

## THE IMPACT OF INSTITUTIONAL QUALITY ON FOREIGN DIRECT INVESTMENT IN MOROCCO: AN EMPIRICAL ANALYSIS

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### Abstract

Institutional quality is increasingly recognized as a decisive factor in shaping the location of foreign direct investment (FDI). This study examines the effect of institutional quality on FDI inflows to Morocco by analyzing four key dimensions: political stability, control of corruption, economic freedom, and regulatory quality. Using annual time series data from 1996 to 2022, the research employed the cointegration approach and the vector error correction model (VECM) to capture both long-term relationships and short-term dynamics. The results showed that all selected institutional indicators had statistically significant effects on FDI inflows. In particular, political stability and regulatory quality emerged as the most influential factors in attracting foreign investment. These findings suggest that institutional reforms can have a measurable impact on Morocco's investment climate. It concludes by suggesting that improving governance, transparency, and the regulatory environment is essential to enhancing the country's ability to attract long-term investment and stimulate economic development. Based on the empirical evidence supporting the strategic importance of institutional quality in investment policy design, the article offers insights that are relevant for policymakers and development planners in emerging economies.

**Keywords :** Governance indicator; Regulatory environment; Political risk analysis; Investment climate; Cointegration analysis; Time series econometrics

### 1 Introduction

Foreign direct investment (FDI) is widely recognized as a key driver of economic growth, productivity enhancement, and technology transfer in host countries. Over the past few decades, many developing economies have sought to attract FDI by focusing on economic and structural reforms - such as stabilizing macroeconomic indicators, upgrading infrastructure, and improving the overall business climate. However, recent scholarship suggests that these efforts, while important, may be insufficient in the absence of strong institutional quality. This shift highlights that beyond traditional economic fundamentals, institutions - such as rule of law, governance, and regulatory quality - play a decisive role in shaping multinational firms' investment decisions.

While several studies have addressed the economic determinants of FDI flows, fewer have thoroughly investigated how institutional dimensions - such as political stability, regulatory quality, control of corruption, and the rule of law - affect FDI inflows. This is

particularly true in North African countries such as Morocco, which has undertaken significant institutional reforms aimed at strengthening governance, transparency, and the rule of law. Yet, there is a lack of comprehensive empirical analysis examining the impact of these institutional factors on Morocco's ability to attract and benefit from FDI over time. This research aims to fill that gap by assessing the relationship between institutional quality and FDI attractiveness in the Moroccan context.

This study uses time series econometrics, specifically the cointegration approach and the Vector Error Correction Model (VECM), to analyze the long-term and short-term dynamics between FDI inflows and selected institutional variables in Morocco over the period 1996–2022.

The findings are expected to provide robust evidence on the role of institutional quality in attracting FDI, offering important insights for policymakers aiming to strengthen Morocco's investment climate and competitiveness in the global economy.

The remainder of this paper is organized as follows: The next section presents a review of the relevant literature. Then, Section 3 describes the methodology and data used. Section 4 discusses the empirical results. Finally, Section 5 concludes with key policy implications and suggestions for future research.

## **2 Literature overview**

### **2.1 Institutional Quality and FDI**

Institutions are defined as 'the humanly devised constraints that structure political, economic, and social interaction' (North, 1991). This includes both formal rules (laws, constitutions, property rights) and informal norms (traditions, customs, codes of conduct). Institutions play a crucial role in fostering order, shaping human behavior, and reducing the uncertainty associated with exchange (North, 1991). In doing so, they provide a stable framework that facilitates interaction, impacting economic outcomes such as property rights protection, contract enforcement, and investor confidence (Levchenko, 2007).

Dunning's (1979) eclectic theory, or OLI paradigm, offers a comprehensive framework for understanding FDI determinants. The "L" component—location advantages - emphasizes that the choice of a host country is influenced by specific characteristics that vary across nations. Dunning (1988) later expanded this with the ESP (Environment, Systems, Policies) paradigm, underlining the importance of institutional settings in shaping investment decisions.

While much of the literature supports the idea that robust institutions promote FDI by enhancing investor confidence, it often overlooks how variations in institutional quality lead to divergent investment outcomes. For instance, Daniele and Marani (2006) argue that weak institutions - marked by instability, poor enforcement of property rights, and ineffective legal systems - deter FDI, especially in greenfield projects requiring significant upfront commitments.

Alongside economic factors such as market size, infrastructure, labor costs, trade openness, and human capital, institutional and political variables also significantly influence the location decisions of multinational firms. Pajunen (2008) emphasizes the importance of host-country institutions, which may function differently from those in the investor's home country, in shaping the business environment for foreign investors. Similarly, Michalet (1999) identifies sound institutions as essential prerequisites for attracting FDI. However, while the literature acknowledges their importance, it often lacks clarity on which specific institutional attributes are most effective in fostering FDI, particularly in emerging markets.

This gap calls for a more nuanced understanding of how institutional quality affects investment behavior across different contexts.

## **2.2 Impact of Institutional Quality on FDI Attractiveness**

Empirical research on the link between institutional quality and FDI has produced mixed results. Studies by Aizenman & Spiegel (2006), Bénassy-Quéré et al. (2007), Daude & Stein (2007), and Jadhav (2012) generally find that stronger institutional frameworks positively influence FDI inflows. However, these analyses often overlook contextual elements - such as economic structure or sectoral composition that may mediate this relationship.

Similarly, Buchanan et al. (2012) and Mishra & Daly (2007) offer broad support for the institutional determinants of FDI across diverse settings, yet tend to generalize their conclusions without accounting for country-specific institutional dynamics. Alfaro et al. (2008) argue that poor institutional quality largely explains weak capital flows from developed to developing countries, but the mechanisms behind this effect remain underexplored and demand further empirical investigation.

Other scholars, including Ali et al. (2010), underscore the relevance of institutional dimensions such as property rights and the rule of law in shaping FDI decisions. Yet, many studies fail to consider how these institutional variables interact with traditional FDI determinants like infrastructure and market potential. Asamoah et al. (2016), for example, demonstrate a positive link between institutional quality and FDI in sub-Saharan Africa, but focus narrowly on a few indicators, limiting the generalizability of their conclusions.

In the Moroccan context, analyses using the ICRG 'political risk' index - such as those by Moujahid et al. (2021) and Azeroual & Cherkaoui (2015) confirm the relevance of institutional quality for attracting FDI. Nevertheless, most studies rely on aggregate indices, which obscure the distinct effects of specific components like political stability, regulatory quality, control of corruption, and economic freedom.

While regulatory quality is often associated with improved governance and investment facilitation, some authors (e.g., Rodrik, 2008) argue that overregulation and bureaucratic inefficiencies can discourage foreign investment. This ambiguity underlines the importance of context-sensitive assessments of institutional quality, particularly in developing economies.

Additionally, the bidirectional relationship between FDI and institutional quality, as discussed by Fukumi & Nishijima (2010), adds complexity to the analysis. While improved institutions may attract FDI, foreign investment can also influence institutional development. This dynamic justifies the use of time series models - such as the vector error correction model (VECM) to differentiate between short-run adjustments and long-run equilibrium relationships.

To address these gaps, this literature review has critically examined existing research, highlighting the need for a more detailed and context-specific empirical investigation. By disaggregating institutional quality into its key dimensions and applying a time series econometric approach to the case of Morocco, this study aims to enhance our understanding of the institutional drivers of FDI in developing economies

## **3 Methodology/Theoretical Framework**

This section outlines the methodological approach adopted to examine the impact of institutional quality on foreign direct investment (FDI) inflows in Morocco from 1996 to 2022. It details the research design, variables and data sources, as well as the econometric procedures employed, including stationarity testing, cointegration analysis, and the estimation of a vector error correction model (VECM). Diagnostic tests are also conducted to ensure the validity and robustness of the model.

### 3.1 Research Design

This study employed a quantitative research design, using time series econometrics to investigate the long-term and short-term effects of institutional quality on foreign direct investment (FDI) inflows to Morocco over the period 1996–2022. The methodological framework was centered on the cointegration approach and the vector error correction model (VECM), which enabled the analysis of both long-run equilibrium relationships and short-run dynamics among the variables.

### 3.2 Variables and Measurement

The empirical studies that have dealt with the quality of institutions adopt multiple and varied measurement indicators by referring to those used by certain international institutions and organisations. The most frequently redundant measurement indicators are:

- i) The composite governance index compiled by Kaufmann et al. (1999a, b) and updated by Kaufmann et al. (2009);
- ii) The ‘political risk’ index developed by the PRS Group's ICRG;
- iii) The ‘economic freedom’ indicator developed by the Heritage Foundation and the Wall Street Journal;
- iv) The ‘political rights and civil liberties’ indices developed by Freedom House.

Other indicators are also used, such as corruption, rule of law, democracy, property rights, etc.

However, the use of one indicator rather than another may lead to different and sometimes paradoxical results. In addition, the multidimensional nature and difficulty of quantifying the quality of institutions means that we need to define the measurement indicators that can be used to identify this qualitative phenomenon and assess its impact on FDI in Morocco as accurately as possible.

To operationalize institutional quality in a manner consistent with established empirical literature, this study employs four explanatory variables: economic freedom, political stability, regulatory quality, and control of corruption.

**Economic freedoms:** The “economic freedoms” indicator, developed by the Heritage Foundation, aims to measure the business climate, the set of factors influencing investment and its location. It reflects the scale of the additional costs borne by investors during and after the implementation of their investment projects by indicating the extent to which institutions are able to influence the investment climate in an economy. This index assesses the degree of freedom of investment, the labour market, business, finance and trade in a country, the stability of monetary policy, the protection of private property, the tax burden, government spending and judicial efficiency.

**Political stability:** Political instability refers to the likelihood of overthrow or violent change of government or political regime, as well as threats to public order. A stable political environment tends to boost the confidence of foreign companies. To measure this variable, we use the World Bank’s WGI ‘political stability’ index compiled by Kaufmann et al. (1999a). The estimate of this index takes values varying between -2.5 and 2.5. Higher values mean a better political stability situation within the country and vice versa.

**Quality of regulation:** The quality of regulation indicates the extent to which regulations and policies developed and implemented by public authorities are conducive to private sector development. To measure this variable that captures the overall quality of governance in the regulatory sphere, we will adopt the ‘Regulatory Quality’ index formulated by Kaufmann et al. (1999a). The values range from -2.5 (very poor regulatory quality) to 2.5 (very good regulatory quality).

**Control of Corruption:** Corruption aims to change the way laws, rules and regulations are applied in favour of the person paying the 'bribe' Hellman and Kauffman (2001). It tends to create an unfavourable business climate and market imperfections. To measure this variable, we use the World Bank's 'Control of Corruption' index compiled by Kaufmann et al (1999a). The estimated values vary between -2.5 and 2.5. A high value indicates a good control of corruption.

### 3.3 Data Collection

The data for this study was collected from reputable sources, ensuring reliability and validity.

- ✓ FDI Data: The data used comes from Worldwide Governance Indicators (WGI), the Heritage Foundation and the Wall Street Journal, and World Development Indicators (WDI). The data covers the period 1996-2022.
- ✓ Institutional Quality Indicators: Institutional quality was measured using various indicators, including the International Country Risk Guide (ICRG) political risk indicator, which assesses factors such as government stability, corruption levels, and rule of law. Additional indicators may include governance and regulatory quality sourced from the World Bank Governance Indicators.
- ✓ Control Variables: The analysis also considers control variables that may impact FDI, such as GDP growth rate, market size (measured by GDP), and trade openness, sourced from the World Bank database.

### 3.4 Econometric Procedure

The empirical approach followed a rigorous sequence of econometric procedures to ensure robust and interpretable results.

#### 3.4.1 Stationarity Tests

Before estimating the model, unit root tests were applied to assess the stationarity of the variables. The Augmented Dickey-Fuller (ADF) test was used to identify the order of integration.

#### 3.4.2 Lag Length Selection

To determine the optimal number of lags to be used in the VAR model, the Schwarz Information Criterion (SC) and other model selection criteria were employed. The optimal lag length was identified and retained for further steps.

#### 3.4.3 Johansen Cointegration Test

The Johansen cointegration approach was then used to test for the existence of a long-term equilibrium relationship between FDI and the institutional quality indicators. This test included both the trace statistic and the maximum eigenvalue test to determine the number of cointegrating vectors.

#### 3.4.4 Vector Error Correction Model (VECM)

Given the existence of cointegration, a VECM was estimated to assess the long-term and short-term dynamics among the variables. The error correction term (ECT) captured the speed of adjustment back to equilibrium after a short-run shock.

### 3.5 Model Validation

To evaluate the adequacy and reliability of the estimated model, several diagnostic tests were performed:

- Autocorrelation Test: The LM (Lagrange Multiplier) test was conducted to check for serial correlation in the residuals. The absence of autocorrelation validates the independence of model errors over time.
- Heteroskedasticity Test: A Chi-squared test was used to examine the constancy of error variance (homoskedasticity). The results confirmed no significant presence of heteroskedasticity.

• **Model Stability:** The eigenvalue stability condition was verified to ensure that all eigenvalues lie within the unit circle. This confirmed the dynamic stability of the VECM.

In summary, the methodological approach adopted in this study ensures a rigorous examination of both the short- and long-term effects of institutional quality on FDI inflows to Morocco. With the model specified, variables selected, and robustness checks applied, the following section presents the empirical results derived from the econometric analysis.

#### 4 Findings/Analysis

To address the research question regarding the extent to which institutional quality influences foreign direct investment (FDI) inflows in Morocco, this section presents the empirical findings derived from the time series analysis conducted over the period 1996–2022. Following the theoretical foundations and methodological framework previously discussed, the results provided concrete evidence on the relationship between institutional variables such as political stability, control of corruption, regulatory quality, and economic freedom, and the volume of inward FDI. These findings aim to shed light on how institutional quality contributes to shaping Morocco’s attractiveness to foreign investors, thereby offering insights that are both academically relevant and practically applicable for policymakers.

##### 4.1 Study of the Stationarity of Series

To analyse the stationarity of the time series, we applied Augmented Dickey-Fuller (ADF) unit root tests and Phillips-Perron (PP) tests.

Table n°1 : Results of ADF Stationarity Tests

Variables	Augmented Dickey–Fuller	Phillips-Perron	Order of integration		
	In level	In first difference	In level	In first difference	
<b>FDI</b>	-3.422325 (0.0729)	-6.882341* (0.0001)	1.016393 (0.9136)	-14.519 * (0.0000)	I(1)
<b>STAB</b>	-1.734973 (0.7063)	-5.009072* (0.0024)	-1.871280 (0.6402)	-5.887121* (0.0003)	I(1)
<b>LE</b>	-1.911461 (0.6199)	-4.696678* (0.0049)	-1.905536 (0.6229)	-4.696678* (0.0049)	I(1)
<b>CC</b>	-2.051654 (0.5471)	-4.667613* (0.0052)	-2.085930 (0.5292)	-5.167453* (0.0017)	I(1)
<b>QR</b>	-2.450141 (0.3477)	-6.537893* (0.0001)	--2.521085 (0.3161)	-6.534647* (0.0001)	I(1)

\* = the statistical t is greater than Mackinnon's critical value for a tolerance threshold of 1%. The values in brackets represent the probabilities.

Source : authors via Eviews 10

The table above showed that the series selected were not stationary in level, but became stationary in first difference. Therefore, all the series had an order of integration I(1).

##### 4.2 Number of Lags in the VAR Model

Estimation of the VECM model requires prior determination of the number of lags (p) in the VAR(p) model. To do this, we used the Schwarz criteria (SC).

Table n°2 : Determination of the VAR(p) Delay Number.

Lag	LogL	LR	FPE	AIC	SC	HQ
0	194.5539	NA	9.50e-14	-15.79615	-15.55073	-15.73104
1	240.7412	69.28109	1.71e-14	-17.56177	-16.08920*	-17.17110

2	276.3361	38.56104*	9.71e-15	-18.44467	-15.74496	-17.72844
3	315.4713	26.09014	8.23e-15*	-19.62260*	-15.69576	-18.58081*

Source : authors via Eviews 10

Table 2 presented the results of the lag order selection criteria for the time series analysis conducted in this study. The estimation of the VECM model required prior determination of the number of lags (p) in the VAR(p) model. To do this, the Schwarz Criterion (SC) was used. The table included various statistics such as the Log Likelihood (LogL), Likelihood Ratio (LR), Final Prediction Error (FPE), Akaike Information Criterion (AIC), Schwarz Criterion (SC), and Hannan-Quinn Criterion (HQ) across different lag lengths (0 to 3).

Notably, the values indicated that the optimal lag length was 2, as evidenced by the significant LR statistic of 38.56104 and the lowest AIC value of -18.44467. Additionally, the corresponding FPE value at this lag length suggested improved predictive performance. Furthermore, the criteria showed that lag length 1 also demonstrated a reasonable fit, but the indicators favored lag length 2 as the most appropriate choice for subsequent modeling.

### 4.3 JOHANSON cointegration test

To verify the existence of long-term equilibrium relationships between the variable to be explained and the integrated explanatory variables of the same order I(1), we used the Johansen cointegration test. The results of this test are summarised in the following table:

Table n°3 : JOHANSON cointegration

Hypothesized NO. Of CE (s)	Eigenvalue	Trace Statistic	Critical Value	Probability
r=0*	0.773557	86.94775	69.81889	0.0012
r ≤ 1*	0.615285	49.81616	47.85613	0.0323
r ≤ 2	0.368220	25.93485	29.79707	0.1307
r ≤ 3	0.302929	14.45449	15.49471	0.0713
r ≤ 4*	0.195321	5.432785	3.841466	0.0198
r=0*	0.773557	86.94775	69.81889	0.0012

\* there is cointegration

Hypothesized No. of CE(s)	Eigenvalue	Max- Eigenvalue Statistic	0.05 Critical Value	Prob.**
r=0*	0.773557	37.13158	33.87687	0.0197
r ≤ 1	0.615285	23.88131	27.58434	0.1389
r ≤ 2	0.368220	11.48036	21.13162	0.5994
r ≤ 3	0.302929	9.021707	14.26460	0.2843
r ≤ 4*	0.195321	5.432785	3.841466	0.0198
r=0*	0.773557	37.13158	33.87687	0.0197

\* there is cointegration

Source : authors via Eviews 10

Table 3 displayed the results of the cointegration analysis, illustrating the number of cointegration equations (CEs) among the variables in the model. The eigenvalues, trace statistics, critical values, and corresponding probabilities were presented for each hypothesized number of CEs. Notably, the results indicated the presence of cointegration for the null hypotheses  $r = 0$  and  $r \leq 1$ , with trace statistics of 86.94775 and 49.81616, respectively, both exceeding their critical values and yielding low probabilities of 0.0012 and 0.0323.

#### 4.4 Estimation results for the VECM model

The table below presents the results of the VECM model estimated in the short and long term by integrating the cointegration relationships.

Table n°4 : Short- and Long-Term VECM Estimation Results

Long-term relationship				
Variables	Coefficient	Std. Errors	t-Statistics	
FDI	1.000000			
STAB	0.235219	(0.03435)	[ 6.84791]*	
LE	0.401462	(0.10953)	[ 3.66530]*	
CC	0.277957	(0.04442)	[6.25769]*	
QR	-0.227089	(0.04621)	[-4.91379]*	
C	-0.301683			
Short-term relationship				
Dependent Variable: DIDE				
Variables	Coefficient	Std. Errors	t-Statistics	
CointEq1	-0.730423	(0.21950)	[-3.32764]*	
$\Delta$ (FDI(-1))	0.283896	(0.24787)	[ 1.14532]**	
$\Delta$ (STAB(-1))	0.078719	(0.04358)	[ 1.80634]**	
$\Delta$ (LE(-1))	-0.009098	(0.19203)	[-0.04737]**	
$\Delta$ (CC(-1))	-0.212443	(0.06121)	[-3.47060]*	
$\Delta$ (QR(-1))	0.061638	(0.04706)	[ 1.30983]**	
C	-0.004352	(0.00366)	[-1.19056]**	
R-squared	0.676978	Log likelihood	75.46905	
Adj. R-squared	0.569303	Akaike AIC	-5.477524	
Sum sq. resids	0.003495	Schwarz SC	-5.136239	
S.E. equation	0.013934	Mean dependent	-0.000437	
F-statistic	6.287280	S.D. dependent	0.021231	

\* : Variable significant at the 5% level.

\*\* : Variable non significant.

Source : authors via Eviews 10

Table 4 indicated the presence of significant relationships between the examined variables in both the long-term and short-term models. In the long-term relationship, the coefficients revealed that political stability (STAB), economic freedom (LE), and control of corruption (CC) positively influenced foreign direct investment (FDI), with respective t-statistics of 6.84791, 3.66530, and 6.25769, demonstrating strong statistical significance. Conversely, regulatory quality (QR) exhibited a negative coefficient of -0.227089 and a significant t-statistic of -4.91379, indicating that higher regulatory intervention may deter FDI.

In the short-term dynamics, the error correction term (CointEq1) was negative and statistically significant (-0.730423), showing that deviations from long-term equilibrium are corrected over time. Although lagged FDI ( $\Delta$ (FDI(-1))) and political stability ( $\Delta$ (STAB(-1))) displayed some degree of significance, control of corruption ( $\Delta$ (CC(-1))) had a more pronounced negative impact with a t-statistic of -3.47060. Overall, the model's R-squared value of 0.676978 reflected a robust explanatory power, as it accounts for approximately 67.7% of the variability in the short-term changes in FDI.

#### 4.5 Model Specification

The hypothetical model can be represented as follows:

$$FDI_t = c + \beta_1 STAB_t + \beta_2 LE_t + \beta_3 CC_t + \beta_4 QR_t + \varepsilon_t \quad (1)$$

Where:

$FDI_t$  : this is the endogenous variable. It is measured by net FDI inflows as a % of GDP;

$STAB_t$  : represents political stability;

:  $LE_t$  represents economic freedoms;

$CC_t$  : represents control of corruption;

:  $QR_t$  represents the quality of regulation;

$\beta_1, \beta_2, \beta_3, \beta_4$  , , and are the coefficients of the respective variables,

$\varepsilon_t$  : is the error term;

c: the constant. It captures the effect of other factors not specified in our hypothetical model.

#### 4.6 Validity of the model

To check the conformity of the estimated model, certain essential tests must be applied to the residuals.

Normality test

We apply the Jarque-Bera test to check the normality of the residuals.

Table n°5 : Test for Normality of Residuals

Component	Jarque-Bera	Df	Prob
1	11.48406	2	0.0032
2	0.208246	2	0.9011
3	0.919956	2	0.6313
4	1.328805	2	0.5146
5	1.119591	2	0.5713
Joint	15.06066	10	0.1299

Source : authors via Eviews 10

The results showed that the Jarques-Bera probabilities were globally above the critical threshold of 5%. Thus, the condition of normality of the residuals is verified.

Autocorrelation test: To verify the autocorrelation of the residuals, we use the Lagrange multiplier (LM) test.

Table n°6 : Autocorrelation Test(LM) and Heteroskedasticity Test

Null hypothesis: No serial correlation at lag h

Lag	LRE* stat	df	Prob.	Rao F-stat	df	Prob.
1	29.54117	25	0.2419	1.242646	(25, 34.9)	0.2726
2	30.28470	25	0.2138	1.285260	(25, 34.9)	0.2432
Chi-sq		df	Prob.			
206.7800		180	0.0835			

Source : authors via Eviews 10

Table 6 reported the results of the autocorrelation test (LM), which examined the null hypothesis of no serial correlation at specified lags. At lag 1, the Lagrange Multiplier (LRE\*) statistic was 29.54117 with a probability value of 0.2419, suggesting that the null hypothesis could not be rejected, indicating no significant serial correlation at this lag. Similarly, at lag 2, the LRE\* statistic increased to 30.28470, with a probability value of 0.2138, which also supported the conclusion of no serial correlation. Additionally, the Rao F-statistics for both lags yielded probabilities of 0.2726 for lag 1 and 0.2432 for lag 2, further confirming the absence of serial correlation.

The results of the heteroskedasticity test evaluated the presence of non-constant variance in the model's residuals. The Chi-squared statistic was 206.7800 with 180 degrees of freedom, and the associated probability value was 0.0835. As a result, the

assumptions underlying the regression analysis remain valid, reinforcing the reliability of the model's estimations. In summary, the outcomes of the various diagnostic tests demonstrate the validity and robustness of the estimated VECM model.

## **5 Discussion**

The findings of this study underscore the critical role of institutional quality as a determinant of FDI flows into Morocco. All institutional quality indicators examined are statistically significant, thereby confirming the central hypothesis that these factors significantly influence foreign investment. However, the variation in the direction (sign) of these effects highlights the complexity of the relationship between institutional quality and FDI inflows. While political stability, economic freedom, and control of corruption positively influence FDI, regulatory quality appears to have a negative impact, suggesting that excessive regulation may deter foreign investors.

The long-term relationships among the variables are validated through several cointegration tests. The results from Table 1 indicate that all series are integrated of order  $I(1)$ , which justifies the use of the VECM approach. The findings from Table 3 further confirm a strong cointegration relationship, particularly for the hypotheses  $r = 0$  and  $r \leq 1$ , where trace statistics exceed critical values with high statistical significance. Conversely, the hypotheses for  $r \leq 2$  and  $r \leq 3$  do not show significant results, indicating that only one or two cointegration equations exist. The maximum eigenvalue test corroborates these results, emphasizing the importance of institutional quality in the long-term dynamics of FDI in Morocco.

In terms of model reliability, diagnostic tests confirm the robustness of the estimated VECM model. As shown in Table 6, the LM test results reveal no autocorrelation in the residuals, with probability values above the 5% significance level. This suggests that the residuals are independent over time, which is essential for the reliability of the model. Similarly, the heteroskedasticity test, based on the Chi-squared statistic, shows a probability value of 0.0835. This implies that the null hypothesis of homoskedasticity cannot be rejected, indicating no significant evidence of heteroskedasticity and thus consistent variance across observations.

### **Political Stability**

The positive and statistically significant correlation between political stability and FDI aligns with existing literature, including the works of Liargovas & Skandalis (2012), Busse & Hefeker (2007), and Gani (2007). Specifically, our results indicate that a 1% improvement in political stability corresponds to a 0.23% increase in FDI inflows. This finding is particularly relevant in the context of the Arab Spring, where Morocco has maintained relative stability compared to its regional counterparts. While previous studies underscore the importance of political stability, our findings suggest that its impact may be even more pronounced in a region grappling with significant political upheaval. This stability enhances Morocco's attractiveness to foreign investors, suggesting that countries experiencing political turbulence may benefit from adopting institutional reforms to foster stability and boost FDI.

### **Control of Corruption**

Our results reveal a positive and significant relationship between the control of corruption and FDI, with a 1% improvement leading to a 0.27% increase in FDI inflows. This finding corroborates the conclusions of Wei (2000), Asiedu (2005), and Quazi (2014). However, unlike some prior research that may have downplayed the significance of corruption, our analysis emphasizes its critical role in investor confidence. The troubling state of corruption in Morocco, as highlighted by multiple international organizations - including Worldwide Governance Indicators, Transparency International, and the PRS group indicates that a failure to address corruption could

result in missed opportunities for attracting foreign investment. This observation reinforces the notion that improving institutional quality is not merely beneficial but essential for enhancing FDI attractiveness.

### **Economic Freedoms**

The significant correlation between economic freedoms and FDI indicates that enhancing economic liberties is essential for attracting foreign investment. Our findings demonstrate that a 1% improvement in economic freedoms results in a 0.40% increase in FDI inflows, echoing the conclusions of El Moutaouakil & Sadik (2019). This consistency with previous literature underscores the importance of creating an environment conducive to foreign investment. Policymakers should prioritize reforms that promote economic freedoms, aligning their strategies with best practices observed in more FDI-attractive countries.

### **Regulatory Quality**

In contrast, the negative relationship between regulatory quality and FDI highlights the challenges posed by interventionist policies. Our analysis shows that a 1% increase in the quality of regulation leads to a 0.22% decrease in FDI inflows. This finding diverges from some studies that posit regulation as primarily beneficial. The results suggest that excessive government intervention may deter foreign investors, raising important questions about the appropriateness of current regulatory frameworks. This observation is crucial for both scholars and practitioners, as it calls for a reevaluation of regulatory policies to create a more conducive environment for FDI.

In summary, the empirical evidence not only supports the hypothesized impact of institutional quality on FDI inflows in Morocco but also confirms the statistical soundness of the model used to assess these relationships.

## **5 Conclusion**

The objective of this study is to provide new empirical evidence on the effect of institutional quality on the attractiveness of FDI in Morocco. The empirical results show that the institutional variables, which we have used to quantify and identify the different aspects of institutional quality, have a statistically significant influence on FDI. This suggests that institutional quality is an important determinant explaining the behaviour of inward FDI flows to Morocco.

The results indicate that improvements in political stability, control of corruption, and economic freedoms are likely to attract more foreign firms to establish operations in Morocco. Conversely, an increase in state interventionism (regulatory quality) is not conducive to encouraging FDI inflows. These findings lead us to a critical reassessment of Morocco's FDI promotion policy, emphasizing the urgent need to prioritize the improvement of institutional factors.

The intended contribution of this article is to help to enhance the existing literature by providing robust empirical evidence that intricately links institutional quality to foreign direct investment (FDI) in Morocco. Our findings not only reaffirm previous research but also shed light on the complex dynamics that characterize the interaction between various dimensions of institutional quality and FDI flows. Specifically, we identify how political stability, control of corruption, economic freedoms, and regulatory quality independently and collectively influence the attractiveness of Morocco as a destination for foreign investment.

This study advocates for a deeper exploration of these relationships, particularly within the context of emerging markets. By doing so, researchers can develop a more nuanced understanding of the interplay between institutional factors and foreign investment, recognizing that such dynamics may differ substantially across various national

contexts. Future research could delve into the specific mechanisms through which these institutional dimensions exert their influence on FDI, offering insights into the causal pathways that underlie these relationships. Additionally, comparative analyses with other emerging economies would enrich the discourse, allowing for a broader understanding of the role of institutional quality in shaping investment landscapes across different regions. Such studies could also provide valuable lessons for policymakers aiming to create a more conducive environment for FDI, thereby facilitating sustainable economic growth and development.

Moreover, this line of inquiry could explore the temporal aspects of institutional quality and FDI interactions, examining how changes over time in governance, regulation, and economic policies affect foreign investment decisions. The potential for longitudinal studies in this area could yield important insights into the long-term effects of institutional reforms on FDI, helping to inform strategic policy interventions. Overall, expanding this research agenda will not only contribute to academic scholarship but also provide practical guidance for policymakers seeking to enhance their countries' investment climates and attract foreign capital effectively.

This study has some limitations; we acknowledge that the primary limitation relates to the number of observations. While the selected observations provide valuable insights, they are insufficient from an econometric perspective to incorporate other important determinants of FDI, particularly those of an economic nature, into the model equation. Given these limitations, it is essential to explore additional perspectives that consider a more exhaustive range of determinants influencing the attractiveness of FDI in Morocco.

To build upon these insights and address the limitations identified, we propose several concrete recommendations for policymakers. First, developing initiatives aimed at fostering political dialogue and consensus-building among various political factions can help ensure ongoing political stability. Regular assessments of political risks should be conducted to preempt potential unrest and communicate effectively with potential investors about the political climate. By focusing on these areas, policymakers can create a more stable environment conducive to attracting foreign investment.

In addition to promoting political stability, it is essential to implement robust anti-corruption strategies. These strategies should involve transparency in governmental processes, rigorous enforcement of anti-corruption laws, and the establishment of independent bodies to monitor and report on corruption. This could include public reporting on government procurement processes and establishing whistleblower protections to encourage the reporting of corrupt practices.

Furthermore, policymakers should streamline regulations that restrict business operations and enhance the ease of doing business. Efforts should focus on simplifying business registration processes, reducing bureaucratic red tape, and ensuring that economic policies favor free-market principles to encourage foreign investment.

Additionally, a comprehensive review of current regulatory policies is necessary to identify and eliminate excessive government intervention. Engaging stakeholders, including foreign investors and local businesses, in consultations can help redesign regulations that balance public interest with the need to attract FDI.

In summary, the contributions of this paper extend the existing literature by providing empirical evidence that links institutional quality with FDI in Morocco. Our findings not only confirm previous research but also illuminate the nuanced dynamics of how different aspects of institutional quality interact with FDI flows. This study calls for further exploration of these relationships, particularly in the context of emerging

markets, to develop a more comprehensive understanding of the interplay between institutional factors and foreign investment.

Ultimately, this framework for actionable policy recommendations aims to provide a clear pathway for Moroccan policymakers to enhance the country's attractiveness for FDI, thus fostering sustainable economic growth. investment? *Open Economies Review*, 21, 201–219. <https://doi.org/10.1007/s11079-010-9170-4>

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