countries that confer location advantages to their foreign investment. The location advantages are typically categorized into input-side (e.g., lower labor costs, and availability of resources), and output-side (e.g., larger and/or growing markets). Also, institutional and developmental factors (e.g., less-stringent business regulations, better infrastructure, lower barriers to international trade, and lower restrictions on foreign ownership of capital) render a given location attractive for MNEs to undertake business projects. MNEs determine the mode of entry to a foreign market by weighing the advantages of internalizing production and operation within their organizational boundaries (e.g., savings in transaction costs) through FDI against the advantages associated with alternative modes of entry (e.g., exporting, licensing, or joint ventures). Within the OLI framework, the impact of economic growth on FDI can be primarily expressed through the location component, as economic growth plays a significant role in attracting FDI.

Higher economic growth rates in host countries, which are often accompanied by increases in per capita income, generate opportunities for MNEs to invest in the manufacturing and service sectors and infrastructure projects, and they give rise to economic rents that encourage FDI inflows (Globerman and Shapiro 1999). At the baseline, higher economic growth levels stimulate (domestic and foreign) investments to increase production and meet rising demand (Dowling and Hiemenz 1983; Zhang 2001; Shan 2002). These favorable conditions would naturally render the location attractive for MNEs to undertake foreign investment (Markusen 1995; Zhang and Markusen 1999).

Economic growth generally signals increases in market size and, hence, market demand in host countries (Vernon 1966; Scaperlanda and Mauer 1969; Shan 2002; Blonigen et al. 2007; Greenaway et al. 2007; Iamsiraroj and Doucouliagos 2015). As such, economic growth attracts market-seeking FDI through the strategic endeavour of acquiring market shares and achieving increases in sales in growing host economies (Torrise 1985; Tsai 1994; Markusen 1995; Carstensen and Toubal 2004; Agosin and Machado 2007). In this context, Torrise (1985) indicates that FDI initially occurs when the host country reaches a certain market size threshold, and that subsequent FDI expansion is associated with increasing economic growth prospects. Moreover, economic growth would stimulate efficiency-seeking FDI by conferring a location advantage to realize (1) on-site economies of scale by reducing per-unit fixed costs through increases in production and (2) on-site economies of scope by lowering per-unit costs through the production of more varieties of goods or services (Markusen 1995; Carstensen and Toubal 2004; Agosin and Machado 2007; Moudatsou and Kyrkilis 2011). The favorable market conditions stemming from higher economic growth rates would incentivize MNEs to undertake FDI as their foreign affiliates tend to reap increasing profits and achieve operational efficiency (Lim 1983; Schneider and Frey 1985; Torrise 1985; Zhang 2001; Hansen and Rand 2006).

Business confidence of MNEs in the host country's economy is also promoted by economic growth, fostering long-term commitments through FDI (Noorbakhsh et al. 2001; Ernst and Young Global Limited 2010). Specifically, higher economic growth rates generally imply more stable macroeconomic conditions, positive economic prospects, and lower levels of political risks (Morisset 2000; Noorbakhsh et al. 2001; Dunning 2006; Aisen and Veiga 2013). Also, economic growth that continually occurs at higher rates often indicates an accelerated pace of economic development, favorable investment climate, improvement in institutions and infrastructure, and availability of qualified human capital (Tsai 1994; Zhang 2001; Nunnenkamp and Spatz 2004).

There is a wide empirical literature that examines the two-way causality between economic growth and FDI, and that reports significant effects of economic growth on FDI inflows (e.g., Tsai 1994; Chakrabarti 2001; Choe 2003; Pradhan 2009; Iamsiraroj and

[Doucouliagos 2015](#)). Some studies indicate that recessions (or lower economic growth rates) can induce some types of FDI inflows through Mergers and Acquisitions (M&A) ([Katrakilidis et al. 1997](#); [Jensen 2003](#)). Also, economic growth rates may not have direct and significant effects on resource-seeking FDI inflows ([Akinlo 2004](#)).

This paper examines the short-run and the long-run effects of economic growth on FDI inflows through a dynamic empirical framework. The empirical analysis uses a panel dataset that comprises developing and developed economies and spans the time period 2005–2019. It is implemented through the one-step and the two-step Generalized Method of Moments (GMM) System estimators for dynamic panel models for different empirical specifications. The empirical analysis begins by examining the overall effects of economic growth on FDI inflows. Then, it investigates the variations in these effects over economic growth levels, time periods, and geo-economic groups. The empirical analysis continues to examine the influence of various economic variables (namely, economic development, trade openness, foreign investment openness, and endowment in natural resources) on the magnitude of the economic growth effect on FDI inflows.

The remainder of this paper is structured as follows. Section 2 presents the empirical model and econometric methodology. Section 3 overviews the data and variables. Section 4 presents the benchmark empirical results. Section 5 examines the diverse impacts of economic growth on FDI inflows as a function of economic growth level, time period, and geo-economic group. Section 6 investigates the influence of pertinent economic variables on the economic growth effect on FDI inflows. Section 7 provides concluding remarks.

2. Empirical Model and Econometric Methodology

The empirical analysis examines the effects of economic growth on FDI inflows, and it is implemented for a panel dataset that includes 159 countries in different geo-economic regions over the time period 2005–2019.¹ The COVID-19 pandemic has inflicted external shock on the global economic system and FDI patterns ([Baldwin and Di Mauro 2020](#); [International Monetary Fund \(IMF\) \(2021\)](#); [United Nations Conference on Trade and Development \(UNCTAD\) 2020, 2021](#)). Therefore, the dataset covers the pre-COVID-19 period to avoid confounding implications associated with this pandemic for the empirical analysis.²

The empirical analysis is performed by using empirical specifications that account for the unobserved heterogeneity peculiar to each country, and it relies on the GMM estimator to analyze dynamic panel models ([Holtz-Eakin et al. 1990](#); [Arellano and Bond 1991](#); [Arellano and Bover 1995](#)). These dynamic models include the lagged dependent variable, which enables feedback from previous FDI inflows to the present period.³ The basic dynamic empirical model is determined as:

$$\ln FDI_{it} = \alpha + \beta \ln FDI_{it-1} + \gamma EGROWTH_{it} + \delta' X_{it} + \theta_t + \vartheta_i + \varepsilon_{it} \quad (1)$$

where $\ln FDI_{it}$ is the logarithmic value of FDI inflows in constant USD for country i at time t , $EGROWTH_{it}$ is the annual percentage growth rate of real GDP, where GDP values are expressed in constant USD, and X_{it} is a vector of regressors comprising control variables. The time-specific effect is depicted by θ_t , which accounts for temporal shocks such as the 2008/2009 global financial crisis. Also, the unobserved country-specific effect and the remaining stochastic term are represented by ϑ_i and ε_{it} , respectively. The stochastic components are assumed to be independent of each other and among themselves.⁴

The GMM estimator is used in dynamic panel specifications to tackle econometric challenges such as endogeneity bias, reverse causality, and omitted variable bias. The basic use of the first-difference GMM panel estimator aimed to mitigate any potential bias resulting from unobserved individual effects ([Holtz-Eakin et al. 1990](#); [Arellano and Bond 1991](#)). The subsequent studies ([Blundell and Bond 1998](#); [Alonso-Borrego and Arellano 1999](#)) demonstrate that using lagged levels as instruments for the first-difference equations is ineffective when individual series exhibit long-term persistence and when there are relatively few observations of time series. To mitigate bias and improve precision, the GMM System estimator, which combines first-difference equations with level equations,

has been proposed (Arellano and Bover 1995; Blundell and Bond 1998). The first-difference equation is given by:

$$\ln FDI_{it} - \ln FDI_{it-1} = \beta(\ln FDI_{it-1} - \ln FDI_{it-2}) + \gamma(EGROWTH_{it} - EGROWTH_{it-1}) + \delta'(X_{it} - X_{it-1}) + (\theta_t - \theta_{t-1}) + (\varepsilon_{it} - \varepsilon_{it-1}) \quad (2)$$

The GMM estimator relies on the assumption that the stochastic components do not display any serial correlation. Accordingly, the first-difference estimator fulfills the following moment conditions for the lagged dependent variable and economic growth (and for other endogenous variables):

$$E[\ln FDI_{it-s} \cdot (\varepsilon_{it} - \varepsilon_{it-1})] = 0 \text{ for } s \geq 2 \quad (3)$$

$$E[EGROWTH_{it-s} \cdot (\varepsilon_{it} - \varepsilon_{it-1})] = 0 \text{ for } s \geq 2 \quad (4)$$

The moment conditions for strictly exogenous and weakly exogenous (predetermined) variables are:

$$E[x_{it-s} \cdot (\varepsilon_{it} - \varepsilon_{it-1})] = 0 \text{ for } t - s \geq 0 \text{ if } x_{it} \text{ is a strictly exogenous variable} \quad (5)$$

$$E[x_{it-s} \cdot (\varepsilon_{it} - \varepsilon_{it-1})] = 0 \text{ for } s \geq 1 \text{ if } x_{it} \text{ is a predetermined variable} \quad (6)$$

The GMM System estimator utilizes the lagged first differences of variables as instruments in the level equations. Hence, the additional moment conditions for the lagged dependent variable and economic growth (and for other endogenous variables) are:

$$E[(\ln FDI_{it-1} - \ln FDI_{it-2}) \cdot (\theta_i + \varepsilon_{it})] = 0 \text{ for } t \geq 2 \quad (7)$$

$$E[(EGROWTH_{it-1} - EGROWTH_{it-2}) \cdot (\theta_i + \varepsilon_{it})] = 0 \text{ for } t \geq 2 \quad (8)$$

The moment conditions for both strictly exogenous and predetermined variables are:

$$E[(x_{it} - x_{it-1}) \cdot (\theta_i + \varepsilon_{it})] = 0 \text{ for } t \geq 1 \quad (9)$$

The validity of the GMM estimator is confirmed by two standard diagnostic checks (Arellano and Bond 1991; Arellano and Bover 1995; Blundell and Bond 1998). The first examination is the Sargan–Hansen (SH) test, which assesses the over-identifying constraints to determine the collective effectiveness of instruments. The second examination investigates the presence of second-order autocorrelation AR(2) due to the fact that its incidence leads to inconsistent estimations. When ε_{it} is not serially correlated, the differenced residuals exhibit a negative first-order autocorrelation [AR(1)] and no second-order autocorrelation [AR(2)].

3. Data and Variables

The data on FDI inflows are obtained from the database of the United Nations Conference on Trade and Development (UNCTAD). The UNCTAD's World Investment Report (WIR) measures FDI inflows on a net basis or net incurrence of liabilities. The current values of FDI inflows are subsequently adjusted to the constant 2010 USD to account for inflation. In line with the approach used by Yeyati et al. (2007) and following the principles in Eichengreen and Irwin (1995), the empirical analysis accounts for the limited number (112) of negative and zero values of FDI inflows in the dataset by applying $\text{sign}(FDI_{it}) \times \ln(1 + |FDI_{it}|)$. Some studies (e.g., Neumayer and Spess 2005; Busse and Hefeker 2007; Fan et al. 2009) indicate that excluding such observations from the dataset would likely lead to a biased sample. The economic growth variable is obtained from the World Bank database and is calculated based on the annual percentage growth rate of real GDP, with GDP values reported in constant 2010 US dollars.

Table 1 shows the results from the Levin–Lin–Chu (Levin et al. 2002) and the Fisher-type Phillips–Perron (PP) (Choi 2001) panel unit root tests for the FDI inflows and economic

growth variables as used in the empirical model. These tests indicate that both series are stationary, and that panel co-integration or data transformation approaches are not required.⁵

Table 1. Panel Unit Root Tests.

	(i)	(ii)	(iii)
	Exogenous Variables	<i>lnFDI</i>	<i>EGROWTH</i>
Levin–Lin–Chu Test, t-Statistic	Intercept	−11.12 (0.000) *	−17.04 (0.000) *
	Intercept and Linear Trend	−10.888 (0.000) *	−19.543 (0.000) *
Fisher-Type PP Test, χ^2 -Statistic	Intercept	1162.71 (0.000) *	1111.90 (0.000) *
	Intercept and Linear Trend	1013.66 (0.000) *	1019.84 (0.000) *

Notes: *lnFDI* is the log of FDI inflows in million constant USD. *EGROWTH* is the annual percentage growth rate of real GDP, where GDP values are expressed in constant USD. The Levin–Lin–Chu test assumes common unit root process. The Fisher-type Phillips–Perron (PP) test assumes individual unit root process. *p*-values are presented in parentheses, and “*” indicates the rejection of the null hypothesis of common or individual unit root process at the 1% level.

The empirical specification comprises conventional control variables, including log of real GDP per capita (*lnRGDPC*), log of population (*lnPOPUL*), trade openness (*TRADEOP*), inflation rate (*INFLATION*), real interest rate (*RINTEREST*), and financial development through domestic credit to the private sector (*FINDEVEL*).⁶ The corresponding basic datasets are obtained from the World Bank database, and the current values are subsequently adjusted to the constant 2010 USD to account for inflation. Also, the empirical model controls for endowments in natural resources, distinguishing between oil and gas (O&G) and metals and minerals (M&M). Data on total endowments in natural resources are, however, limited, and the total export values of these natural resources are used as proxies. These values are collected from the United Nations Commodity Trade Statistics (UN Comtrade) database and converted to constant 2010 USD; the correlation coefficients between exports of natural resources and the available observations on endowments in natural resources are high, standing at 0.80. The logs of export values of the corresponding natural resources are included in the empirical equations (*lnNR_{O&G}* and *lnNR_{M&M}*, respectively). Finally, the empirical model comprises an indicator that measures the extent of foreign investment/ownership restrictions. This indicator is derived from the Fraser Institute’s database. It basically depicts the magnitude of these restrictions in a descending order (i.e., higher values imply more openness to, or less restrictions on foreign investment/ownership). Then, this indicator is denoted as foreign investment openness variable (*FORIOP*) through the empirical analysis.

4. Benchmark Empirical Results

Table 2 presents the benchmark empirical results from the one-step and the two-step GMM System estimations. The SH test for over-identifying constraints and the AR(2) test for the presence of second-order serial correlation do not reject the respective null hypotheses, therefore confirming the validity of the estimates across the empirical models. Column (i) shows the one-step GMM System estimates from the basic empirical specification. The effect of economic growth on FDI inflows is positive and statistically significant at the 1% level. The estimate implies that an increase in economic growth rate by one percentage point is associated with a rise in FDI inflows by 2.7% in the short run, *ceteris paribus*. The corresponding long-run effect of economic growth on FDI inflows stands at an increase by $[0.027/(1 - 0.544)] \times 100 = 5.9\%$, *ceteris paribus*. Also, among the results, we find that

trade openness and foreign investment openness variables (*TRADEOP* and *FORIOP*) have positive and statistically significant effects on FDI inflows.

Table 2. Benchmark Empirical Results.

	(i)	(ii)	(iii)	(iv)	(v)	(vi)
	GMM System	GMM System	GMM System [FOD]	GMM System [Two-Step]	GMM System	GMM System [Two-Step]
$\ln FDI_{t-1}$	0.544 a (0.064)	0.528 a (0.070)	0.539 a (0.067)	0.531 a (0.069)	0.540 a (0.071)	0.538 a (0.068)
<i>EGROWTH</i>	0.027 a (0.005)	0.031 a (0.006)	0.029 a (0.006)	0.030 a (0.006)	0.033 a (0.006)	0.032 a (0.006)
<i>EGROWTH</i> ²					−0.0001< (0.0001)	−0.0001< (0.0001)
$\ln RGDP_C$	0.407 a (0.070)	0.335 a (0.080)	0.311 a (0.079)	0.339 a (0.082)	0.343 a (0.081)	0.348 a (0.083)
$\ln POPUL$	0.401 a (0.052)	0.387 a (0.062)	0.364 a (0.070)	0.362 a (0.060)	0.390 a (0.060)	0.356 a (0.061)
<i>TRADEOP</i>	0.316 b (0.134)	0.348 b (0.148)	0.319 b (0.155)	0.360 b (0.151)	0.326 b (0.147)	0.371 b (0.154)
<i>INFLATION</i>	0.004 (0.003)	0.009 c (0.005)	0.009 c (0.005)	0.010 c (0.006)	0.009 c (0.005)	0.009 c (0.006)
<i>RINTEREST</i>	−0.001 (0.001)	0.003 (0.002)	0.003 (0.002)	0.003 (0.002)	0.003 (0.002)	0.003 (0.002)
<i>FORIOP</i>	0.089 a (0.027)	0.083 a (0.028)	0.079 a (0.030)	0.081 a (0.030)	0.085 a (0.029)	0.082 a (0.030)
<i>FINDEVEL</i>		0.178 c (0.096)	0.170 c (0.093)	0.195 c (0.104)	0.168 c (0.099)	0.198 c (0.105)
$\ln NR_{O\&G}$		0.105 b (0.046)	0.124 b (0.051)	0.115 b (0.048)	0.102 b (0.044)	0.116 b (0.050)
$\ln NR_{M\&M}$		0.068 (0.048)	0.073 (0.056)	0.080 (0.053)	0.069 (0.047)	0.088 (0.055)
Long-Run Effects						
<i>EGROWTH</i>	0.059 a (0.013)	0.066 a (0.014)	0.063 a (0.014)	0.064 a (0.014)	0.072 a (0.014)	0.069 a (0.014)
<i>EGROWTH</i> ²					−0.0001< (0.0001)	−0.0001< (0.0001)
N × T	2.385	2.385	2.385	2.385	2.385	2.385
SH Test ($Pr > \chi^2$)	0.505	0.483	0.498	0.524	0.441	0.458
AR(1) Test ($Pr > z$)	0.00	0.00	0.00	0.00	0.00	0.00
AR(2) Test ($Pr > z$)	0.291	0.281	0.297	0.305	0.274	0.292

Notes: The dependent variable is $\ln FDI$ (log of FDI inflows in million constant USD). Robust (Windmeijer-corrected) standard errors are reported in parentheses, with “a”, “b”, and “c” denoting statistical significance at the 1%, 5%, and 10% level, respectively. The SH test is the Sargan–Hansen test of instrument over-identification restrictions. The AR(1) and AR(2) tests are the Arellano–Bond tests for first-order and second-order serial correlation, respectively.

Column (ii) reports the results when augmenting the empirical specification by the financial development and natural resources variables. The results are comparable to the previous estimates: an increase in economic growth rate by one percentage point leads to increases in FDI inflows by 3.1% and 6.6% in the short run and the long run, respectively. The estimate on the financial development variable is positive and statistically significant

at the 10% level. Also, the estimated coefficient on the natural resources—oil and gas—variable ($\ln NR_{O\&G}$) is positive and statistically significant at the 5% level, whereas the effect of the natural resources—metals and minerals—variable ($\ln NR_{M\&M}$) is not statistically significant. The empirical analysis proceeds using this augmented specification. Column (iii) of Table 2 presents the results when carrying out the GMM System estimation with Forward Orthogonal Deviations (FOD), which involves subtracting the mean of future values from the current values (Arellano and Bover 1995). Also, column (iv) shows the results from the two-step GMM System estimation, where the covariance matrix is subjected to finite-sample correction to tackle downward bias in standard errors (Windmeijer 2005). The results in these columns are found to be comparable to the benchmark one-step estimates in column (ii).

5. Variations in the Effects of Economic Growth on FDI Inflows

The effect of economic growth on FDI inflows could potentially exhibit non-linear variations. Then, it could be hypothesized that the significance of economic growth in attracting FDI decreases at higher economic growth levels when accompanied by diminishing returns to investment. The prevalence of non-linear effects of economic growth on FDI inflows is examined by including a quadratic function of economic growth in the empirical specification. Columns (v) and (vi) of Table 2 display the one-step and the two-step GMM System estimates. They reveal that the estimated coefficients on $EGROWTH^2$ are not statistically significant, implying that the effect of economic growth on FDI inflows does not exhibit variations with economic growth levels.

The effect of economic growth on FDI inflows could be impacted by varying global economic conditions over time. For instance, it could be speculated that the global financial crisis of 2008/2009 inflicted structural changes and altered the relationship between economic growth and FDI. Also, enhancing globalization factors over time (e.g., decreases in information, communication, and transportation costs) could further emphasize the appealing effect of economic growth on FDI inflows. The empirical analysis proceeds to investigate whether the effect of economic growth on FDI inflows exhibits changes over time. The empirical specification now includes supplementary interactions between the economic growth variable and binary variables covering the time periods $P^2 = [2008–2010]$, $P^3 = [2011–2013]$, $P^4 = [2014–2016]$, and $P^5 = [2017–2019]$. Hence, the original economic growth variable now captures the effect of economic growth on FDI inflows in the reference period $P^1 = [2005–2007]$, whereas the estimates on the interaction variables depict the deviation (δ) in the effect of economic growth on FDI inflows in the corresponding time period relative to the reference period. The results are presented in Table 3, where columns (i) and (ii) show the short-run and the long-run effects from the one-step GMM System estimation, respectively, and where columns (iii) and (iv) display those derived from the two-step GMM System estimation. The estimates on the deviation variables are not statistically significant, suggesting that the effect of economic growth on FDI inflows did not experience structural changes over time.

Table 3. Effect of Economic Growth on FDI Inflows over Time Periods.

	(i)	(ii)	(iii)	(iv)
	GMM System		GMM System [Two-Step]	
	Short-Run Effects	Long-Run Effects	Short-Run Effects	Long-Run Effects
$EGROWTH; P^1_{[2005–2007]}$	0.033 a (0.008)	0.071 a (0.019)	0.035 a (0.009)	0.075 a (0.021)
$\delta_EGROWTH; P^2_{[2008–2010]}$	0.003 (0.010)	0.006 (0.020)	0.002 (0.009)	0.004 (0.018)

Table 3. Cont.

	(i)	(ii)	(iii)	(iv)
	GMM System		GMM System [Two-Step]	
$\delta_{EGROWTH}; P^3_{[2011-2013]}$	0.004 (0.010)	0.009 (0.022)	−0.001 (0.009)	−0.002 (0.018)
$\delta_{EGROWTH}; P^4_{[2014-2016]}$	−0.015 (0.012)	−0.032 (0.027)	−0.017 (0.013)	−0.037 (0.028)
$\delta_{EGROWTH}; P^5_{[2017-2019]}$	0.003 (0.010)	0.006 (0.020)	0.004 (0.011)	−0.009 (0.025)

Notes: The dependent variable is $\ln FDI$ (log of FDI inflows in million constant USD). Robust (Windmeijer-corrected) standard errors are reported in parentheses, with “a” denoting statistical significance at the 1% level. The Sargan–Hansen (SH) test of instrument over-identification restrictions and the Arellano–Bond AR(2) test for second-order serial correlation do not reject the corresponding null hypotheses and confirm the validity of the estimates across the regressions.

The appeal of economic growth in attracting FDI could potentially differ from one geo-economic region to another given the varying economic and geo-economic conditions and disparate risk perceptions. In this context, several reports (e.g., [United Nations Conference on Trade and Development \(UNCTAD\) 2013, 2018, 2023](#)) underline distinct FDI patterns and varying trends across geo-economic regions. These conditions are pertinent for MNEs that often select locations within a given geo-economic region to undertake FDI. Accordingly, the empirical analysis investigates potential variations in the effect of economic growth on FDI inflows across different geo-economic groups. The geo-economic regions/groups are specified as: Latin America and the Caribbean (LAC); Middle East and North Africa (MENA); East, South, and South-East Asia (ESSEA); Sub-Saharan Africa (SSA); Eastern Europe and Central Asia (EECE); European Union, pre-2004 members [EU(1)]; European Union, post-2004 new members [EU(2)]; and other (non-EU) members of the Organization for Economic Cooperation and Development (oOECD). Letting “ G ” represent a given geo-economic group with country $i \in G$, we estimate the coefficient on $EGROWTH_{i \in G, t}$. The results are presented in Table 4, where columns (i) and (ii) show the short-run and the long-run one-step GMM System estimates, respectively, and where columns (iii) and (iv) display the corresponding two-step GMM System estimates. The results from the one-step and the two-step estimations are generally comparable, and they underline significant variations across geo-economic regions. Then, the following discussion proceeds through the two-step estimates.

Table 4. Effect of Economic Growth on FDI Inflows by Geo-Economic Groups.

	(i)	(ii)	(iii)	(iv)
	GMM System		GMM System [Two-Step]	
	Short-Run Effects	Long-Run Effects	Short-Run Effects	Long-Run Effects
$EGROWTH; G^1_{LAC}$	0.052 a (0.009)	0.112 a (0.021)	0.057 a (0.009)	0.123 a (0.022)
$EGROWTH; G^2_{MENA}$	0.017 b (0.007)	0.036 b (0.015)	0.018 b (0.008)	0.039 b (0.018)
$EGROWTH; G^3_{ESSEA}$	0.030 a (0.009)	0.065 a (0.020)	0.033 a (0.010)	0.072 a (0.022)

Table 4. Cont.

	(i)	(ii)	(iii)	(iv)
	GMM System		GMM System [Two-Step]	
$EGROWTH; G_{SSA}^4$	0.024 b (0.011)	0.051 b (0.025)	0.027 b (0.012)	0.058 b (0.026)
$EGROWTH; G_{EECE}^5$	0.035 a (0.013)	0.075 a (0.029)	0.039 a (0.013)	0.084 a (0.029)
$EGROWTH; G_{EU(1)}^6$	0.042 b (0.021)	0.089 b (0.044)	0.040 c (0.022)	0.085 c (0.047)
$EGROWTH; G_{EU(2)}^7$	0.030 b (0.014)	0.064 b (0.030)	0.028 b (0.014)	0.060 b (0.030)
$EGROWTH; G_{oOECD}^8$	0.035 (0.026)	0.075 (0.056)	0.032 (0.028)	0.069 (0.060)

Notes: The dependent variable is $\ln FDI$ (log of FDI inflows in million constant USD). Robust (Windmeijer-corrected) standard errors are reported in parentheses, with “a”, “b”, and “c” denoting statistical significance at the 1%, 5%, and 10% level, respectively. The Sargan–Hansen (SH) test of instrument over-identification restrictions and the Arellano–Bond AR(2) test for second-order serial correlation do not reject the corresponding null hypotheses and confirm the validity of the estimates across the regressions.

The effect of economic growth on FDI inflows is found to be the highest in the case of G_{LAC}^1 , where an increase in economic growth rate by one percentage point would lead to rises in FDI inflows by 5.7% in the short run and 12.3% in the long run, ceteris paribus. Also, the estimates for G_{ESSEA}^3 and G_{EECE}^5 are relatively high and statistically significant at the 1% level, implying that an increase in economic growth rate by one percentage point would lead to increases in FDI inflows by 3.3% and 3.9% in the short run, respectively, ceteris paribus. The corresponding long-run estimates stand at 7.2% and 8.4%, respectively. Meanwhile, the effects of economic growth on FDI inflows are found to be relatively moderate in the cases of G_{MENA}^2 and G_{SSA}^4 , where the estimated coefficients show statistical significance at the 5% level. These findings could be associated with the significant share of resource-seeking FDI (particularly in oil and gas intensive and extractives industries) in the case of MENA, and inadequate infrastructure and institutions in the case of SSA.

The estimated coefficients for the two EU groups, $G_{EU(1)}^6$ and $G_{EU(2)}^7$, are positive and statistically significant at the 10% and 5% level, respectively. They indicate that an increase in economic growth rate by one percentage point would lead to increases in FDI inflows by 4.0% and 2.8% in the short run, respectively, ceteris paribus. The corresponding long-run estimates stand at 8.5% and 6.0%, respectively. Meanwhile, the estimated coefficient for G_{oOECD}^8 is positive, but it is statistically insignificant.

6. Effect of Economic Growth on FDI Inflows by Quantile Categories

The empirical analysis proceeds to investigate the influence of pertinent economic variables (namely, economic development, trade openness, foreign investment openness, and endowments in natural resources) on the effect of economic growth on FDI inflows. Accordingly, the empirical analysis allows for potential heterogeneities by investigating variations in the economic growth effect on FDI inflows. These potential heterogeneities are examined by estimating the economic growth coefficient by quantile categories. Hence, the empirical specification interacts $EGROWTH$ with the tercile Q_r^v , where “c” and “v” depict the tercile and the corresponding economic variable, respectively. The empirical results are presented in Tables 5 and 6, and they are discussed in the next sub-sections.

Table 5. Effect of Economic Growth on FDI Inflows by Quantile Categories.

	(i)	(ii)	(iii)	(iv)
	GMM System		GMM System [Two-Step]	
	Short-Run Effects	Long-Run Effects	Short-Run Effects	Long-Run Effects
Economic Development				
$EGROWTH; Q_{RGDPC}^1$	0.017 c (0.010)	0.036 c (0.021)	0.017 c (0.010)	0.036 c (0.021)
$EGROWTH; Q_{RGDPC}^2$	0.041 a (0.009)	0.088 a (0.022)	0.040 a (0.010)	0.086 a (0.023)
$EGROWTH; Q_{RGDPC}^3$	0.026 c (0.015)	0.055 c (0.032)	0.028 c (0.016)	0.060 c (0.034)
Trade Openness				
$EGROWTH; Q_{TRADEOP}^1$	0.013 (0.010)	0.028 (0.021)	0.014 (0.011)	0.030 (0.023)
$EGROWTH; Q_{TRADEOP}^2$	0.023 a (0.008)	0.049 a (0.018)	0.023 a (0.008)	0.049 a (0.018)
$EGROWTH; Q_{TRADEOP}^3$	0.036 a (0.009)	0.078 a (0.021)	0.034 a (0.009)	0.073 a (0.022)
Foreign Investment Openness				
$EGROWTH; Q_{FORIOP}^1$	0.016 (0.011)	0.034 (0.023)	0.016 (0.011)	0.034 (0.024)
$EGROWTH; Q_{FORIOP}^2$	0.029 a (0.010)	0.062 a (0.023)	0.028 a (0.010)	0.060 a (0.022)
$EGROWTH; Q_{FORIOP}^3$	0.043 a (0.007)	0.092 a (0.017)	0.041 a (0.008)	0.088 a (0.019)

Notes: The dependent variable is $\ln FDI$ (log of FDI inflows in million constant USD). Robust (Windmeijer-corrected) standard errors are reported in parentheses, with “a” and “c” denoting statistical significance at the 1% and 10% level, respectively. The Sargan–Hansen (SH) test of instrument over-identification restrictions and the Arellano–Bond AR(2) test for second-order serial correlation do not reject the corresponding null hypotheses and confirm the validity of the estimates across the regressions.

Table 6. Influence of Natural Resources by Quantile Categories.

	(i)	(ii)	(iii)	(iv)
	GMM System		GMM System [Two-Step]	
	Short-Run Effects	Long-Run Effects	Short-Run Effects	Long-Run Effects
Natural Resources: Oil and Gas				
$EGROWTH; Q_{O\&G}^1$	0.032 a (0.012)	0.068 a (0.026)	0.033 a (0.012)	0.071 a (0.027)
$EGROWTH; Q_{O\&G}^2$	0.035 a (0.012)	0.074 a (0.028)	0.037 a (0.013)	0.079 a (0.030)
$EGROWTH; Q_{O\&G}^3$	0.018 c (0.010)	0.039 c (0.021)	0.019 c (0.010)	0.041 c (0.021)
Natural Resources: Metals and Minerals				
$EGROWTH; Q_{M\&M}^1$	0.029 b (0.012)	0.062 b (0.025)	0.030 b (0.012)	0.064 b (0.025)

Table 6. Cont.

	(i)	(ii)	(iii)	(iv)
	GMM System		GMM System [Two-Step]	
$EGROWTH; Q_{M\&M}^2$	0.032 a (0.012)	0.068 a (0.026)	0.034 a (0.012)	0.073 a (0.027)
$EGROWTH; Q_{M\&M}^3$	0.022 b (0.011)	0.047 b (0.023)	0.023 b (0.011)	0.049 b (0.023)

Notes: The dependent variable is $\ln FDI$ (log of FDI inflows in million constant USD). Robust (Windmeijer-corrected) standard errors are reported in parentheses, with “a”, “b”, and “c” denoting statistical significance at the 1%, 5%, and 10% level, respectively. The Sargan–Hansen (SH) test of instrument over-identification restrictions and the Arellano–Bond AR(2) test for second-order serial correlation do not reject the corresponding null hypotheses and confirm the validity of the estimates across the regressions.

6.1. Economic Development

The response of MNEs to economic growth in undertaking foreign investment is anticipated to be greater in growing economies with adequate infrastructure and institutions (Dunning 1981; Trevino et al. 2002; Dunning and Zhang 2008). These favoring conditions would further emphasize the location advantage of host countries in attracting FDI. Accordingly, the empirical analysis examines the influence of the host country’s economic development level (proxied by RGDP) by specifying the following terciles: Q_{RGDP}^1 (lowest tercile), Q_{RGDP}^2 (middle tercile), and Q_{RGDP}^3 (highest tercile). The results are presented in the first panel of Table 5. Columns (i) and (ii) show the short-run and the long-run one-step GMM System estimates, respectively, and columns (iii) and (iv) display the corresponding two-step GMM System estimates.

The results underline that the effect of economic growth on FDI inflows is the highest in the case of Q_{RGDP}^2 , where the two-step estimates show that an increase in economic growth rate by one percentage point is associated with rises in FDI inflows by 4.0% in the short run and 8.6% in the long run, ceteris paribus. These results indicate higher propensities of middle-income countries in attracting FDI with economic growth. The corresponding effects in the case of Q_{RGDP}^1 are found to be considerably lower, standing at 1.7% in the short run and 3.6% in the long run. These findings could encompass the adverse effects of deficient infrastructure and institutions in lower-income countries, lessening the significance of economic growth in attracting FDI. In the case of Q_{RGDP}^3 , the estimates are found to be statistically significant only at the 10% level. The significance of economic growth in attracting FDI in middle-income countries is consistent with the interaction between broader foreign investment prospects in growing economies combined with adequate infrastructure and institutions.

6.2. Trade Openness

Trade openness is an essential factor that enables foreign affiliates of MNEs to effectively engage in the importation of primary and intermediate products and the exportation to third markets (Goldberg and Klein 1998; Buckley et al. 2012; Liargovas and Skandalis 2012).⁷ Trade openness would also benefit MNEs by enhancing the effectiveness of their vertical production networks and optimizing their international value chain (Hanson et al. 2005). Therefore, it could be hypothesized that MNEs have greater responsiveness to higher economic growth rates in host countries when accompanied by elevated levels of trade openness. The effects of economic growth on FDI inflows are estimated when allowing for distinct effects over the following trade openness terciles: $Q_{TRADEOP}^1$ (lowest tercile), $Q_{TRADEOP}^2$ (middle tercile), and $Q_{TRADEOP}^3$ (highest tercile). The results are presented in the second panel of Table 5, where columns (i) and (ii) show the short-run and the long-run one-step GMM System estimates, respectively, and where columns (iii) and (iv) present the two-step GMM System estimates.

The results reveal the highest response of FDI inflows to economic growth in the case of $Q^3_{TRADEOP}$; the two-step GMM System estimates show that an increase in economic growth rate by one percentage point leads to increases in FDI inflows by 3.4% in the short run and 7.3% in the long run, *ceteris paribus*. The corresponding effects in the case of $Q^2_{TRADEOP}$ are also found to be positive and statistically significant at the 1% level, but they are relatively smaller in magnitude. Meanwhile, the estimates in the case of $Q^1_{TRADEOP}$ are positive but statistically insignificant. These findings highlight that trade openness emphasizes the effect of economic growth on FDI inflows. Adequate levels of trade openness in host countries would facilitate the operations of foreign affiliates of MNEs in importing primary and intermediate products and exporting to third markets. As such, MNEs would be more responsive to economic growth in host countries when combined with higher levels of trade openness.⁸

6.3. Openness to Foreign Investment

MNEs are likely to exhibit higher propensities to undertake FDI when there are lower restrictions on foreign investment and the activities of foreign affiliates of MNEs (Dunning 1977, 1998; Kinoshita and Campos 2003; Dunning and Lundan 2008). As such, heightened restrictions on foreign investment/ownership (e.g., discriminatory investment screening and approval processes, asset ownership and foreign equity restrictions, stringent taxation schemes, biased anti-competitive procedures, constraints on foreign personnel, and operational restrictions) are naturally expected to lessen the appeal of economic growth in attracting FDI. The regressions are executed next according to the openness to foreign investment criterion by specifying the following terciles: Q^1_{FORIOP} (lowest tercile), Q^2_{FORIOP} (middle tercile), and Q^3_{FORIOP} (highest tercile). The results are presented in the third panel of Table 5, where columns (i) and (ii) show the short-run and the long-run one-step GMM System estimates, respectively, and where columns (iii) and (iv) present the two-step GMM System estimates.

As expected, the results indicate that the largest effect of economic growth on FDI inflows occurs in the case of Q^3_{FORIOP} , where the two-step estimates show that an increase in economic growth rate by one percentage point is associated with increases in FDI inflows by 4.1% in the short run and 8.8% in the long run, *ceteris paribus*. The corresponding effects in the case of Q^2_{FORIOP} are positive and statistically significant at the 1% level, but they are relatively smaller in magnitude. The estimates in the case of Q^1_{FORIOP} are positive but statistically insignificant. These empirical findings indicate that the appeal of economic growth in attracting FDI is more significant in countries with higher levels of openness to foreign investment. Hence, MNEs would be more responsive to economic growth in undertaking FDI in host countries when combined with lower restrictions on foreign investment/ownership and operations of foreign affiliates.

6.4. Natural Resources

Host countries' endowments in natural resources would typically attract resource-seeking FDI (Dunning 1977; Dunning and Zhang 2008), and they are expected to influence the effect of economic growth on FDI inflows. In this context, it could be hypothesized that the abundance of natural resources in host countries would attenuate the sensitivity of FDI inflows to economic growth when MNEs are primarily driven by the motivations of accessing and securing natural resources (Akinlo 2004). The economic analysis proceeds by examining the effects of economic growth on FDI inflows across different categories of endowments in natural resources. In the case of oil and gas, three terciles are specified: $Q^1_{O\&G}$ (lowest tercile), $Q^2_{O\&G}$ (middle tercile), and $Q^3_{O\&G}$ (highest tercile). In the case of metals and minerals, the corresponding terciles are: $Q^1_{M\&M}$ (lowest tercile), $Q^2_{M\&M}$ (middle tercile), and $Q^3_{M\&M}$ (highest tercile). The results are presented in Table 6, where columns (i) and (ii) show the short-run and the long-run one-step GMM System estimates, respectively, and where columns (iii) and (iv) display the two-step GMM System estimates.

One noticeable finding is that the estimated coefficients for the highest natural resources' terciles (i.e., $Q_{O\&G}^3$ and $Q_{M\&M}^3$) are relatively smaller in magnitude and statistical significance compared to the coefficients for the other categories. For instance, in the case of $Q_{O\&G}^3$, the short-run effect of an increase in economic growth rate by one percentage point on FDI inflows stands at a two-step estimate of 1.9% with statistical significance at the 10% level, *ceteris paribus*. Comparatively, in the cases of $Q_{O\&G}^1$ and $Q_{O\&G}^2$, the corresponding effects are 3.3% and 3.7% with statistical significance at the 1% level, respectively. These results could be associated with the important shares of resource-seeking FDI in countries that are relatively abundant in natural resources. In this context, MNEs that are driven by resource-seeking motivations would be relatively less concerned with economic growth in host countries when undertaking foreign investments.

7. Conclusions

Economic growth is deemed to be a conducive factor in attracting FDI. Economic growth is generally accompanied by higher investment levels, and it confers location advantages to the host country and generates foreign investment opportunities for MNEs. Also, the occurrence of sustained economic growth tends to foster business confidence in the host country's economy, and it indicates a heightened pace of economic development, favorable investment climate, improvement in institutions and infrastructure, and availability of qualified human capital. This paper examines the short-run and the long-run effects of economic growth on FDI inflows using a panel dataset that covers developing and developed economies over the time period 2005–2019. The empirical analysis is executed through the one-step and the two-step GMM System estimators for different empirical specifications.

The basic empirical findings underline significant positive effects of economic growth on FDI inflows, and they show that there are statistically insignificant changes in the magnitude of these effects over time despite global economic shocks and evolving globalization patterns. Also, the results do not support the premise that the importance of economic growth in attracting FDI diminishes at higher economic growth levels. The results also highlight significant disparities in the effects of economic growth on FDI inflows across geo-economic groups, being consistent with the varying economic and geo-economic conditions and regional FDI patterns. There are particularly stronger responses of FDI inflows to economic growth in LAC, ESSEA, and EECE among developing geo-economic regions, and in the EU bloc among developed geo-economic groups. Meanwhile, the effects are found to be relatively smaller in other geo-economic regions, such as MENA, where a significant share of FDI departs from resource-seeking motivations, and SSA, where FDI inflows are discouraged by inadequate infrastructure and institutions.

The empirical analysis reveals that FDI inflows are most sensitive to economic growth in the case of middle-income countries compared to high-income and low-income countries. These results are consistent with the proposition that the responses of MNEs to economic growth are more pronounced in the case of growing developing economies that feature adequate infrastructure and institutions. Also, among trade and foreign investment openness groups, the corresponding upper quantile categories are characterized by the highest responses of FDI inflows to economic growth. Trade openness is essential in facilitating foreign affiliates' activities in terms of importation of primary and intermediate goods and exportation to third markets, while openness to foreign investment is an essential requirement for FDI to occur. These results imply that economic growth would appeal more to MNEs in undertaking FDI when coupled with higher levels of openness to international trade and foreign investment. Also, the responses of FDI inflows to economic growth are found to be lower in the cases of host countries that are relatively abundant in natural resources (namely, oil and gas, and metals and minerals), where resource-seeking FDI generally constitutes an important share of FDI inflows.

This paper provides empirical evidence of the general appeal of economic growth in attracting FDI. The findings are also relevant when assessing the adverse short-run

and long-run implications of the COVID-19 pandemic, which led to contracted global economic growth rates, for FDI inflows, and the repercussions of global and regional political tensions for economic growth and, consequently, for FDI inflows. It is worth noting that the relationship between economic growth and FDI inflows may have been altered due to this pandemic. Hence, as more annual post-COVID-19 observations become available, it would be pertinent to empirically analyze (1) whether the disruption in this relationship is temporary or permanent, and (2) whether a structural break has led to persistent implications for the effect of economic growth on FDI inflows.⁹

The findings underline the necessity of implementing growth-enhancing policies that are tailored according to the economic and geo-economic characteristics of host countries. In this context, host countries could stimulate economic growth through deregulation and upgrade of infrastructure and institutions. They could introduce fiscal policies and tax reforms to improve the macroeconomic conditions and foster consumer spending and business operations. Also, host countries could design education and training policies that would eventually lead to higher shares of skilled labor, and they could adopt Research and Development (R&D) policies to raise productivity and promote innovation. Such policies could be coupled with international trade and foreign investment openness directions to stimulate stronger responses of FDI inflows to positive economic growth rates and mitigate the implications of unfavorable global and regional political conditions.

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Conflicts of Interest: The author declares no conflict of interest.

Appendix A

Table A1. List of Countries.

Albania	Denmark	Kyrgyzstan	Qatar
Algeria	Dominican Rep.	Laos	Romania
Angola	Ecuador	Latvia	Russian Federation
Argentina	Egypt, Arab Rep.	Lebanon	Rwanda
Armenia	El Salvador	Lesotho	Saudi Arabia
Australia	Estonia	Liberia	Senegal
Austria	Eswatini	Lithuania	Serbia
Azerbaijan	Ethiopia	Luxembourg	Seychelles
Bahamas	Fiji	Madagascar	Sierra Leone
Bahrain	Finland	Malawi	Singapore
Bangladesh	France	Malaysia	Slovak Rep.
Belarus	Gabon	Mali	Slovenia
Belgium	Gambia	Malta	South Africa
Belize	Georgia	Mauritania	Spain
Benin	Germany	Mauritius	Sri Lanka
Bhutan	Ghana	Mexico	Sudan

Table A1. *Cont.*

Bolivia	Greece	Moldova	Suriname
Bosnia and Herz.	Guatemala	Mongolia	Sweden
Botswana	Guinea	Montenegro	Switzerland
Brazil	Guinea-Bissau	Morocco	Tajikistan
Brunei Darussalam	Guyana	Mozambique	Tanzania
Bulgaria	Haiti	Myanmar	Thailand
Burkina Faso	Honduras	Namibia	Togo
Burundi	Hong Kong	Nepal	Trinidad and Tobago
Cabo Verde	Hungary	Netherlands	Tunisia
Cambodia	Iceland	New Zealand	Turkey
Cameroon	India	Nicaragua	Turkmenistan
Canada	Indonesia	Niger	Uganda
Central African Rep.	Iran, Islamic Rep.	Nigeria	Ukraine
Chad	Iraq	North Macedonia	United Arab Emirates
Chile	Ireland	Norway	United Kingdom
China	Israel	Oman	United States
Colombia	Italy	Pakistan	Uruguay
Congo, Dem. Rep.	Jamaica	Panama	Uzbekistan
Congo, Rep.	Japan	Papua New Guinea	Vietnam
Costa Rica	Jordan	Paraguay	West Bank and Gaza
Côte d'Ivoire	Kazakhstan	Peru	Yemen
Croatia	Kenya	Philippines	Zambia
Cyprus	Korea, Rep.	Poland	Zimbabwe
Czech Rep.	Kuwait	Portugal	

Table A2. Descriptive Statistics.

	(i)	(ii)	(iii)	(iv)	(v)
	$N \times T$	Mean	St. Dev.	Min.	Max.
<i>FDI</i>	2.385	9.646	27.988	−50.852	429.193
<i>FDI_{LAC}</i>	360	6.357	14.216	−1.654	91.847
<i>FDI_{MENA}</i>	240	3.289	5.768	−8.039	42.726
<i>FDI_{ESSEA}</i>	285	17.222	30.643	−4.39	148.995
<i>FDI_{SSA}</i>	630	0.819	1.611	−6.347	11.881
<i>FDI_{EECE}</i>	255	3.847	9.234	−5.997	72.286
<i>FDI_{EU(1)}</i>	225	26.953	38.347	−32.56	267.744
<i>FDI_{EU(2)}</i>	195	6.224	9.764	−16.99	64.117
<i>FDI_{oOECD}</i>	165	37.811	72.341	−50.852	429.193
<i>EGROWTH</i>	2.385	3.842	4.046	−36.392	34.466
<i>EGROWTH_{LAC}</i>	360	3.237	3.010	−6.296	13.208
<i>EGROWTH_{MENA}</i>	240	3.645	4.810	−27.994	26.170
<i>EGROWTH_{ESSEA}</i>	285	5.740	3.099	−2.508	18.361
<i>EGROWTH_{SSA}</i>	630	4.543	4.244	−36.392	20.716

Table A2. Cont.

	(i)	(ii)	(iii)	(iv)	(v)
	N × T	Mean	St. Dev.	Min.	Max.
$EGROWTH_{EECE}$	255	4.619	4.952	−14.759	34.466
$EGROWTH_{EU(1)}$	225	1.448	3.099	−9.132	25.163
$EGROWTH_{EU(2)}$	195	2.944	4.063	−14.839	11.986
$EGROWTH_{oOECD}$	165	2.625	2.418	−6.776	11.200

Notes: FDI represents FDI inflows in million constant USD. EGROWTH is the annual percentage growth rate of real GDP, where GDP values are expressed in constant USD. LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; ESSEA = East, South, and South-East Asia; SSA = Sub-Saharan Africa; EECE = Eastern Europe and Central Asia; EU(1) = European Union, pre-2004 members; EU(2) = European Union, post-2004 new members; oOECD = other (non-EU) members of the Organization for Economic Cooperation and Development.

Notes

- ¹ These countries are listed in Table A1 of Appendix A.
- ² With more annual post-COVID observations, this empirical analysis would be complemented by examining the occurrence of long-lasting transformations in the effect of economic growth on FDI inflows. Also, it is worth noting that extending the dataset further into history encounters missing observations.
- ³ There is a broad range of empirical studies (e.g., Naudé and Krugell 2007; Saini and Singhania 2018; Ghazalian 2023) that use dynamic empirical specifications to examine the determinants of FDI.
- ⁴ The assumption of idiosyncratic disturbance that is uncorrelated across countries is loosened by employing two-way error component disturbances to account for common variations in the dependent variable at any given moment.
- ⁵ Table A2 of Appendix A presents descriptive statistics for FDI inflows and economic growth over the whole dataset, and across different geo-economic regions/groups. The simultaneous inclusion of diverse countries (including developed and developing countries) in the dataset allows for desirable variability and increases the statistical power of the GMM empirical analysis.
- ⁶ $\ln RGDP$ serves as a proxy for economic development. The latter is typically associated with the availability of human capital, and the quality of institutions and infrastructure, inter alia.
- ⁷ It is worth noting that trade openness, through its components, often plays an important role in determining the mode of access of MNEs to foreign markets (Brainard 1997; Ghazalian and Furtan 2008, 2009).
- ⁸ These results complement the findings of Ghazalian and Amponsem (2019) in terms of the positive effects of freedom to trade internationally on FDI inflows.
- ⁹ Moreover, this research could be extended by follow-up studies that examine the relationship between economic growth and FDI inflows in some specific sectors.

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