

“Foreign direct investment – a key driver of Moroccan development: What can be done to maximize its potential?”

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FOREIGN DIRECT INVESTMENT – A KEY DRIVER OF MOROCCAN DEVELOPMENT: WHAT CAN BE DONE TO MAXIMIZE ITS POTENTIAL?

Abstract

This study examines the determinants influencing the attractiveness of foreign direct investment (FDI) in Morocco during the period 2000–2023. The data utilized in this study are sourced from the World Bank and the International Monetary Fund, encompassing economic, institutional, and infrastructural dimensions. The model includes variables representing economic growth, economic openness, inflation, infrastructure quality, political and macroeconomic stability, institutional quality, and fiscal policy. A Ridge regression was adopted to address multicollinearity issues detected in the data. Econometric diagnostics, including stationarity tests, residual normality tests, autocorrelation tests, and heteroskedasticity tests, confirm the robustness of the model. The results show that economic openness has a positive and significant effect on FDI inflows, highlighting the importance of trade and international integration. Political and macroeconomic stability also exerts a positive and significant impact, confirming that foreign investors value a stable environment. Conversely, economic growth exhibits a negative and non-significant effect, suggesting that Morocco's growth has not been sufficient to create favorable conditions for FDI attractiveness. Infrastructure quality and institutional quality show significant negative impacts, which may reflect perceived shortcomings in these areas despite ongoing efforts. Inflation has no statistically significant effect on FDI, while fiscal policy has a significant negative impact, indicating that tax policies have a dissuasive effect on international investors.

Keywords

foreign direct investment, economic attractiveness, economic growth, institutional quality, infrastructure

JEL Classification

F21, C33, E22

INTRODUCTION

Foreign direct investment has long been recognized as a key driver of economic development, offering multiple benefits such as job creation, access to new technologies, local capacity building, and integration into global value chains. They also help to diversify national economies, improve infrastructure, and boost international competitiveness. For developing countries, FDI represents a strategic lever for bridging domestic investment gaps and supporting sustainable economic growth. However, the attractiveness of FDI is highly dependent on a country's economic, political, and institutional conditions. Factors such as political stability, infrastructure quality, tax competitiveness, institutional governance, and economic openness play a decisive role in international investors' decisions. Their primary aim is to minimize risk while maximizing returns, which makes the establishment of a favorable and competitive environment all the more important.

In this context, Morocco, as an emerging country located at the crossroads of European, African, and Arab markets, aspires to become a re-

gional investment platform. Thanks to its strategic geographical position, its free-trade agreements with several major economic partners, and its structural reforms aimed at improving the business climate, Morocco has attracted growing attention from foreign investors. However, FDI flows remain uneven, revealing persistent challenges linked to institutional quality, the state of infrastructure, taxation, and other economic factors. The challenge for Morocco is to identify the levers likely to optimize its attractiveness and maximize the benefits of FDI for its economic and social development.

1. LITERATURE REVIEW AND HYPOTHESES

The attractiveness of foreign direct investment (FDI) is a major concern for developing countries in the context of increasing globalization. As vectors of technology transfer, job creation, and economic growth stimulation, FDI plays a key role in development strategies. Many studies have therefore sought to identify the determinants of FDI and to analyze their impact on host economies.

Recent literature highlights the importance of several factors in attracting FDI, such as economic growth, trade openness, institutional quality, inflation control, infrastructure quality, political stability, and tax incentives.

Several authors, including Blonigen (2005), Bellak et al. (2009), Groh and Wich (2012), and Dang and Nguyen (2021), among others, demonstrate that economic growth is a major factor enhancing a country's ability to attract FDI. Blonigen (2005) points out that market size expansion, driven by sustained growth, increases the attractiveness of economies for foreign investors seeking dynamic outlets. Bellak et al. (2009) specify that economic growth, combined with effective public policies, plays a structuring role in attracting FDI. According to their study, adequate infrastructure, such as modern transportation networks, and high institutional quality also enhance economic appeal. Groh and Wich (2012) add that improved economic activity strengthens the attractiveness of emerging markets, focusing on criteria such as regulatory stability and innovation capacity. Ridzuan et al. (2018) show that economic growth, combined with financial development and infrastructure improvements, stimulates investor interest by reducing economic uncertainties. Dang and Nguyen (2021) also emphasize that economic growth is a key lever in attracting FDI, notably by increasing purchasing power and business opportunities.

Regarding trade openness, Anghel (2005) indicates that this factor acts as a catalyst for FDI attractiveness. Emphasizing the effects of liberal trade policies, he explains that such policies reduce trade barriers and create a favorable environment for foreign investors. Buchanan et al. (2012) support this idea, asserting that trade openness promotes integration into the global market and improves investor perception. According to them, this effect is amplified when accompanied by institutional improvements and good governance. Badri and Sheshgelani (2017) show that policies aimed at reducing trade barriers directly strengthen international economic actors' confidence. Sabir, Rafique, and Abbas (2019) complement this perspective by stating that an open trade regime enhances transparency and reduces institutional obstacles, thereby reinforcing investor confidence. They also stress the importance of regulatory stability and administrative simplification. Jaiblai and Shenai (2019) highlight that trade openness, by promoting international trade and reducing tariffs, improves long-term competitiveness. Sadeghi et al. (2020) confirm that trade integration, measured by the share of trade in GDP, facilitates the entry of foreign capital by expanding opportunities for multinationals.

Concerning institutional quality, Agosin and Machado (2007) emphasize that policy liberalization, such as procedure simplification and removal of restrictions, fosters a conducive climate for FDI, highlighting location advantages. Trevino et al. (2002) show, however, that these dynamics lose effectiveness in a context of high inflation, which increases transaction costs and instability. Hailu (2010) shares this view, describing inflation as a signal of economic instability that deters investors. He stresses the need for sound macroeconomic management. Rashid et al. (2017) confirm this approach, stating that investors favor economically stable environments, with inflation perceived as a major risk. Avetisyan (2020) adds that inflation of-

ten interacts with other variables, such as political stability and institutional quality, enhancing their overall impact on FDI attractiveness. Sharbati et al. (2024) similarly highlight the destabilizing nature of inflation, which increases uncertainty and reduces investor confidence.

In terms of infrastructure, Kumar (2006) highlights the importance of transportation, telecommunications, and energy infrastructure in attracting FDI. Such infrastructure reduces operating costs and enhances investment profitability, particularly for multinational companies. Khadaroo and Seetana (2010) emphasize the role of transport infrastructure in reducing transaction costs and facilitating integration into global supply chains. Bellak et al. (2010) add that infrastructure quality improves logistics efficiency and destination competitiveness. Similarly, Kaur et al. (2016) emphasize the importance of road and rail networks for operational efficiency. Stack et al. (2017) confirm that modern infrastructure reduces costs for foreign companies. Jaiblai and Shenai (2019) note that quality infrastructure not only supports FDI attractiveness but also contributes to sustainable economic development.

Regarding political and institutional stability, Globerman and Shapiro (2002) show that political stability enhances the credibility of host countries by reducing uncertainties. Busse and Hefeker (2007) highlight the importance of property rights protection and governance in mitigating political risks. Bénassy-Quéré et al. (2007) stress the role of effective institutions, particularly in combating corruption and protecting property rights, in attracting FDI. Masron and Abdullah (2010) underscore the importance of robust regulatory frameworks in creating a secure environment. Abbas and El Mosallamy (2016) consider institutional stability a key signal for multinationals. Rodríguez-Pose and Cols (2017) argue that strong institutions, characterized by the rule of law and effective corruption control, improve legal security and reduce uncertainty. Ullah and Khan (2017) show that transparent and stable regulatory frameworks, combined with active anti-corruption measures, reduce investment costs. Masron and Naseem (2017) confirm that the rule of law and regulatory quality directly influence FDI flows. Shan et al. (2018) add that certain institutional dimensions reassure investors through increased transparen-

cy, although some, such as those from China, may tolerate weaker institutional contexts. Dorożyński et al. (2019) conclude that government transparency and anti-corruption efforts reduce transaction costs and boost investor confidence.

Regarding economic stability and inflation control, Birnleitner (2014) asserts that economic stability, including moderate inflation, is a crucial criterion for investors. Şıklar and Kocaman (2018) support this analysis, showing that inflation and exchange rate fluctuations negatively affect FDI. These authors agree that stable macroeconomic indicators are essential for attracting foreign capital.

Finally, on the topic of taxation, Globerman and Shapiro (2002) state that competitive tax systems encourage business establishment. Simmons (2003) emphasizes that tax transparency and stability, along with simplified obligations, strongly influence investment decisions. He notes that mechanisms preventing double taxation and clear tax policies are major assets. Tavares-Lehmann et al. (2012) argue that while tax impacts are often marginal compared to other factors, targeted measures, such as tax credits or exemptions, can enhance project profitability. Domazet et al. (2018) show that employment-related tax incentives increase economic competitiveness. Boly et al. (2020) add that tax incentives are particularly effective in less developed regions or in settings with low institutional quality.

Based on the literature review, the following research hypotheses can be formulated:

- H1: Economic growth has a significant positive impact on FDI attractiveness in Morocco.*
- H2: Economic openness has a significant positive effect on FDI attractiveness in Morocco.*
- H3: Inflation has a significant negative impact on FDI attractiveness in Morocco.*
- H4: Infrastructure quality has a significant positive impact on FDI attractiveness in Morocco.*
- H5: Political and macroeconomic stability has a significant positive effect on FDI attractiveness in Morocco.*

- H6: *Institutional quality has a significant positive impact on FDI attractiveness in Morocco.*
- H7: *Fiscal policy has a significant positive or negative impact on FDI attractiveness in Morocco.*

2. METHOD

In addressing the research question concerning the determinants of foreign direct investment (FDI) attractiveness from 2000 to 2023, this study adopts a quantitative empirical approach. This choice is driven by the need to analyze measurable economic indicators and their relationships systematically. The methodology section delineates the selection of variables, data sources, and the econometric model employed

The econometric model in this study aims to test the research hypotheses related to the identified issues. Each hypothesis has been translated into a dependent variable to enable empirical testing. The data used for this econometric model cover the period from 2000 to 2023 and are sourced from the World Bank and the International Monetary Fund (IMF). The collected information focuses on economic, institutional, and infrastructural dimensions. The model is defined as follows:

$$FDI = \beta_0 + \beta_1 \cdot GROW + \beta_2 \cdot OPEN + \beta_3 \cdot INFL + \beta_4 \cdot INFR + \beta_5 \cdot STAB + \beta_6 \cdot INST + \beta_7 \cdot TAXP + \varepsilon, \quad (1)$$

where *FDI* represents foreign direct investment (*FDI*) inflows. *GROW* corresponds to the economic growth rate (*GROW*– Growth). *OPEN* is an indicator of economic openness, measured by an index that includes exports of goods and services as a percentage of *GDP*, imports of goods and services as a percentage of *GDP*, and international reserves expressed in months of imports. *INFL* refers to the inflation rate (*INFL*– Inflation). *INFR* reflects infrastructure quality, measured by an index that includes the length of paved roads as a percentage of total roads, access to electricity as a percentage of the population, fixed broadband Internet subscriptions per 100 inhabitants, Internet users as a percentage of the population, and access to basic drinking water services as a percentage of the

population. *STAB* indicates political and macroeconomic stability, assessed through an index that takes into account the political stability and absence of violence/terrorism index (values ranging from –2.5 to 2.5), public debt as a percentage of *GDP*, and the unemployment rate as a percentage of the active population. *INST* measures institutional quality through an index combining several indicators, including control of corruption (Control of Corruption – CC), regulatory quality (Regulatory Quality – RQ), rule of law (Rule of Law – RL), government effectiveness (Government Effectiveness – GE), and the Ease of Doing Business Index. *TAXP* evaluates fiscal policy or tax incentives through an index considering the corporate tax rate, the ease of paying taxes, the time spent on tax compliance in hours per year, tax incentives such as subsidies or tax credits, as well as tax transparency and the structure of tax exemptions. Variables measured by indices were calculated using the following steps: data normalization through standardization between 0 and 1, and aggregation of variables using Principal Component Analysis (PCA).

Table 1 presents the results of the stationarity tests on the time series conducted using the Augmented Dickey-Fuller (ADF) test. These tests verified and adjusted the data to ensure stationarity. The results show that some variables, such as foreign direct investment (*FDI*) inflows and infrastructure quality (*INFR*), are stationary at the level without requiring further transformations. Conversely, the economic growth rate (*GROW*) and political and macroeconomic stability (*STAB*) were made stationary through first-order differencing. Variables such as economic openness (*OPEN*), inflation (*INFL*), institutional quality (*INST*), and taxation (*TAXP*) were rendered stationary after second-order differencing.

Table 1. Stationarization of time series

Variables	ADF test statistic	Prob.	Order of integration
FDI	–11.80080	0.0001	0
GROW	–8.272794	0.0000	1
OPEN	–10.73139	0.0000	2
INFL	–7.418505	0.0001	2
INFR	–9.619073	0.0000	0
STAB	–12.26173	0.0001	1
INST	–18.30910	0.0001	2
TAXP	–11.00982	0.0000	2

Table 2 presents the Variance Inflation Factors (VIF) derived from the OLS regression analysis. The results show centered VIF values exceeding 5 for several variables, which is considered problematic for the study. Notably, infrastructure quality (INFR) has a centered VIF of 11.76, and political and macroeconomic stability (STAB) has a centered VIF of 8.37, indicating a high correlation with other explanatory variables. These elevated VIF levels suggest that the coefficient estimates for these variables may be biased and unstable. Additionally, variables such as economic growth rate (GROW), economic openness (OPEN), and institutional quality (INST) exhibit centered VIF values close to 4.

Table 2. Variance Inflation Factors / OLS

Variable	Coefficient of variance	Uncentered VIF	Centered VIF
C	0.029572	33.70175	NA
GROW	0.046311	16.89378	4.190379
OPEN	0.036640	15.95274	3.838543
INFL	0.011987	3.854826	1.046461
INFR	0.192839	28.49269	11.76110
STAB	0.293526	14.85532	8.375113
INST	0.040327	14.96823	3.360797
TAXP	0.011941	4.075566	1.023058

These results highlight the need for a specific treatment of multicollinearity to ensure reliable econometric results. In this context, the use of Ridge regression is fully justified. Ridge regression, by introducing a penalty in the minimization of the sum of squared errors, reduces the variances of the estimated coefficients. This effectively corrects the instability of estimates caused by high centered VIF values.

3. RESULTS

This section presents the empirical findings of the study on the determinants of foreign direct investment (FDI) attractiveness between 2000 and 2023. It begins with an assessment of the robustness of the estimates derived from the initial regression model, aiming to verify the stability of the estimated coefficients and the validity of the underlying assumptions. Subsequently,

it presents the results of the Ridge regression, a regularization method used to address multicollinearity issues among explanatory variables. These analyses collectively enhance the understanding of the factors influencing FDI attractiveness during the studied period.

Table 3 presents the results of the Ramsey RESET test applied to the Ridge regression. This test evaluates the model specification by examining the potential presence of omitted variables or errors in the functional form used. The results indicate that the t-statistics, F-statistics, and likelihood statistics are associated with high probabilities, exceeding the commonly used significance thresholds. For example, the probability associated with the F-statistic is 0.2938, suggesting that the null hypothesis, which assumes the model is correctly specified, cannot be rejected. The failure to reject the null hypothesis indicates that neither significant omitted variables nor meaningful nonlinearities affect the model's structure.

Table 3. Ramsey RESET test of the ridge regression

Ramsey RESET Test			
Specification: FDI C GROW OPEN INFL INFR STAB INST TAXP			
Omitted Variables: Squares of fitted values			
	Value	df	Probability
t-statistic	1.056248	87	0.2938
F-statistic	1.115661	(1, 87)	0.2938
Likelihood ratio	1.223247	1	0.2687

Table 4 presents the Variance Inflation Factors (VIF) calculated after applying Ridge regression. The centered VIF values show a clear improvement compared to the previous results obtained with OLS regression. All variables exhibit centered VIF values below 2, indicating that multicollinearity, previously problematic in the model, has been significantly reduced. For example, variables such as infrastructure quality (INFR), political and macroeconomic stability (STAB), and institutional quality (INST), which displayed high levels of collinearity in the OLS model, now have centered VIF values close to 1. These results confirm that Ridge regression has effectively mitigated the multicollinearity issues in the model, making the coefficient estimates more stable and interpretable.

Table 4. Variance inflation factors for Ridge regression

Variable	Coefficient of variance	Uncentered VIF	Centered VIF
C	0.018309	19.14503	NA
GROW	0.011142	3.889562	1.054116
OPEN	0.013889	4.594928	1.062156
INFL	0.013442	4.600139	1.073904
INFR	0.013107	4.035127	1.049139
STAB	0.013347	5.403330	1.084651
INST	0.011648	4.007934	1.014035
TAXP	0.012126	4.211593	1.072852

Figure 1 shows the confidence ellipses of the Ridge regression. The stability of the coefficients, evident through the shape and size of the ellipses, is a key indicator of the robustness of the estimates. Well-defined and regular ellipses demonstrate that regularization has successfully limited the impact of high correlations between explanatory variables, thus ensuring reliable estimates that are less sensitive to data fluctuations. This improves the ability

to capture the relationships between explanatory variables and FDI flows while reducing the risk of overinterpretation.

Table 5 presents the results of the autocorrelation and partial correlation tests of the residuals for the Ridge regression. These tests assess whether the model’s residuals exhibit sequential correlations, which could indicate model misspecification or unaccounted relationships. The autocorrelation (AC) and partial correlation (PAC) values are close to zero for all lags, suggesting no significant autocorrelation in the residuals. The Ljung-Box statistics (Q-Stat), calculated for each lag, confirm these observations, with associated probabilities (Prob) far exceeding common significance thresholds (0.05 or 0.10). These results indicate that the null hypothesis of no autocorrelation cannot be rejected, reinforcing the validity of the model’s residuals. The absence of autocorrelation ensures that the coefficient estimates are reliable and that the

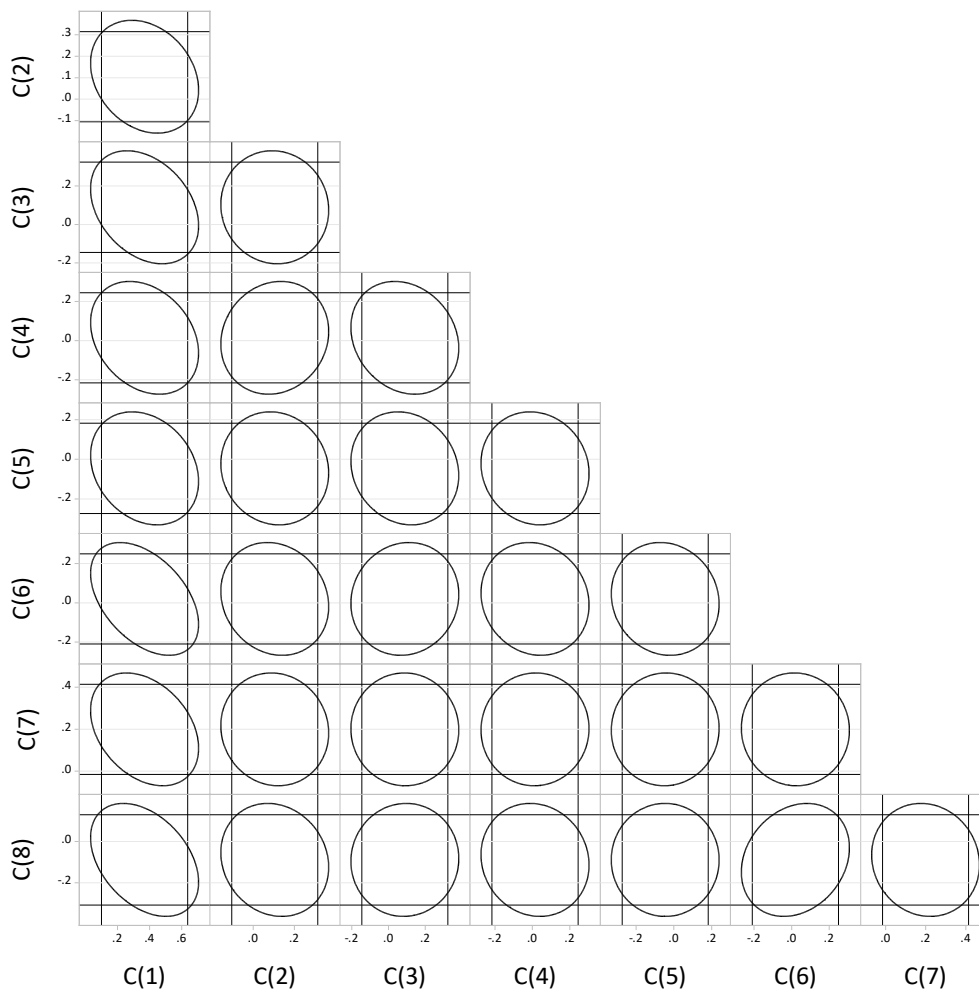


Figure 1. Confidence ellipses/Ridge regression

relationships captured between explanatory variables and the dependent variable are not biased by unaccounted sequential errors.

Table 5. Test of autocorrelation and partial correlation of residuals for the Ridge regression

Lag	AC	PAC	Q-Stat	Prob
1	-0.061	-0.061	0.3655	0.545
2	-0.027	-0.031	0.4404	0.802
3	0.020	0.017	0.4818	0.923
4	-0.030	-0.029	0.5738	0.966
5	-0.107	-0.110	1.7497	0.883
6	-0.005	-0.021	1.7522	0.941
7	-0.159	-0.169	4.4409	0.728
8	-0.106	-0.133	5.6513	0.686
9	0.084	0.049	6.4191	0.697
10	-0.083	-0.099	7.1769	0.709
11	-0.027	-0.054	7.2576	0.778
12	-0.063	-0.133	7.6985	0.808
13	0.096	0.049	8.7476	0.792
14	-0.025	-0.055	8.8207	0.842
15	0.044	-0.021	9.0415	0.875

Table 6 presents the results of the Harvey heteroscedasticity diagnostic test. This test evaluates whether the variance of the model's residual errors is constant. The results indicate that the F-statistic, ObsR-squared, and Scaled Explained SS are all associated with high probabilities, well above common significance thresholds (0.05 or 0.10). For instance, the probability associated with the F-statistic is 0.7461, suggesting that the null

hypothesis of homoscedasticity cannot be rejected. Similarly, the probabilities associated with the Chi-Square statistics (ObsR-squared and Scaled Explained SS) confirm that the residual variance is homogeneous. These results demonstrate that the Ridge regression model does not exhibit significant heteroscedasticity issues. The homogeneity of residual variances ensures the robustness of the estimated coefficients and allows for reliable conclusions to be drawn from the observed relationships between explanatory variables and the dependent variable.

Table 6. Ridge regression heteroskedasticity diagnosis (Test: Harvey)

Test	Statistic	Prob. Value
F-statistic	0.610219	0.7461 (F(7,88))
Obs*R-squared	4.444134	0.7274 (Chi-Square(7))
Scaled explained SS	3.000756	0.8849 (Chi-Square(7))

Figure 2 presents the residual histogram and the results of the Jarque-Bera normality test for the Ridge regression. The residual histogram shows a symmetric distribution around zero, suggesting a tendency toward normality. The associated statistics, Skewness (-0.0658) and Kurtosis (2.7629), support this observation. Skewness close to zero indicates no significant asymmetry, and a Kurtosis slightly below 3 suggests a distribution close to normal.

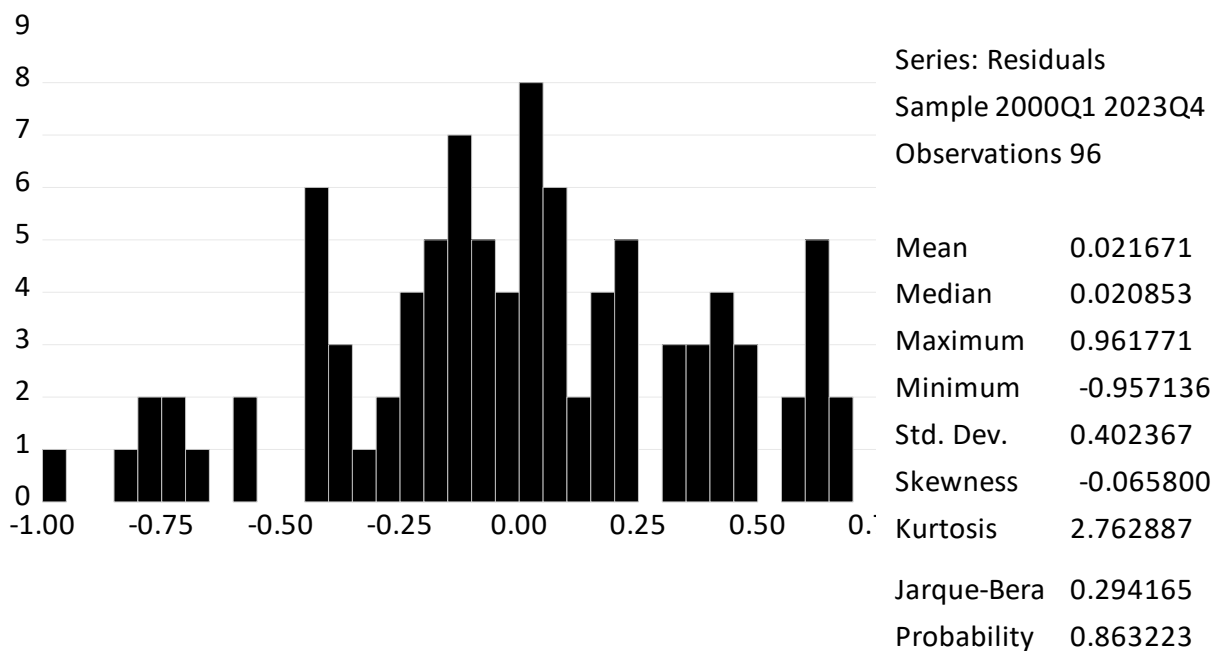


Figure 2. Normality test for Ridge regression residuals

The Jarque-Bera test, which combines these two measures, provides a statistic of 0.294165 with a probability of 0.863223. This probability, well above 0.05, indicates that the null hypothesis of normality cannot be rejected. Therefore, the model's residuals can be considered to follow a normal distribution. These results confirm that the residuals of the Ridge regression model comply with the normality assumption. Although residual normality is not a necessary condition in Ridge regression, it can enhance the validity of confidence intervals and hypothesis tests when these are applied.

throughout the period, indicating that the model's estimated coefficients are stable over time, with no significant structural breaks detected. The CUSUMSQ test confirms this stability by showing that the cumulative sum of squares curve also stays within the significance limits. This result reinforces the idea that the estimated coefficients do not exhibit significant variations over time and that the model effectively captures the structural relationships between the variables.

Figure 3 presents the results of the CUSUM (Cumulative Sum) and CUSUMSQ (Cumulative Sum of Squares) tests. These tests are used to evaluate the stability of the model's coefficients over the entire study period. The CUSUM test curve remains within the 5% significance bands

The Hat matrix, also known as the projection matrix, is a tool used in regression to establish the relationship between observed values and the model's fitted values. It evaluates the individual influence of each observation on the coefficient estimates. The diagonal values of this matrix, called "leverage," indicate the relative importance of each observation in the model. High leverage for an

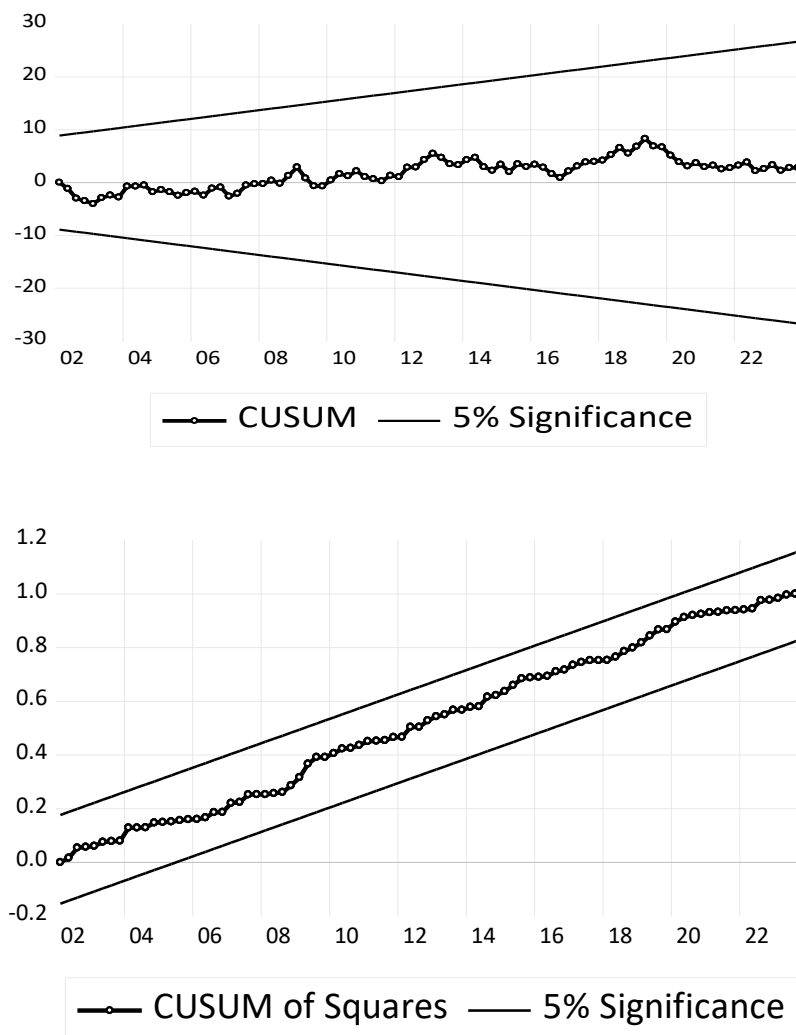


Figure 3. CUSUM and CUSMSQ tests for Ridge regression

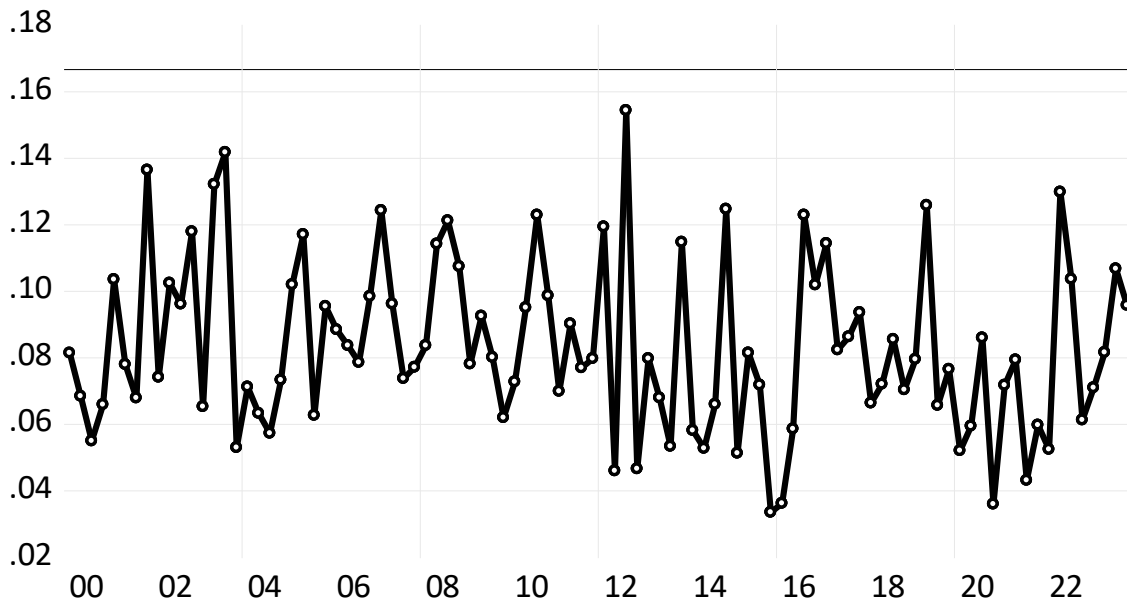


Figure 4. Hat matrix for Ridge regression

observation suggests it has a significant influence on the results, which could potentially affect the robustness and stability of the estimates. Figure 4 presents the influence statistics for Ridge regression, based on the Hat matrix. These statistics assess the individual influence of observations on the coefficient estimates, identifying potentially problematic or influential data points. The curve shows that the values of the influence statistics remain below critical thresholds, indicating that the observations have a limited effect on the estimated coefficients.

Although some peaks are visible, particularly around specific periods (e.g., 2012 and 2016), these fluctuations remain within acceptable limits, indicating that no single observation excessively dominates the model's structure. Therefore, the model can be considered balanced and stable, with no significant impact from influential observations on the overall results.

The econometric model in this study employs Ridge regression to analyze the attractiveness of foreign direct investment (FDI) in Morocco, using data from 2000 to 2023 sourced from the World Bank and the IMF. These data include economic, institutional, and infrastructural variables, measured using normalized and aggregated indices. The presence of high multicollinearity among certain explanatory variables, detected through

Variance Inflation Factors (VIF), motivated the choice of Ridge regression. By adding a regularization term, this method reduces the variance of the estimated coefficients and improves their stability without compromising interpretability. Econometric tests confirm the quality and robustness of the results. The Ridge regression results are presented in Table 7.

Table 7. Ridge regression results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.368267	0.135309	2.721663	***0.0078
GROW	-1.695136	1.710968	-0.990747	0.3243
OPEN	22.937254	7.886306	2.908492	***0.0045
INFL	2.082997	1.261634	1.651031	0.1020
INFR	-10.504019	4.740261	-2.215915	**0.0291
STAB	24.999361	8.971312	2.786589	***0.0064
INST	-15.865005	6.609012	-2.400511	**0.0183
TAXP	-4.081529	1.391246	-2.933722	***0.0042

Note: ***Significant at 1%; **Significant at 5%; *Significant at 10%.

The coefficient associated with economic growth (GROW) is negative, which contradicts hypothesis H1, as economic growth is generally perceived as a driver of FDI attractiveness. The p-value of 0.3243 indicates that this coefficient is not statistically significant. Therefore, hypothesis H1 is not validated. This result may suggest that Morocco's economic growth during the study period was not accompanied by a favorable environment to attract FDI. Regarding economic openness (OPEN), the coef-

efficient is positive. With a p-value of 0.0045, this coefficient is significant at the 1% level. This significance validates hypothesis *H2*, highlighting the importance of trade and international interactions in FDI attractiveness. This suggests that greater openness to international trade strongly promotes the attraction of foreign direct investment.

The coefficient associated with inflation (INFL) is positive. However, the p-value of 0.1020 indicates that this coefficient is not statistically significant. Therefore, hypothesis *H3* is not validated. This result may indicate that inflation management has not yet been fully optimized to maximize its effect on FDI attractiveness. The coefficient for infrastructure (INFR) is negative, contradicting hypothesis *H4*. However, the p-value of 0.0291 indicates significance at the 5% level. Hypothesis *H4* is thus rejected. This result suggests that, despite efforts in infrastructure development, its perceived effect by investors is limited, likely due to insufficient quality, poor maintenance, or uneven geographic distribution. Further improvements are needed to maximize its impact on FDI attractiveness.

The coefficient for political and macroeconomic stability (STAB) is positive and highly significant, with a p-value of 0.0064 (1% level). Hypothesis *H5* is therefore validated. This result confirms that Morocco's efforts to ensure a stable environment are a key factor in attracting foreign investors, emphasizing the importance of stability in encouraging FDI. The coefficient for institutional quality (INST) is negative, contradicting hypothesis *H6*. With a p-value of 0.0183, this coefficient is significant at the 5% level. Hypothesis *H6* is thus rejected. This may reflect that some institutional reforms, although initiated, have not yet produced the results expected by investors. Institutional quality remains a concern, and additional efforts are needed to meet foreign investors' expectations. The coefficient associated with fiscal policy (TAXP) is negative. The p-value of 0.0042 indicates significance at the 1% level, validating hypothesis *H7*. The negative sign underscores the importance of competitive taxation for FDI attractiveness. This suggests that, while Morocco has taken steps in fiscal policy, further improvements are needed to make taxation more attractive. A burdensome or poorly structured tax system can indeed deter foreign investors.

4. DISCUSSION

The relationship between economic growth and the attractiveness of foreign direct investment (FDI) in Morocco contradicts the conclusions of the literature, which generally emphasizes its central role in stimulating FDI flows. Dang and Nguyen (2021) highlight the positive impact of economic expansion, while Blonigen (2005) stresses the enlargement of market size as a key attraction factor. Bellak et al. (2009) specify that growth, combined with effective public policies, plays a structuring role. However, the results suggest that economic growth in Morocco has not generated the expected effect, which could be linked to structural challenges or investors' mixed perceptions of the economic environment. This highlights a potential gap between the opportunities offered by growth and the conditions required to attract foreign investors. Economic openness is confirmed as a determining factor in FDI attractiveness, consistent with Sadeghi et al. (2020) and Jaiblai and Shenai (2019), who highlight the benefits of trade liberalization. Increased openness enhances international integration and commercial prospects, as also suggested by Anghel (2005) and Buchanan et al. (2012). These results confirm that Morocco's efforts to promote international trade and reduce trade barriers significantly contribute to attracting FDI flows.

The impact of inflation on FDI attractiveness appears more complex to interpret. Although Sharbati et al. (2024) and Rashid et al. (2017) describe inflation as a major destabilizing factor, the results show no significant relationship. This lack of connection may reflect inflation management that, although imperfect, is not an immediate priority for investors. However, Hailu (2010) reminds us that inflation often interacts with other variables, which could explain these findings. Infrastructure, considered a pillar of FDI attractiveness by Kumar (2006) and Khadaroo and Seetanah (2010), shows a negative effect here. Donaubauer et al. (2016) and Ross (2015) emphasize the importance of quality and maintenance, while Bellak et al. (2010) highlight their role in logistical efficiency. This result may indicate shortcomings in the quality or distribution of infrastructure in Morocco, thereby reducing

its perceived impact on investors. Greater attention to modernization and a more balanced distribution of infrastructure seems necessary to meet international expectations.

Political and macroeconomic stability emerges as a key factor in FDI attractiveness, in line with the conclusions of Avetisyan (2020) and Globerman and Shapiro (2002). Effective governance and strong institutions enhance investor confidence by reducing uncertainties. Abbas and El Mosallamy (2016) also emphasize that institutional stability sends a positive signal. In contrast, institutional quality shows a negative and significant effect, contrary to the findings of Bénassy-Quéré et al. (2007) and Busse and Hefeker (2007), who highlight its role in FDI attractiveness. This may indicate that the institutional reforms undertaken in Morocco have

not yet reached a level deemed satisfactory by investors. This observation calls for additional efforts to improve transparency, efficiency, and trust in institutions. The negative and significant impact of fiscal policy aligns with the conclusions of Tavares-Lehmann et al. (2012) and Simmons (2003), who show that burdensome or poorly structured tax systems can deter foreign investors. Competitive taxation is essential for attracting FDI, and targeted reforms could reduce the barriers perceived by investors. These measures would include simplifying tax obligations and introducing fiscal incentives tailored to investor needs. These results highlight the importance of increased efforts to improve infrastructure quality, strengthen institutional governance, and reform fiscal policy while capitalizing on progress in stability and economic openness.

CONCLUSION

This study aimed to identify and empirically test the main determinants influencing the attractiveness of foreign direct investment in Morocco over the period 2000–2023. Drawing on a literature review and econometric modeling, it integrated economic, institutional, and infrastructural dimensions through a Ridge regression model, chosen to address multicollinearity issues. The analysis confirmed the robustness of the model through various diagnostic tests, including stationarity, residual normality, heteroscedasticity, and autocorrelation checks. The empirical findings showed that economic openness and political-macroeconomic stability have a strong and significant positive impact on FDI inflows, highlighting Morocco's success in liberalizing trade and maintaining a stable environment. Conversely, variables traditionally considered as FDI drivers, such as economic growth, infrastructure quality, institutional governance, and fiscal policy, either showed a negative influence or lacked statistical significance. These results suggest that Morocco's structural and policy conditions may not yet be aligned with investor expectations, despite macroeconomic efforts.

From these findings, several conclusions can be drawn. First, the positive impact of openness and stability confirms the importance of Morocco's integration into global markets and the credibility of its macroeconomic framework. However, the weak or negative effects of growth, infrastructure, institutional quality, and taxation point to significant deficiencies in implementation and perception. These results call for a renewed focus on improving infrastructure quality, accelerating institutional reforms, and designing more competitive and transparent tax policies. Future research could explore sector-specific FDI trends to better understand how these macroeconomic and institutional variables affect different industries. Moreover, qualitative studies involving investor perceptions would complement the quantitative findings, helping to clarify the gap between policy ambitions and investor realities. Exploring the spatial distribution of FDI within Morocco and its correlation with regional infrastructure and governance could also provide valuable insights for territorial development policies aimed at making FDI more inclusive and impactful.

AUTHOR CONTRIBUTIONS

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