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The Institutional–Economic Nexus in Driving Greenfield FDI to European Countries

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Abstract:
While theoretical perspectives often emphasize the role of high-quality institutions in attracting foreign investors, empirical findings remain rather mixed. This study advances existing research by exploring the interplay between quality of institutions and economic development in driving greenfield foreign direct investment (FDI) in European countries. The results do not suggest that better institutions alone directly help attract FDI in the selected European sample from 2003–2022. However, in more economically developed host countries, institutional quality plays a significant role, whether measured by real GDP per capita or GNI per capita. Further analysis reveals that both legal and political components of institutional quality have a beneficial conditional effect in more developed countries. Conversely, this finding does not hold uniformly across all FDI; it applies to FDI in the services sector but not in manufacturing, which may be explained by efficiency-seeking motives.

Keywords: institutional quality; legal and political institutions; economic development; foreign direct investment; investment motives

JEL Classification: E22; F21; O17; O43

1. Introduction

The growth literature widely recognizes that variations in institutional quality explain differences in long-term economic performance (Acemoglu et al., 2001; 2014; Afonso et al., 2021; Kar et al., 2019). This perspective is rooted in institutional economics, which emphasizes how institutions, such as legal norms, enforcement mechanisms, and governance structures, shape the behavior of economic actors (North, 1990). By ensuring the protection

of property rights and reducing transaction costs, high-quality institutions can incentivize domestic and foreign direct investments (FDI) (Sabir et al., 2019).

However, from an empirical standpoint, there are several shortcomings in this respect in European countries. Despite their generally high ranking on a global scale, Europe has experienced a decline in institutional quality since the onset of the Great Recession in 2008 (Eurofound, 2022). This is largely the result of the strategic decisions of opportunistic politicians and conflicts over resource distribution that have hindered the reforms needed to deliver the socially desirable benefits of institutional improvements (Wagner, 2014).

Furthermore, persistent disparities continue to exist between Western European countries and post-communist Central and Eastern European countries (CEE); the former have a long history of democratic governance and market economies, and the latter have undergone profound transformations from centrally planned to market-oriented systems (Konatar et al., 2025), as illustrated in Appendix Figure A1. These historical and systemic differences contribute to their different institutional trajectories and levels of economic development, as the emulation of developed Western countries' institutions may not align with the prevailing social and cultural norms of less developed CEE countries (see, e.g., Rodrik, 2008).

Such structural differences call into question the generalizability of institutional theories of FDI, as they may help explain why theoretical expectations about the positive role of institutions are not uniformly supported in the empirical literature (Bothner, 2024; Doytch and Ashraf, 2023; Gossel, 2018; Saha et al., 2022; Wei, 2000). One possible explanation may lie in the varying levels of economic development across countries, which may condition the effectiveness of institutional frameworks in attracting FDI. As such, studies in the literature have moved beyond examining the direct effects of institutions on FDI. Instead, attention has been shifted toward threshold and conditional relationships (Hou et al., 2021; Zhang and Kim, 2022).

This evolving literature lends support to the idea that institutional quality interacts with economic development in shaping FDI inflows. It is plausible that the synergy between these factors could create a more attractive environment for FDI. Investors might be more inclined to allocate resources to countries that offer stability and efficiency, facilitated by strong institutions and supported by robust markets and infrastructure. Building on this line of reasoning, which highlights institutional and developmental disparities across European countries, the main research question here is the following: To what

extent is the relationship between institutional quality and FDI inflows in European countries moderated by their level of economic development?

While prior research has explored institutional effects in developed and developing countries separately (see, e.g., Doytch and Ashraf, 2023; Sabir et al., 2019), the conditional nature of this relationship within the diverse but economically interconnected European context remains underexplored. We address this gap by examining how the effect of institutional quality on greenfield FDI across 28 European countries depends on the level of economic development. The novel evidence presented here highlights that the relationship between institutional quality and FDI is not uniform across countries and sectors. While institutional quality alone does not appear to attract FDI in the countries examined, its effect becomes economically important and robust when considered in conjunction with higher levels of economic development.

This suggests that institutional quality enhances FDI inflows primarily in more developed countries, where it likely complements other favorable conditions such as market growth. Furthermore, the disaggregated analysis reveals that this conditional effect is particularly pronounced in the services sector. These findings underscore the importance of understanding sector-specific investor motivations and tailoring policy measures to strengthen the institutional framework and economic policies to attract diverse types of FDI. As such, the results offer theoretical insights into the institutional determinants of FDI and have practical implications for investment policy in the EU.

The remainder of the article is structured as follows. In Section 2, we introduce the theoretical framework and review the relevant literature on the direct and conditional effects of institutional quality in attracting foreign investment. Section 3 details the dynamic panel data methodology and data employed in the analysis. Section 4 presents empirical results, examining the aggregate relationship between institutional quality and FDI and its conditional nature through the interaction with economic development. A heterogeneity analysis provides deeper insights into decomposed FDI components and institutional sub-indices. Finally, in Section 5, we summarize the findings and offer policy recommendations.

2. Literature review

Traditional FDI theories such as Vernon's (1966) product life-cycle theory and Dunning's (1988) eclectic paradigm, also known as the OLI framework, examine the factors behind foreign investors' decisions, with a primary focus on firm-level location choices driven by

economic motives. Institutional factors, although potentially relevant, have not been central to these theoretical approaches (Makoni, 2015; Ross, 2019).

A greater emphasis on institutional factors emerged later in the literature, influenced most notably by the Institutional FDI Fitness (IFF) theory. Formulated by Wilhelms and Witter (1998), the IFF theory highlights a country's ability not only to attract but also to adapt to both internal and external expectations of foreign investors, thereby enhancing its capacity to retain FDI. This institutional "fitness" is built on four pillars: the sociocultural environment, education, markets, and government. The IFF theory aligns conceptually with North's (1990) view of institutions, both of which emphasize their role in shaping economic outcomes.

The relevance of institutions for attracting FDI can be theoretically justified through two main channels. Firstly, inadequate institutional quality can be understood as a tax that increases costs for investors; for instance, in highly corrupt environments, businesses may need to pay bribes to obtain the necessary permits. Second, poor institutional quality heightens uncertainty regarding future returns, which can also discourage investment (Daude and Stein, 2007). It is therefore suggested that high-quality institutions might reduce transaction costs and create a more stable and transparent business environment, which could, in turn, enhance a country's potential to attract FDI.

While this theoretical framework clearly emphasizes the benefits of institutions for FDI, the empirical findings remain inconclusive. Next, we provide a structured overview of empirical studies, beginning with those that support a direct institutional effect on FDI, followed by those that suggest a more conditional or context-dependent role for institutional quality.

2.1 The direct role of institutional quality in attracting FDI

A substantial body of empirical research demonstrates a direct positive effect of institutions on FDI. These studies argue that poor institutional quality discourages foreign investors by increasing the operational risks and costs faced in host economies (Doytch and Ashraf, 2023; Lysandrou et al., 2016; Wei, 2000; Zhang and Kim, 2022).

In this regard, Wei (2000) highlights the negative association between corruption, commonly regarded as a form of institutional weakness, and inward FDI, likening its effect to that of a tax. Specifically, the findings suggest that the detrimental effect on inward

FDI following an increase in corruption from the level observed in Singapore to that seen in Mexico would be similar to the effect of a fifty-percentage-point increase in the tax rate.

Similarly, Bhujabal et al. (2024) find that institutions play a supportive role in attracting FDI inflows in South and Southeast Asian countries. In addition, they identify positive spillovers to economic growth, trade, and financial development. Consistent with these findings, Kwaw-Nimeson and Tian (2023) confirm the importance of institutional quality using a sample from the Community of Sahel-Saharan States. The authors argue that institutional reforms enhanced the region's attractiveness for FDI inflows, regardless of their level of integration.

It is important to acknowledge that although numerous studies support the theoretical view that deteriorating institutional quality discourages foreign investment, particularly through increased corruption (see e.g. Khan et al., 2024; Lysandrou et al., 2016), this relationship is not universally consistent. In particular cases, the reverse dynamics may apply. Gossel (2018) explores this phenomenon through the dichotomy of corruption's "helping hand" and its "grabbing hand"; the latter reflects high costs and negative effects, while the former allows multinational corporations to exploit low regulatory standards as an opportunity to speed bureaucratic processes through bribes.

This perspective is further supported by Clausen (2014), who suggests that highly efficient institutions may reduce opportunities for arbitrage in financial markets, discouraging speculative investment as a result. Using a sample of sub-Saharan African countries, Gossel (2018) demonstrates that investors use corruption to navigate the region's weak institutional framework. The evidence also suggests that, as democratic capital accumulates, the effectiveness of this relationship diminishes, and the negative effect of corruption on FDI becomes more pronounced.

Other dimensions of institutional quality have been found to have a similar deterrence effect on foreign investment in specific contexts. For instance, Saha et al. (2022) find that in lower-middle-income countries, greater respect for the rule of law and voice and accountability are associated with reduced FDI inflows during the period from 2002 to 2018. Likewise, Ullah and Khan (2017) report a negative relationship between the governance index and FDI inflows in the South Asian Association for Regional Cooperation region and observe that greater freedom is linked to lower FDI inflows in Central Asia.

In addition to the above positive and negative relationships, empirical evidence points to cases where institutional quality appears to have no significant effect on FDI. For example, Asongu et al. (2018) find no evidence to support the relevance of institution-

al quality for attracting FDI to BRICS (Brazil, Russia, India, China, and South Africa) and MINT (Mexico, Indonesia, Nigeria, and Turkey) countries. Instead, other economic determinants such as market size and trade openness are identified as key.

Complementing these findings, Doytch and Ashraf (2023) provide a more comprehensive perspective by examining the effects of various institutional quality indicators not only on FDI, but also on cross-border mergers and acquisitions (M&As). Based on a sample of 110 countries, their results suggest that while law and order and the state of democracy are important for attracting greenfield FDI, strong corruption control and government stability do not appear to play a significant role in this context. However, when it comes to M&As, control of corruption emerges as a key determinant.

2.2 The contingent role of institutional quality in attracting FDI

Given that the evidence for the direct effect of institutional quality on FDI is inconclusive, it is likely that this relationship is shaped by additional contextual factors. Recent studies have thus increasingly shifted toward identifying the specific conditions under which institutions may enhance a country's attractiveness to foreign investors (see, e.g., Bothner, 2024; Chen and Jiang, 2023; Zhang and Kim, 2022).

For instance, Chen and Jiang (2023) use panel data for 42 countries and identify several factors moderating the relationship between institutional quality and FDI inflows. These include financial development, tax levels, and natural resource wealth. Specifically, higher levels of financial development and abundant natural resources reinforce the positive effect of institutional quality, whereas elevated tax burdens tend to weaken this. The authors also find that institutional quality contributes to FDI inflows indirectly by enhancing trade openness or fostering technological innovation.

The conditionality of institutional quality in relation to financial openness, measured by the capital account openness index, is examined by Okada (2013). Using a system generalized method of moments (GMM) estimator, Okada (2013) finds that neither financial openness nor institutional quality has a direct, standalone effect on FDI or portfolio equity investment in a sample of 112 countries from 1985 to 2009. However, the conditional effect of these is evident: countries with high institutional quality benefit more from financial openness in the form of capital inflows than those with low institutional quality. Dutta and Roy (2011) likewise show that political stability, as an aspect of institutional quality, is a crucial factor in the relationship between financial development and FDI inflows.

Katsaitis and Doulos (2009) provide relevant evidence on the conditional nature of institutional effects on FDI inflows to EU-15 countries. Although their study primarily investigates the role of EU Structural Funds, their findings underscore the importance of institutional quality as a moderating factor. Specifically, the results indicate that EU funds tend to attract foreign investors in countries in which institutional quality is high; by contrast, in countries with weaker institutions, the same funds may fail to generate positive investment responses.

Similarly, Zhang and Kim (2022) show that strong institutions can mitigate the adverse effects of high labor costs, indirectly supporting the FDI attractiveness of South and Southeast Asian countries. In particular, the negative effect of labor costs diminishes once a sufficient level of institutional quality is reached, suggesting that these developing countries should strive to improve institutional quality and property rights protection and reduce corruption. These improvements should help attract new investments even in the face of rising labor costs.

Although there has been greater attention paid to the role of economic development in the relationship between institutional quality and FDI, existing studies tend to examine these separately across country groupings. For example, Sabir et al. (2019) analyze the relationship between indicators of institutional quality and FDI inflows across low, lower-middle, upper-middle, and high-income countries. The findings indicate that institutional quality is particularly important for investors in developed countries.

Following a comparable approach, Khan et al. (2024) examine the relationship across a global panel, and samples of developed, developing, and Asian countries. While regulatory quality appears to increase FDI inflows in the global panel, this effect is not evident for developed countries. In contrast, for developing countries, the authors note that corruption control, political stability, and voice and accountability are significant in attracting FDI. Interestingly, in Asian countries, control of corruption is associated with reduced FDI inflows, despite the overall importance of institutional quality.

These fragmented approaches, while informative, leave open the question of how institutional quality and economic development jointly determine FDI in a single context. Addressing this gap, we adopt an integrated framework to examine their interaction across a diverse but economically interconnected group of European countries. Based on the IFF theory and findings from studies using single-country samples, we propose a framework in which institutional quality has a conditional effect on FDI, which is moderated by the level of economic development. We posit that a perception of high institutional

quality is insufficient on its own to yield the desired effect of increased FDI. However, when coupled with economic development, improved institutional quality could enhance productivity, boost investor confidence, reduce risks, and create a positive cycle of FDI growth.

Our analysis contributes to empirical literature in two ways. First, we provide further evidence of the conditional effect of institutional quality, expanding empirical knowledge of the factors that are decisive for investors and enhancing the understanding of FDI dynamics in the observed European countries. Second, our findings can be utilized to better coordinate policies promoting investment. These insights offer valuable guidance for policymakers to support institutional quality alongside economic development efforts.

3. Methodology and data

Building on the theoretical framework presented above, particularly the IFF theory and the proposed conditional relationship between institutional quality and economic development, this study applies a dynamic panel model to test these interactions empirically. This approach enables us to examine whether institutional quality becomes more effective in attracting FDI when supported by higher levels of economic development. The use of a dynamic panel model is consistent with recent empirical studies on FDI location decisions. These emphasize that past investments are an important determinant of current investments (see, e.g., Economou et al., 2017; Khan et al., 2024; Saha et al., 2022; Zhang and Kim, 2022).

Recognizing the critical role of past investments, the inclusion of a lagged endogenous variable necessitates the use of GMM estimation. Both first-difference and system GMM estimators are applicable; however, we select the system GMM estimator proposed by Blundell and Bond (1998) since the first-difference GMM estimator removes valuable information on cross-country variation in levels and performs poorly with short and persistent time series (Fukase, 2010). The system GMM estimator refines the first-difference estimator of Arellano and Bond (1991) by assuming that the first differences of the instrument variables are uncorrelated with the fixed effects. This assumption allows for the utilization of additional instruments, thereby significantly enhancing their efficiency. The model is specified as follows:[1]

1 To reduce data dispersion and improve interpretability, continuous variables of the model (except the CEE binary indicator) were log-transformed.

$$\log FDI_{it} = \beta_0 + \beta_1 \log FDI_{it-1} + \beta_2 \log IQ_{it} + \beta_3 \log Econ\_dev_{it} + \beta_4 \log IQ_{it}\, x \log Econ\_dev_{it} + \sum_{c=1}^{C} \delta_c \log C\,V_{cit} + \gamma_1 Period_{2003-07} + \gamma_2 Period_{2008-12} + \gamma_3 Period_{2013-17} + \varepsilon_{it} \quad (1)$$

$$\varepsilon_{it} = \mu_i + \upsilon_{it} \quad (2)$$

The greenfield FDI capital expenditure (FDI_{it}), measured as a share of GDP, is explained first by its lagged value (FDI_{it-1}). This term is included to capture the agglomeration effects often present in FDI; current investors are incentivized to invest in proximity to existing FDI, leading to clustering. This tendency is mainly due to the fact that the previous stock of investment represents positive externalities, indicating a business environment favorable to FDI (see, e.g., Economou et al., 2017).

To account for potential heterogeneity in investment motives across sectors, we estimate separate models for total greenfield capital expenditure in European host countries ($Total\ FDI_{it}$), and its disaggregated components in the services ($FDI\_services_{it}$) and manufacturing ($FDI\_manufact_{it}$), based on data from the *Financial Times* FDI Markets database.[2] The analysis focuses on the dominant services sector in the European countries under study and manufacturing, where distinct investment motivations may be observed.

The primary enquiry is whether institutional quality (IQ_{it}) and the level of economic development ($Econ\_dev_{it}$) are associated with an increase in the volume of FDI in the respective countries. We capture the conditional relationship proposed in the theoretical framework by including a term to reflect the interaction between these variables ($IQ_{it} \times Econ\_dev_{it}$). This allows us to test for a moderating effect, where the effect of institutional quality on FDI is contingent upon the level of economic development.

We employ several measures of the IQ_{it} variable. In the baseline model, we use an institutional quality index (*IQ index*) that encompasses all six aspects monitored by the World Bank within the widely utilized World Governance Indicators (WGI) database. Specifically, these are control of corruption (*Corruption*), regulatory quality (*RegQuality*), rule of law (*Rule*), voice and accountability (*Voice*), government effectiveness (*GovEff*), and political stability (*Stability*). Then, in line with Khan et al. (2024), we calculate sub-indicators: *Legal IQ*, which includes the first three indicators, and *Political IQ*, which includes the remaining three. To capture individual aspects, we also estimate models

2 The FDI Markets database provides comprehensive data on greenfield FDI, enabling the analysis of both aggregated FDI flows and sector-specific trends over an extended time period.

for each of the six indicators.[3] This approach facilitates the identification of parameter heterogeneity across institutional dimensions within a consistent econometric framework.

We consider two measures of economic development ($Econ\_dev_{it}$ to ensure robustness: real GDP per capita (*realGDPpc*) and GNI per capita (*GNIpc*). GNI per capita is obtained from the United Nations (UN) Development Programme, while real GDP per capita is sourced from the ARDECO database of the European Commission's Directorate General for Regional and Urban Policy.

The model also incorporates several control variables, including human capital ($Human\_cap_{it}$), labor costs ($LabCost_{it}$), trade openness ($Trade_{it}$), and a binary variable, CEE (CEE_{it}), which takes the value of one for countries in the CEE region and zero otherwise. These countries have seen substantial FDI inflows since their transition and accession to the EU. We thus anticipate that this binary indicator will have a positive effect on the dependent variable. The inclusion of the CEE dummy enables us to capture regional differences in FDI patterns across European countries.

Human capital, defined as the share of the population with a tertiary education (Eurostat), is expected to attract FDI, consistent with most previous studies (see, e.g., Mulliqi et al., 2018). Higher levels of human capital typically contribute to technological innovation and increased productivity, which could make these countries more attractive to foreign investors.

A similar assumption is made regarding trade openness, defined as the sum of exports and imports of goods and services as a share of GDP, with data sourced from the World Bank. Fewer trade barriers and greater openness may incentivize foreign investors to engage with host economies (Doytch and Ashraf, 2023; Ly-My and Lee, 2019). By contrast, higher labor costs measured by employee compensation from the ARDECO database may deter investors, particularly when efficiency-seeking motives dominate (Hou et al. 2021; Zhang and Kim 2022).

3 In each model specification, we ensure that the explanatory variables are not highly correlated. Strong correlations are observed among the indicators of total FDI, manufacturing FDI, and services FDI, as well as among the indicators of institutional quality. However, in these cases, the highly correlated indicators are never included together in the same model; instead, we alternate the FDI or IQ indicators across different models.

Table 1. Descriptive statistics

	N	Min	Mean	Median	StDev	Max
Total FDI	560	0.0883	2.6800	1.4188	4.1507	56.1785
FDI_manufact	547	0.0000	0.8191	0.3419	1.3511	12.4059
FDI_services	560	0.0105	1.3215	0.7019	2.1173	28.2570
IQ index	560	4.8877	7.0694	6.9967	0.9701	8.8938
Legal IQ	560	4.5516	7.1837	7.0659	1.1925	9.2378
Political IQ	560	5.1365	6.9551	6.9519	0.7817	8.7006
Voice	560	5.5194	7.2204	7.2115	0.6855	8.6020
Stability	560	4.0508	6.4650	6.5000	0.7584	8.3740
GovEff	560	4.2721	7.1798	7.1096	1.1856	9.6944
RegQuality	560	4.8963	7.3561	7.3390	0.8917	9.0800
Rule	560	4.5799	7.1921	7.1842	1.2101	9.2496
Corruption	560	4.1787	7.0030	6.8497	1.5680	9.9182
Real GDPpc	560	4074.31	27700.39	22369.84	18971.51	101292.71
GNIpc	560	12963.15	39023.18	36956.61	14667.04	109543.08
Human_cap	556	10.7000	36.2371	38.1500	10.8738	62.6000
LabCost	540	2872.30	211646.10	75567.40	357909.10	1778665.00
Trade	560	45.4188	122.2846	104.3352	65.8056	393.1412
CEE	560	0.0000	0.3929	0.0000	0.4888	1.0000

Source: Own calculations using data from the ARDECO database of the European Commission's Directorate General for Regional and Urban Policy, Eurostat, fDi markets, United Nations Development Programme, and the World Bank.

The model specification (Eq. (1)) also includes three dummy variables representing 5-year time periods ($Period_{2003–07}$, $Period_{2008–12}$, and $Period_{2013–17}$) to address potential concerns with system GMM estimation. This approach is particularly suitable because the potential inconsistencies may arise when the number of instruments becomes excessively

large as t increases (Zhang and Kim, 2022). By incorporating these time dummies, we effectively reduce the number of instruments, thereby mitigating this concern. Finally, ε_{it} represents the error term, which, in the dynamic-panel-data framework, consists of an orthogonal unobserved country-level effect (μ_i) and the observation-specific error (ν_{it}).

The model is estimated for a sample of 28 European countries, encompassing the 27 EU member states and the United Kingdom, from 2003 to 2022.[4] The inclusion of the UK is warranted as it was part of the EU for most of the study period and was thus subject to the same institutional framework. Table 1 provides descriptive statistics, while the stationarity tests are detailed in Appendix Table A1. Based on the results of the panel unit root tests (Levin-Lin-Chu and Im-Pesaran-Shin, with and without trend), non-stationarity is not considered a major concern for the variables used in the analysis. A complete description of all variables used in the analysis is provided in Appendix Table A2.

4. Results and discussion

4.1 Baseline estimates: Institutional quality–development interaction and FDI

The initial estimation results, as presented in Table 2, elucidate the relationship between the IQ index, economic development, and total FDI.[5] From a technical perspective, the results of the AR(1) and AR(2) tests indicate that the idiosyncratic error term is not serially correlated. The Hansen test confirms the validity of the instruments employed, confirming the appropriateness of the model specifications.

4 The sample is well-suited for system GMM estimation, as the number of individual units exceeds the number of periods.

5 Throughout this manuscript, the term "FDI" refers to greenfield FDI, based on data from the fDi Markets database. The terms "FDI" and "greenfield FDI" are used interchangeably in the text, as all data relate to greenfield projects.

Table 2. Estimation results for total FDI and IQ index

	Dependent variable: Total FDI					
			Economic development:			
			real GDPpc		GNIpc	
	(I)	(II)	(III)	(IV)	(V)	(VI)
Lagged total FDI	0.2651*** (0.0812)	0.2584*** (0.0868)	0.2984*** (0.0816)	0.2641*** (0.0757)	0.2815*** (0.0854)	0.2920*** (0.0784)
IQ index	1.4360 (3.1599)	0.3179 (1.7874)	−53.9146* (28.4510)	−35.3104* (18.9744)	−91.6843** (41.7076)	−58.8020** (26.0228)
CEE	0.2725 (0.7790)	0.2616 (0.6250)	−0.0209 (0.8384)	−0.7152 (0.6873)	0.1522 (0.6034)	0.2452 (0.4077)
Human_cap	−0.1047 (0.8532)	−0.2166 (0.6084)	0.6683 (0.8707)		1.1393 (0.9604)	
LabCost	−0.5506** (0.2196)	−0.3800* (0.2203)	−0.5097** (0.2233)	0.1374 (0.2555)	−0.3822* (0.2201)	0.2267 (0.2238)
Trade		0.5198 (0.4985)		1.5708*** (0.5180)		1.4524*** (0.4498)
Econ_dev			−9.4800* (4.8969)	−9.1148*** (3.3524)	−15.6897** (7.1816)	−11.6825** (4.5744)
IQ index X Econ_dev			5.0886* (2.8068)	3.7553** (1.8498)	8.3962** (3.9732)	5.5011** (2.4692)
Period$_{2003–07}$	0.0649 (0.4483)	0.2118 (0.2645)	0.5106 (0.3686)	0.1933 (0.1937)	0.7770** (0.3954)	0.4249** (0.1876)
Period$_{2008–12}$	−0.1187 (0.2672)	−0.0012 (0.1585)	0.1813 (0.2407)	−0.0555 (0.1632)	0.3660 (0.2551)	0.1409 (0.1577)
Period$_{2013–17}$	−0.4036*** (0.1486)	−0.3440*** (0.1084)	−0.2606* (0.1387)	−0.4270*** (0.1314)	−0.1896 (0.1264)	−0.2863*** (0.1090)
Constant	4.0337 (6.1548)	2.1710 (6.0330)	103.7997** (49.1777)	78.2265** (31.3004)	171.4666** (75.0938)	115.2031** (48.1628)
N	513	513	513	513	513	513
AR(1)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AR(2)	0.5890	0.4870	0.6150	0.4870	0.6290	0.4600
Hansen	0.5350	0.1850	0.1180	0.2560	0.1740	0.1660

Note: Robust standard errors provided in parentheses. *p < 0.1, **p < 0.05, and ***p < 0.01.

Source: Own calculations using data from the ARDECO database of the European Commission's Directorate General for Regional and Urban Policy, Eurostat, fDi Markets, United Nations Development Programme, and the World Bank.

Turning to economic relationships, across all models, the results consistently show that countries that have already attracted FDI tend to continue receiving foreign investment (see coefficients related to lagged FDI). This pattern supports the widely accepted view of investment clustering, whereby FDI tends to concentrate in locations with an established presence of foreign investors.

There are several factors that contribute to this phenomenon, including cost savings, the establishment of investment hubs, and the advantages associated with existing infrastructure and business networks. However, this concentration of FDI is not without its drawbacks. One of the key concerns is that it may inadvertently result in peripheral or less developed areas being sidelined and overlooked by investors as a result. This dynamic can deprive such areas of much-needed investment and hinder their prospects for economic development and integration into broader networks (see, e.g., McDonald et al., 2018).

In terms of the geographical classification of host economies into CEE and Western European countries, the relationship between the CEE dummy and greenfield FDI tends to be positive in most specifications. The pattern may reflect the region's sustained attractiveness since the early 2000s, largely as a result of low labor costs and a high share of FDI in GDP, which supported economic growth, although the coefficient of the variable is not statistically significant. This interpretation is further supported by the findings regarding the role of labor costs. The findings suggest that efficiency-seeking motives, particularly the pursuit of cost advantages, continue to play an important role in greenfield investment decisions.

In addition, host economies that are more open to international trade tend to experience higher levels of greenfield FDI. In this context, involvement in global trade networks could create more favorable conditions for foreign investors, although this interpretation is indicative rather than conclusive. Similarly, the relationship between human capital, measured by tertiary education attainment, and FDI fluctuates across specifications, indicating no clear direction. This may reflect sector-specific or country-specific dynamics that are not explicitly accounted for in the aggregate analysis (see, e.g., Abbas et al., 2022). The overall association may thus not be visible.

Regarding institutional quality, the results indicate that for countries in the study sample, the quality of institutions does not consistently enhance the attractiveness of host economies for foreign investors. The direction and magnitude of the estimated coefficients vary. This stands in contrast to the expectations derived from the IFF theory (Wilhelms and Witter, 1998) that strong institutional frameworks should increase a country's ability to attract and retain FDI.

Nevertheless, empirical findings related to this relationship are far from uniform and tend to reflect divergent perspectives. In the present case, the absence of a robust positive association may reflect the complex and context-specific nature of institutional effects. It is plausible that, as is the case for other emerging economies, like the BRICS countries (Asongu et al., 2018), other economic determinants more decisively shape FDI decisions. Institutional quality, although relevant, may not be the primary factor guiding investor behavior in these contexts. This interpretation is consistent with empirical studies that emphasize alternative investor motivations (see, e.g., Clausen, 2014; Gossel, 2018), such as cost-efficiency or market growth, which, in certain environments, may outweigh institutional considerations.

The evidence aligns with the findings related to the linear term of economic development (Columns (III)–(VI)), and they reinforce the notion that institutional quality may exert a conditional rather than universal effect on FDI, depending on the level of economic development.

The intriguing aspect, therefore, is the combined effect of these factors. While neither institutional quality nor economic development alone is proven to attract FDI, the positive interaction between them suggests a conditional relationship. In line with the integrated framework based on the IFF theory, this result indicates that the effect of institutional quality on FDI is not uniform, but rather moderated by the level of economic development. In other words, institutional quality becomes more pronounced in countries with higher levels of economic development. These findings indirectly validate the results of Sabir et al. (2019), who emphasized the importance of institutional quality, particularly within the sample of developed countries.

Therefore, high institutional quality alone is insufficient for attracting FDI; its prerequisite is economic development, which ensures that institutional quality translates into a supportive business environment, ease of doing business, greater attractiveness to investors, and increased total FDI. These results are confirmed when considering real GDP per capita as an indicator of economic development (Columns (III)–(IV)) and when using GNI per capita (Columns (V) –(VI)).

4.2 Heterogeneity in conditional effects: Sub-indices and sectoral FDI

It is important to note that the results presented in Table 2 are derived from an institutional quality index comprising six sub-components, each targeting a specific aspect of institutional quality. For this reason, and consistent with the literature (see Doytch and

Ashraf, 2023; Khan et al., 2024), we investigated further and re-estimated the models using a sub-index that more accurately represents legal institutional quality and a sub-index capturing political institutional quality. We further account for heterogeneity in investment motives across sectors and estimate separate models for the total, services, and manufacturing FDI. The results are presented in Tables 3 and 4.

Table 3. Estimation results for total FDI and IQ sub-indices

	Dependent variable: Total FDI					
	Economic development:					
	real GDPpc			GNIpc		
	(I)	(II)	(III)	(IV)	(V)	(VI)
Lagged total FDI	0.2641*** (0.0757)	0.2764*** (0.0679)	0.3019*** (0.0725)	0.2920*** (0.0784)	0.2971*** (0.0645)	0.3108*** (0.0657)
IQ index	−35.3104* (18.9744)			−58.8020** (26.0228)		
Legal IQ		−47.6275** (19.3779)			−73.5177*** (25.9501)	
Political IQ			−68.0952** (28.1593)			−96.9123** (40.3180)
CEE	−0.7152 (0.6873)	−0.1872 (0.5356)	0.1406 (0.8231)	0.2452 (0.4077)	0.3781 (0.2790)	0.5365 (0.5814)
LabCost	0.1374 (0.2555)	−0.0240 (0.2130)	0.1621 (0.3772)	0.2267 (0.2238)	−0.0089 (0.2023)	0.1310 (0.2953)
Trade	1.5708*** (0.5180)	0.9700*** (0.3620)	1.2972*** (0.4901)	1.4524*** (0.4498)	0.7737* (0.3960)	1.1318** (0.4508)
Econ_dev	−9.1148*** (3.3524)	−10.3169*** (3.0643)	−14.0486** (5.7707)	−11.6825** (4.5744)	−13.5125*** (4.5744)	−17.8684** (7.6562)
IQ X Econ_dev	3.7553** (1.8498)	4.8332*** (1.81103)	6.9003** (2.9548)	5.5011** (2.4692)	6.8893*** (2.4695)	9.1274** (3.9534)
Period$_{2003–07}$	0.1933 (0.1937)	0.2211 (0.2041)	0.3209 (0.1965)	0.4249** (0.1876)	0.3516** (0.1657)	0.4220*** (0.1466)
Period$_{2008–12}$	−0.0555 (0.1632)	−0.0185 (0.1679)	0.0641 (0.1501)	0.1409 (0.1577)	0.1130 (0.1408)	0.1512 (0.1213)
Period$_{2013–17}$	−0.4270*** (0.1314)	−0.3772*** (0.1351)	−0.3092** (0.1282)	−0.2863*** (0.1090)	−0.2806*** (0.0922)	−0.2482*** (0.0908)
Constant	78.2265** (31.3004)	97.4540*** (33.0079)	130.5900** (52.1731)	115.2031** (48.1628)	140.3792*** (48.6662)	182.5780** (76.4987)
N	513	513	513	513	513	513
AR(1)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AR(2)	0.4870	0.5230	0.6010	0.4600	0.5570	0.6100
Hansen	0.2560	0.2490	0.3820	0.1660	0.3430	0.4680

Note: Robust standard errors provided in parentheses. *p < 0.1, **p < 0.05, and ***p < 0.01.

Source: Own calculations using data from the ARDECO database of the European Commission's Directorate General for Regional and Urban Policy, Eurostat, fDi Markets, United Nations Development Programme, and the World Bank.

The results remain broadly stable when accounting for control variables, institutional quality, and economic development. Across all model specifications, neither institutional quality nor economic development alone exhibits a significant positive association with total FDI. However, the effect of their interaction is consistently positive, suggesting that institutional quality becomes more relevant in more economically developed countries.

Total FDI investments seem to increase in more developed countries with higher institutional quality, consistent with the conditional logic of the IFF theory. Developed countries generally have larger and more reliable markets, and their economic stability is supported by strong institutional frameworks. This combination may be associated with higher levels of investment and innovation, which could enhance competitiveness, although causality cannot be inferred from the analysis presented here.

Regarding the specific sub-components of institutional quality, no significant differences were observed in the relationship between FDI and the quality of legal and political institutions. This suggests that both legal and political quality contribute positively to FDI in more developed European countries. Legal quality supports the enforcement of contracts and property rights, creating a business environment that is more predictable and efficient. Political quality, on the other hand, constitutes low levels of corruption, fair competition, and stability; a high-quality political environment enhances the country's overall outlook and attractiveness from an investor's perspective.

Additional results regarding the individual indicators that constitute these two sub-indices are provided in the Appendix (see Tables A3 and A4). Interestingly, among the individual components, voice and accountability (when economic development is measured by real GDP per capita), as well as political stability and the absence of violence or terrorism, and regulatory quality, do not exhibit statistically significant interaction effects with economic development (measured by either real GDP or GNI per capita) in explaining greenfield FDI. One possible explanation for the former is that economic development may itself signal a stable environment, rendering the additional effect of political stability redundant. Similarly, more developed countries tend to have well-established regulatory frameworks, and marginal improvements may not alter business conditions as substantially as they might in less developed economies. Therefore, other factors, such as control of corruption, may play a more decisive role in shaping FDI inflows.

So far, the results have focused on the effects of the examined variables on total FDI, without considering the sector in which the investment was made. However, the nature of the investment may significantly influence investor motives (see, e.g., Hou et al., 2021). Therefore, as a further analysis, we present the model estimates for disaggregated FDI in Table 4.

Table 4. Estimation results for FDI components and IQ index

	Dependent variable: FDI components					
	Economic development:					
	real GDPpc			GNIpc		
	(I)	(II)	(III)	(IV)	(V)	(VI)
Lagged total FDI	0.2641*** (0.0757)			0.2920*** (0.0784)		
Lagged FDI_manufact		0.0989 (0.0790)			0.1106 (0.0744)	
Lagged FDI_services			0.2693** (0.1254)			0.2727** (0.1228)
IQ index	−35.3104* (18.9744)	−77.0649* (46.1634)	−69.2817*** (26.1974)	−58.8020** (26.0228)	−96.5841** (48.2706)	−114.9084** (45.5112)
CEE	−0.7152 (0.6873)	0.9246 (1.0764)	−0.2827 (0.6965)	0.2452 (0.4077)	1.1765* (0.6179)	0.2412 (0.5353)
LabCost	0.1374 (0.2555)	0.0736 (0.4603)	−0.3792 (0.3561)	0.2267 (0.2238)	0.2812 (0.3112)	−0.4012 (0.3308)
Trade	1.5708*** (0.5180)	1.2286 (0.7647)	0.5168 (0.4999)	1.4524*** (0.4498)	1.4656** (0.5715)	0.2280 (0.5136)
Econ_dev	−9.1148*** (3.3524)	−13.5035 (8.3129)	−13.9531*** (4.7352)	−11.6825** (4.5744)	−16.9390** (8.5357)	−19.8315** (7.9757)
IQ index X Econ_dev	3.7553** (1.8498)	7.2449 (4.5318)	7.0083*** (2.5762)	5.5011** (2.4692)	8.9086* (4.6324)	10.7599** (4.3329)
Period$_{2003–07}$	0.1933 (0.1937)	1.0985*** (0.3807)	0.0576 (0.2411)	0.4249** (0.1876)	1.1169*** (0.2936)	0.2881 (0.1983)
Period$_{2008–12}$	−0.0555 (0.1632)	0.3402 (0.2702)	−0.1357 (0.1910)	0.1409 (0.1577)	0.3677* (0.2078)	0.0789 (0.1707)
Period$_{2013–17}$	−0.4270*** (0.1314)	0.0270 (0.1511)	−0.4503*** (0.1594)	−0.2863*** (0.1090)	0.0338 (0.1178)	−0.3052** (0.1201)
Constant	78.2265** (31.3004)	135.2123 (87.9778)	139.2425*** (45.9921)	115.2031** (48.1628)	171.6222* (90.9660)	214.5890** (83.3140)
N	513	492	513	513	492	513
AR(1)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AR(2)	0.4870	0.2340	0.1650	0.4600	0.2190	0.1370
Hansen	0.2560	0.3200	0.1220	0.1660	0.1960	0.1580

Note: Robust standard errors provided in parentheses. *p < 0.1, **p < 0.05, and ***p < 0.01.

Source: Own calculations using data from the ARDECO database of the European Commission's Directorate General for Regional and Urban Policy, Eurostat, fDi Markets, United Nations Development Programme, and the World Bank.

To capture the most significant differences in motives, compared to total FDI, we select two distinct types: FDI in the manufacturing sector and FDI in services. The results of this sectoral disaggregation analysis, which proved to be well-founded, are presented in Table 4. These indicate that the initial evidence for the supportive role of institutional quality in more economically developed countries cannot be universally applied across all FDI sectors.

In fact, this relationship between FDI and institutional quality appears to be primarily driven by the services sector. This sector is often characterized by higher added value due to its reliance on advanced technologies, skilled labor, and innovation, which are more common in economically developed countries. In these countries, the services sector tends to be more dependent on the legal framework and institutional environment, and FDI in services is thus more institutionally demanding. By contrast, in less developed countries, FDI in services may be motivated less by the quality of formal institutions and more by other factors, such as lower costs, language compatibility of the labor force, and regional positioning.

This result lacks robustness for the manufacturing sector, appearing under GNI per capita but disappearing when real GDP per capita is used. In this case, the higher institutional quality in more developed countries does not appear to be a primary driver of FDI. This may reflect the overall dominance of efficiency-seeking motives in manufacturing, where factors such as lower labor costs tend to outweigh institutional considerations. The broader pattern of results remains consistent across specifications, supporting the reliability of the findings.

5. Conclusions

Europe is currently facing multiple challenges, including a decline in institutional quality and a decrease in FDI inflows; the latter have historically supported economic growth across EU member states. There is thus a clear need to enhance competitiveness in the upcoming period and to examine how institutional quality and economic development are related to investor decision-making in Europe.

The analysis presented in this paper contributes to this discussion by providing novel empirical evidence based on dynamic panel model estimates, indicating that high-quality institutions are associated with higher levels of greenfield FDI in more economically developed European countries over the period 2003–2022. The benefits of institutional quality on greenfield FDI inflows thus appear to depend on the level of economic development,

which enhances a country's attractiveness to foreign investors. This finding confirms and extends previous evidence, primarily in lower-middle-income countries in Africa, Latin America, and Asia, by demonstrating that a similar relationship holds in the European context. By doing so, the study fills an important gap in literature and provides new, region-specific insights, suggesting that institutional reforms are more effective in attracting FDI when accompanied by higher levels of economic development.

Furthermore, only a limited number of studies have addressed the effect of institutions on sectoral FDI. This study thus contributes to the empirical literature on FDI location choices by exploring the interplay between institutional quality and economic development in greater depth. The findings suggest that while FDI in the service sector tends to benefit from stronger institutions and higher levels of economic development, manufacturing FDI does not appear to be robustly responsive to institutional quality in more developed countries. These results complement and extend existing research by highlighting sector-specific differences in investor behavior within the European context.

These empirically observed patterns suggest the need for sector-specific strategies to attract foreign investors. Given that FDI in the services sector generally surpasses FDI in the manufacturing sector across the European countries in the sample, our findings suggest that policymakers should adopt a balanced approach that simultaneously enhances institutional quality and economic development. This strategy could increase a country's attractiveness from the perspective of foreign investors, supporting more targeted and effective policies to promote investment. By contrast, the manufacturing sector remains stable in countries with a strong industrial base. Based on this evidence, it would be prudent to stimulate investors through efficiency-seeking motives, such as a low tax burden, attractive labor costs, and infrastructure support.

Finally, the observed link between institutional quality, economic development, and FDI opens space for further research, particularly into the mechanisms by which institutional frameworks shape investment patterns at more granular levels, for example, regionally. Future studies could also explore how these dynamics might attract high-value-added investments, especially in research and innovation-intensive activities. This line of inquiry is particularly relevant in the light of the EU's focus on innovation and stronger industrial policy.

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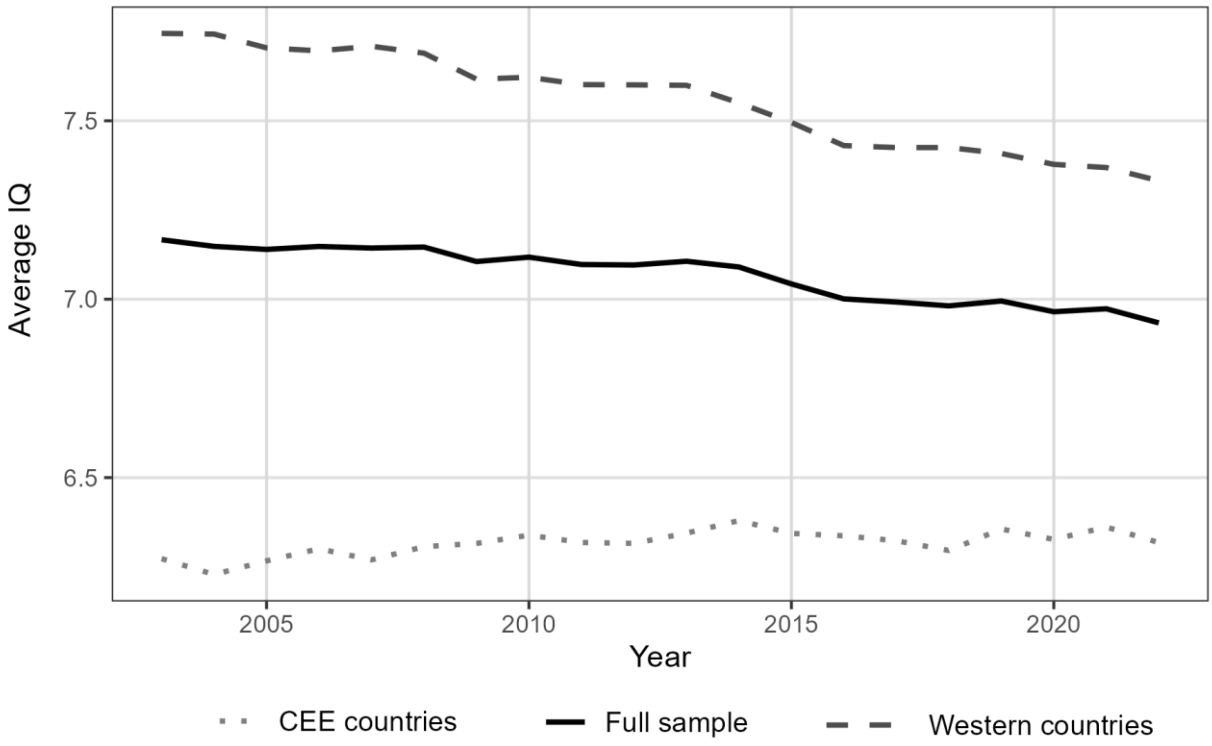
Appendix

Figure A1. Average institutional quality index over time



Note: The average institutional quality index was calculated for three groups: full sample, Western European countries, and CEE countries. The index is based on six governance dimensions from the World Bank's Worldwide Governance Indicators (WGI): control of corruption, regulatory quality, rule of law, voice and accountability, government effectiveness, and political stability. The scale ranges from 0 to 10, where 0 indicates the lowest institutional quality and 10 the highest.

Source: Own calculations using data from the World Bank.

Table A1. Panel Unit Root Testing

Variable	Levin-Lin-Chu panel unit root test		Im-Pesaran-Shin panel unit root test	
	No trend	Trend	No trend	Trend
Total FDI	–9.7017***	–12.0665***	–5.0666***	–7.1479***
FDI_manufact	–10.2124***	–12.5798***	–7.2977***	–9.3129***
FDI_services	–10.9730***	–13.5585***	–6.3595***	–7.9853***
IQ index	–6.2870	–11.6019***	1.2121	–4.4716***
Legal IQ	–6.2519*	–11.5986***	0.3628	–3.6712***
Political IQ	–7.5586**	–11.6683***	–0.5202	–5.4593***
Voice	–12.5321***	–16.3294***	–2.3539***	–5.3630***
Stability	–8.5406**	–13.3181***	–3.2978***	–5.9546***
GovEff	–8.4964***	–11.6299***	–0.7295	–4.0117***
RegQuality	–6.6997	–12.1910***	–1.0200	–4.3872***
Rule	–6.9758**	–12.1382***	–0.4846	–4.4522***
Corruption	–7.4196***	–10.6484**	0.6147	–2.8884***
Real GDPpc	–4.3488*	–13.6748***	1.6684	–4.1678***
GNIpc	–4.6806**	–13.9731***	1.6278	–4.1213***
Human_cap	–5.9524***	–7.8499	–1.8510**	–1.9384**
Trade	–5.5677	–15.9969***	1.3180	–5.6752***
LabCost	–4.9842***	–12.7502***	4.1830	–1.4968*

Note: Test statistics are provided. *p < 0.1, **p < 0.05, and ***p < 0.01.

Source: Own calculations using data from the ARDECO database of the European Commission's Directorate General for Regional and Urban Policy, Eurostat, fDi Markets, United Nations Development Programme, and the World Bank.

Table A2. Description of variables

Variable	Description	Source
Total FDI	Total capital expenditure by foreign investors in European host economies, expressed as a share of GDP	FDI Markets
FDI_ manufact	Capital expenditure by foreign investors in the manufacturing sector of European host economies, as a share of GDP	FDI Markets
FDI_ services	Capital expenditure by foreign investors in the services sector of European host economies, as a share of GDP	FDI Markets
IQ index	Institutional quality index based on six dimensions from the World Bank WGI: control of corruption, regulatory quality, rule of law, voice and accountability, government effectiveness, and political stability (scale 0-10, with 0 = weakest, 10 = strongest)	WGI
Legal IQ	Sub-index of institutional quality including control of corruption, regulatory quality, and rule of law (scale 0-10)	WGI
Political IQ	Sub-index of institutional quality including voice and accountability, government effectiveness, and political stability (scale 0-10, with 0 = weakest, 10 = strongest)	WGI
Voice	Voice and accountability indicator reflecting citizens' ability to participate in government selection and exercise freedoms of expression, association, and media (scale 0-10, with 0 = weakest, 10 = strongest)	WGI
Stability	Political stability and absence of violence/terrorism indicator reflecting perceived risks of political instability and/or violence, including terrorism (scale 0-10, with 0 = weakest, 10 = strongest)	WGI
GovEff	Government effectiveness indicator capturing perceived quality of public administration, including service delivery, civil service autonomy, policy design and execution, and government reliability (scale 0-10, with 0 = weakest, 10 = strongest)	WGI
Reg Quality	Regulatory quality indicator reflecting perceptions of the government's capacity to design and enforce policies and regulations that support private sector development (scale 0-10, with 0 = weakest, 10 = strongest)	WGI
Rule	Rule of law indicator reflecting perceptions of confidence in and adherence to societal rules, including contract enforcement, property rights, the police, the judiciary, and the prevalence of crime and violence (scale 0-10, with 0 = weakest, 10 = strongest)	WGI
Corruption	Control of corruption indicator reflecting perceptions of the extent to which public power is used for private benefit, including petty and grand corruption, as well as state capture (scale 0-10, with 0 = weakest, 10 = strongest)	WGI
Real GDPpc	Real GDP per capita	ARDECO
GNIpc	Gross national income per capita	UN Development Programme
Human_ cap	Share of the population with tertiary education	Eurostat
LabCost	Labor costs measured as compensation of employees at constant 2015 prices	ARDECO
Trade	Trade openness measured by the sum of exports and imports of goods and services, as a share of GDP	World Bank
CEE	Binary variable indicating whether a country belongs to the CEE region (1) or not (0)	-

Note: Following standard practice in empirical literature on FDI (see, e.g., Ly-My and Lee, 2019), institutional quality indicators originally ranging from –2.5 to 2.5 were rescaled to a 0–10 scale by adding the minimum value to each score and multiplying the result by two. This transformation facilitates interpretation, where 0 represents the weakest and 10 the strongest perceived performance in a given aspect of institutional quality.

Source: Own elaboration using data from the ARDECO database of the European Commission's Directorate General for Regional and Urban Policy, Eurostat, fDi Markets, UN Development Programme, and the World Bank.

Table A3. Estimation results for total FDI and IQ subcomponents (economic development as real GDP per capita)

	Dependent variable: Total FDI					
	IQ subcomponent:					
	Voice	**Stability**	**GovEff**	**RegQuality**	**Rule**	**Corruption**
	(I)	**(II)**	**(III)**	**(IV)**	**(V)**	**(VI)**
Lagged total FDI	0.2811*** (0.0786)	0.3127*** (0.0742)	0.2741*** (0.0675)	0.2699*** (0.0752)	0.2662*** (0.0730)	0.2778*** (0.0672)
IQ	−44.4413 (39.9509)	22.5941 (29.8947)	−49.2812* (26.1747)	−22.5796 (35.5484)	−28.5335* (15.2566)	−31.1378 (19.3144)
CEE	-0.6721 (0.5822)	0.0973 (0.8294)	−0.1002 (0.6344)	−1.0485 (0.7844)	−0.6728 (0.7866)	−0.3423 (0.3891)
LabCost	0.0865 (0.2245)	−0.0392 (0.2743)	0.0098 (0.2407)	0.0189 (0.2613)	0.0955 (0.2506)	−0.0542 (0.2093)
Trade	1.5941*** (0.4328)	1.2340*** (0.4685)	1.0105** (0.4702)	1.5196*** (0.5844)	1.4437*** (0.4673)	0.9975** (0.4024)
Econ_dev	−10.2490 (7.9921)	3.7132 (5.5531)	−10.4723** (5.0807)	−6.3584 (6.2988)	−7.7056*** (2.5878)	−7.3034** (3.1243)
IQ X Econ_dev	4.5044 (4.0506)	−2.2539 (3.0490)	4.9848* (2.6559)	2.3245 (3.4211)	3.0513** (1.4985)	3.2195* (1.8270)
Period$_{2003-07}$	0.3635** (0.1795)	0.5080** (0.1978)	0.2079 (0.1765)	0.2656 (0.1849)	0.1773 (0.1755)	0.1673 (0.1853)
Period$_{2008-12}$	0.0848 (0.1452)	0.1904 (0.1554)	−0.0137 (0.1398)	0.0068 (0.1743)	−0.0803 (0.1524)	−0.0840 (0.1255)
Period$_{2013-17}$	−0.3439*** (0.1101)	−0.2195** (0.1078)	−0.3291*** (0.1133)	−0.3920*** (0.1227)	−0.4529*** (0.1130)	−0.4040*** (0.1084)
Constant	93.1152 (76.6016)	−42.4120 (51.6751)	98.6530** (49.7832)	55.5062 (66.0515)	65.692*** (24.1037)	67.0195** (33.2555)
N	513	513	513	513	513	513
AR(1)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AR(2)	0.4740	0.6340	0.5490	0.4990	0.4930	0.5500
Hansen	0.2080	0.2390	0.3150	0.2180	0.2300	0.1380

Note: Robust standard errors provided in parentheses. *p < 0.1, **p < 0.05, and ***p < 0.01.

Source: Own calculations using data from the ARDECO database of the European Commission's Directorate General for Regional and Urban Policy, Eurostat, fDi Markets, United Nations Development Programme, and the World Bank.

Table A4. Estimation results for total FDI and IQ subcomponents (economic development as GNI per capita)

	Dependent variable: Total FDI					
	IQ subcomponent:					
	Voice	**Stability**	**GovEff**	**RegQuality**	**Rule**	**Corruption**
	(I)	**(II)**	**(III)**	**(IV)**	**(V)**	**(VI)**
Lagged total FDI	0.3132*** (0.0649)	0.3150*** (0.0691)	0.2844*** (0.0773)	0.3034*** (0.0785)	0.2852*** (0.0806)	0.2937*** (0.0653)
IQ	−71.1793* (40.6816)	23.2376 (53.8688)	−64.5753* (33.6874)	−22.4553 (29.6804)	−47.2989*** (15.0358)	−45.3173** (20.2909)
CEE	0.0208 (0.3790)	0.5528 (0.5878)	0.5299 (0.7127)	0.0451 (0.4077)	0.4313 (0.4033)	0.1978 (0.2313)
LabCost	−0.0596 (0.1636)	0.1742 (0.2780)	0.2347 (0.2954)	0.1532 (0.2054)	0.2377 (0.2060)	−0.0213 (0.1818)
Trade	0.8060** (0.3306)	1.3506** (0.6186)	1.3845*** (0.4712)	1.4699*** (0.4908)	1.3189*** (0.4179)	0.7364* (0.4030)
Econ_dev	−13.3653* (7.8298)	3.4718 (9.5439)	−12.9922** (6.2840)	−5.4855 (5.2146)	−9.3248*** (2.4868)	−8.6159** (3.3873)
IQ X Econ_dev	6.5658* (3.9411)	−2.2211 (5.1905)	6.1887* (3.3063)	2.0681 (2.7629)	4.4280*** (1.4126)	4.2507** (1.9038)
Period$_{2003–07}$	0.3786*** (0.1426)	0.5495** (2186)	0.3302** (0.1593)	0.3968** (0.1863)	0.4245** (0.1877)	0.2821 (0.1735)
Period$_{2008–12}$	0.0879 (0.1163)	0.2154 (0.1701)	0.0814 (0.1316)	0.1115 (0.1688)	0.1689 (0.1651)	0.0117 (0.1269)
Period$_{2013–17}$	−0.2934*** (0.0844)	−0.2079* (0.1074)	−0.2948*** (0.1079)	−0.3109*** (0.1130)	−0.2646** (0.1131)	−0.3318*** (0.0945)
Constant	141.6515* (79.4641)	−44.6490 (96.9759)	126.2255** (62.3680)	50.5804 (56.1365)	90.4179*** (26.3305)	88.4742** (36.1827)
N	513	513	513	513	513	513
AR(1)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AR(2)	0.5970	0.6240	0.4550	0.5150	0.4280	0.5370
Hansen	0.2400	0.3220	0.1700	0.1850	0.1490	0.1660

Note: Robust standard errors provided in parentheses. *p < 0.1, **p < 0.05, and ***p < 0.01.

Source: Own calculations using data from the ARDECO database of the European Commission's Directorate General for Regional and Urban Policy, Eurostat, fDi Markets, United Nations Development Programme, and the World Bank.