

THE INTERACTION BETWEEN THE EFFECTIVENESS OF FINANCIAL INSTITUTIONS AND THE FLOW OF FOREIGN INVESTMENT: AN INTEGRATIVE ANALYSIS IN THE ALGERIAN ECONOMY 2000-2023

1 Charef Benatia Sofiane, Faculty of Economic, Commercial and Management Sciences
University of Relizane, Relizane, Algeria

2 Belfodil Kamel, Faculty of Economic, Commercial and Management Sciences
University of Relizane, Relizane, Algeria

*Corresponding author's e-mail: sofiane.charefbenatia@univ-relizane.dz

1 ORCID ID: [0009-0003-6337-7403](https://orcid.org/0009-0003-6337-7403)

2 ORCID ID: [0009-0003-6604-9544](https://orcid.org/0009-0003-6604-9544)

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ABSTRACT

This study aims to analyse the relationship between the effectiveness of financial institutions and foreign investment flows in light of time-series data. The results showed that the financial institutions effectiveness index remained relatively stable during the studied period, while the foreign investment flow index experienced noticeable fluctuations. Using unit root and cointegration tests, it was found that the two time series, FIEI and DFI, are stationary at level ($I(0)$) and do not suffer from unit root problems. Furthermore, the results of the bounds test showed the existence of cointegration between the two indices at 1%, 5% and 10% significance levels. Through the standard model, it was found that the FIEI (-1) index has a positive and statistically significant impact on foreign investment flow, while the FDI index did not show a significant effect. The equilibrium correction rate (ECT) was found to be 41.79%, indicating a continuous correction of the gap between actual and balanced values.

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1. INTRODUCTION

Amid rapid global economic changes, financial institutions have become the cornerstone of economic market development and driving economic growth. In this context, the effectiveness of these institutions plays a pivotal role in attracting foreign direct investment (FDI), which is one of the most important sources of funding for sustainable economic growth. The interaction between the effectiveness of financial institutions and foreign investment flows represents a

complex mechanism, with the mutual influence of domestic financial policies and global trends.

Since the beginning of the 21st century, Algeria has witnessed significant economic transformations, facing structural challenges that require strategic responses to improve economic efficiency. In this regard, the interaction between the effectiveness of financial institutions and foreign investment flows is of particular importance. This interaction is reflected in the financial system's ability to attract foreign capital, which directly contributes to enhancing and sustaining economic growth.

The role of financial institutions in Algeria, including banks, capital markets and investment funds, is central to achieving financial system stability, which in turn is reflected in foreign investment flows. By analysing this relationship, we can explore how indicators of financial system effectiveness such as transparency, access to finance and capital market development influence the attraction of foreign direct investment.

Research problem:

The relationship between the effectiveness of financial institutions and foreign investment flows is a significant issue in economics. Researchers aim to understand how the effectiveness of these institutions influences investment attraction, particularly amidst economic fluctuations. There is a need for a new analysis that considers both local and global variables to comprehend how the effectiveness indicators interact with investment flows and their impact on economic stability. The study addresses the issue of whether the effectiveness of institutions directly contributes to attracting foreign investment or external factors play a more significant role in determining these flows.

Hypothesis:

The effectiveness of financial institutions positively contributes to attracting foreign direct investment flows, affecting the stability of these flows. Thus there is a common relationship between economic indicators related to financial institutions and investment flow indicators under different economic environments.

This study aims to highlight these dynamics and analyse their impact from 2000 to 2023, with the goal of providing practical insights that contribute to the development of future economic strategies.

2. PREVIOUS STUDIES

1. Study by [Ali \(2022\)](#). This study examines the determinants of foreign direct investment (FDI) inflows in the Kurdistan region, focusing on financial and economic institutional efficiency. The research employs a quantitative approach to analyse how the economic environment and financial structures impact FDI attraction.

Findings:

The study found that FDI inflows are positively influenced by economic activity levels and trade openness. Additionally, enhancing financial institutions' efficiency is a crucial factor in fostering foreign investments.

2. Study by [Hassan & Youssef \(2021\)](#). This study aims to analyse the causal relationship between financial institution development, particularly the banking sector, and FDI inflows in Egypt. It utilises cointegration models and time series analysis to explore the link between these variables.

Findings:

The results indicate a positive long-term relationship between banking sector efficiency and FDI inflows. A strong and stable financial system enhances investor confidence, leading to increased foreign capital inflows.

3. Study by [Al-Qahtani \(2020\)](#). This study examines the impact of FDI on economic growth and integration in the Gulf Cooperation Council (GCC) countries, with a focus on the role of financial institutional efficiency in supporting foreign capital inflows.

Findings:

The study highlights that FDI significantly contributes to economic growth, especially when a stable investment environment and efficient financial institutions are present. It also emphasizes that regulatory factors and economic policies play a critical role in fostering foreign investments.

General conclusion from previous studies

All reviewed studies confirm that the efficiency of financial institutions is a key factor in attracting FDI. When financial institutions are stable and transparent, they boost investor confidence, leading to increased foreign investment inflows. Additionally, the studies underline the importance of integrating economic reforms with financial development to create a sustainable investment climate.

4. Study by [Bentafat, Mohamed. \(2022\)](#). This study highlights that the impact of fiscal policy components on foreign direct investment (FDI) inflows is not uniform. It shows that certain policies, such as increased government spending, may stimulate foreign investments by improving infrastructure and boosting economic activity. Conversely, the findings indicate that high taxation can pose a barrier to FDI inflows by reducing the expected returns for foreign investors. Therefore, the study suggests that balancing fiscal policy between economic stimulation and investor attraction is essential for enhancing FDI inflows.

5. Study by [Ben Laamoudi & Akoun \(2022\)](#). The results of this study indicate that FDI inflows positively contribute to long-term economic growth in Algeria, suggesting that foreign investments help increase productivity and enhance both physical and human capital. However, the study also highlights an insignificant negative impact on unemployment rates, which may imply that foreign investments in Algeria are concentrated in capital-intensive rather than labour-intensive sectors. Additionally, it suggests that there may be challenges related to integrating local labour into foreign enterprises.

6. Study by [Nthangu, N. D, and all \(2025\)](#). The findings of this study reveal that financial stability and transparency in economic policies are among the most significant factors contributing to attracting FDI in North African countries. Countries with clear and stable fiscal policies can provide an attractive investment environment for foreign capital, thereby enhancing FDI inflows. The study also emphasises the importance of reducing bureaucratic barriers and improving banking systems to strengthen foreign investors' confidence.

7. Study by [El Sherif, M and all \(2024\)](#). This study confirms that governance quality plays a crucial role in determining the ability of Arab countries to attract FDI. The findings show that weak institutions, administrative corruption and poor rule of law reduce foreign investors' confidence, hindering FDI inflows. Therefore, improving governance quality and institutional transparency is considered one of the essential reforms needed to enhance the investment climate and stimulate foreign capital inflows.

3. THE ROLE OF FINANCIAL DEVELOPMENT IN ATTRACTING FOREIGN DIRECT INVESTMENT: EVIDENCE FROM ALGERIA

Financial development has been a major focus for policymakers and researchers due to its critical role in bridging theoretical gaps in economics. This topic highlights the importance of financial intermediation, particularly the banking

sector, in fostering investment and production by mobilising savings, managing risks and innovating financial services. Researchers agree that the quality and expansion of financial services into new markets constitute a primary channel linking financial sector development to economic growth. However, to achieve the positive effects of financial development, excessive government intervention must be limited, especially in developing countries. Financial markets are a key component of financial development, as they contribute to risk diversification and provide low-cost information, enhancing the attraction of large investments and supplying funding for major projects, thereby driving economic growth (Larabi & Nassour, 2024, p. 4).

The financial sector facilitates the mobilisation of savings and the allocation of credit across space and time, ensuring the flow of funds from ultimate lenders to ultimate borrowers. This process enhances both the quantity and quality of real investments, leading to economic growth and improved living standards (Beck, 2007, p. 27-49). The effectiveness of financial institutions can be assessed based on their ability to provide financial services efficiently and promote sustainable local investments. Development finance institutions are instrumental in fostering economic growth by enabling access to credit, mitigating financial constraints and promoting investment-friendly environments (Demirgüç-Kunt & Levine, 2022, p. 15). Additionally, they support the transition towards financial inclusion by integrating technological advancements, reducing dependence on external aid and enhancing governance frameworks (World Bank, 2023, pp. 22-24).

Governments promote development and community finance institutions to fund economic projects, prioritising sustainable initiatives over traditional banking operations. These institutions enhance project management efficiency, facilitate financial access and act as intermediaries between public aid and private investments, fostering economic growth (Zhang & Chen, 2022, p. 47).

Foreign direct investment (FDI) involves foreign investors' equity stake in a company within the host country, encompassing equity purchases, reinvested earnings, inter-company loans, management contracts and licensing agreements (James X. Zhan. 2023). This investment type directly channels foreign capital into industrial, financial, construction, agricultural and service sectors, where profitability is the primary motivation (Ahmed, 2013). According to the International Monetary Fund (IMF) and the Organisation for Economic Cooperation and Development (OECD), FDI is defined as an investment that grants foreign residents control over projects within a host country, contributing to both capital flow and technological advancement (World Bank, 2023, p. 14)

Foreign direct investment (FDI) fosters long-term economic relationships, granting foreign investors permanent control over subsidiaries in host countries (Guntrip, E. 2016, p. 9). This investment manifests in several forms, including private investment, which is highly concentrated in primary sectors such as oil and natural resources, where foreign companies capitalise on resource extraction at minimal costs (Jasmina, and all, 2017, p6-11).

Another key form is bilateral investment, involving collaboration between local and foreign capital in economic projects, thereby reducing financial strain on national economies while ensuring profitability for local investors (Global Investment Report, 2022, p. 12). Additionally, multinational corporations (MNCs) account for over 80% of global FDI, dominating technology-intensive industries, as well as sectors such as raw material extraction, agriculture, banking, insurance, tourism and manufacturing (World Bank, 2023, p. 33).

Algeria possesses competitive factors that make it an attractive destination for investments, particularly through its legislative, regulatory, and administrative framework, as well as Investment Law No. 22-18 issued on July 24, 2022. Between 2010 and 2023, Algeria experienced significant fluctuations in FDI inflows, reflecting the deep challenges faced by the national economy due to internal and external economic (Table 1).

Table 1. Foreign Direct Investment (FDI) Flows to Algeria from 2010 to 2023

Unit: Million USD.

Years	2010	2011	2012	2013	2014	2015	2016
Inbound Investments	2301	2581	1499	1697	1507	-585	1636
Outbound Investments	220	534	-41	-268	-18	103	47
Years	2017	2018	2019	2020	2021	2022	2023
Inbound Investments	1232	1475	1382	1140	870	255	1216
Outbound Investments	-18	854	31	15	-52	85	84

Source: United Nations Conference on Trade and Development (UNCTAD) Database, 2025.

At the beginning of the past decade, Algeria recorded strong investment inflows, peaking in 2011 at \$2,581 million, reflecting a relatively stable economic environment supported by rising oil revenues and investor interest, especially in the energy sector. However, from 2012 onwards, investment inflows have gradually declined due to increasing structural challenges in the Algerian economy, such as excessive dependence on oil and gas, lack of economic diversification, bureaucratic hurdles and an inflexible legal framework, such as the 51/49% rule that restricted foreign investors' rights, leading to a drop in investments to \$1,507 million in 2014.

The year 2015 was one of the most challenging periods, as Algeria recorded negative investment inflows of -\$585 million, resulting from the global oil price collapse and the increased outflow of foreign capital due to the country's weak business environment. Despite attempts at recovery in subsequent years, Algeria could not return to pre-crisis levels, with investments ranging between \$1,232 million in 2017 and \$1,382 million in 2019. The crisis worsened in 2020 due to the COVID-19 pandemic, with investments falling to \$1,140 million and continuing to decline, reaching their lowest level in 2022 at \$255 million. However, 2023 saw a slight improvement, with investments rising to \$1,216 million, reflecting some recovery driven by relative political stability and government efforts to encourage investment.

As for Algeria's outbound investments, they have remained modest and inconsistent over the same period, reflecting the limited international expansion of the Algerian private sector. At the beginning of the decade, Algeria recorded positive outbound investment flows, peaking at \$534 million in 2011. However, these investments soon became volatile, with negative values in some years, such as -\$41 million in 2012 and -\$268 million in 2013, indicating the withdrawal of some Algerian companies from foreign markets due to a lack of experience or financial pressures.

The year 2018 was an exception, with outbound investments rising to \$854 million, reflecting a rare move toward foreign expansion, possibly due to limited investment initiatives in the energy or trade sectors. However, this trend did not continue, with outbound investments returning to modest or negative levels in later years, such as -\$52 million in 2020, highlighting the significant decline in the global competitiveness of Algerian companies.

Throughout this period, Algeria exhibited an imbalance between inbound and outbound flows, relying heavily on foreign investments to finance its development projects while showing weak capacity for Algerian companies to enter international markets. Economic crises, particularly oil price declines, negatively affected both flows simultaneously. Despite efforts to diversify the economy, there were no tangible results in expanding inbound investments to new sectors such as agriculture, tourism or technology, which also impacted outbound investments.

4. EVALUATING THE INFLUENCE OF FINANCIAL INSTITUTIONS' EFFICIENCY ON FDI INFLOWS: AN ECONOMETRIC APPROACH

Our analysis of the role of the Financial Institutions Efficiency Index in attracting Foreign Direct Investment (FDI) in Algeria during the period 2000–2023 highlights the critical importance of this topic within the Algerian economic context. This significance is evident in the multiple challenges facing the national economy, including the need to diversify income sources to reduce excessive reliance on oil revenues, enhance the role of the private sector and attract foreign investments that can contribute to sustainable development. From this perspective, assessing the relationship between the efficiency of financial institutions and their ability to improve the investment climate constitutes a necessary step in understanding the drivers and obstacles to this process.

In this study, we employed the Autoregressive Distributed Lag (ARDL) model due to its capability to analyse short- and long-term relationships between economic variables. The Financial Institutions Efficiency Index (FIEI) was selected as the independent variable, as it reflects the level of efficiency and transparency in the financial and administrative performance of financial institutions, including banks, insurance companies and financial markets. Meanwhile, the FDI inflow index was adopted as the dependent variable, as it represents the attractiveness of the national economy to foreign investors and the extent to which foreign capital is attracted.

A descriptive analysis of the time series for the FIEI and FDI inflow index reveals notable variations in trends over the study period. The FIEI recorded an average of 0.6971, indicating a relatively stable performance over the years. This stability is reinforced by a low variance (0.00055) and a limited standard deviation (0.0235), suggesting minimal fluctuations around the mean. The index values ranged between 0.64 in 2005 and 0.73 during the period 2018–2023, reflecting relative sustainability in the performance of financial institutions (Table 2).

In contrast, the FDI inflow index exhibited greater variability, with an average of 0.7133, slightly higher than that of the FIEI, but with a larger standard deviation (0.5090), indicating significant fluctuations in FDI inflows. The values ranged from a minimum of 0.0157 in 2001 to a maximum of 1.8274 in 2009, with a considerable difference of 1.8118, reflecting varying periods of foreign investment inflows influenced by external factors such as global and local economic policy changes.

Table 2. Descriptive Analysis of Financial Institutions’ Efficiency Index and Foreign Investment Flow Index during the Studied Period

Years	2000	2001	2002	2003	2004	2005
Financial Institutions Efficiency Index	0,72	0,68	0,68	0,7	0,65	0,64
Foreign Investment Flow Index	0,02500438	0,01565303	0,16023447	0,03854077	0,26704383	1,07990333
Years	2006	2007	2008	2009	2010	2011
Financial Institutions Efficiency Index	0,67	0,68	0,73	0,7	0,7	0,7
Foreign Investment Flow Index	1,49572335	1,18381815	1,46277345	1,82742165	1,29390467	1,17767329
Years	2012	2013	2014	2015	2016	2017
Financial Institutions Efficiency Index	0,7	0,69	0,7	0,69	0,69	0,7
Foreign Investment Flow Index	0,66055195	0,73655907	0,62868897	0,28683229	0,90630071	0,6479027
Years	2018	2019	2020	2021	2022	2023
Financial Institutions Efficiency Index	0,72	0,7	0,7	0,73	0,73	0,73
Foreign Investment Flow Index	0,75357609	0,71394731	0,69381601	0,46672848	0,10637075	0,49097261

Source: United Nations Conference on Trade and Development (UNCTAD) Database, 2025.

This variation suggests that the FIEI may be more stable compared to the FDI inflow index, highlighting the financial system’s ability to maintain relatively balanced performance. Meanwhile, fluctuations in FDI inflows may result from different influences, including economic reforms, regulatory measures, international market conditions and local political and security factors. Therefore, studying the relationship between these two indices can provide a deeper understanding of how financial stability affects foreign capital attraction (Figure 1).

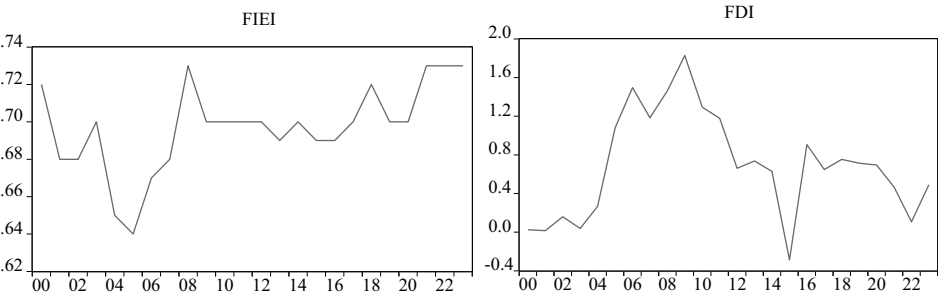


Figure 1. Stability

Source: Prepared by the researchers using EViews software.

To determine the causal relationship between the variables, we first conducted stationarity tests using the Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) methods. These tests aim to verify whether the time series contains a unit root, a prerequisite before applying the cointegration model. The results indicated that the FIEI and FDI inflow series are stationary at level $I(0)$, meaning that the ARDL model can be used without the need for additional differencing of the data (Table 3).

Table 3. Testing the Stability of Time Series for the Variables under Study

Variables		Augmented Dickey-Fuller (ADF)			Phillips-Perron (PP)		
		Without Constant	Constant and Trend	Constant	Without Constant	Constant and Trend	Constant
FIEI	Computed	-1.956406	-3.622033	-2.998064	-1.956406	-3.622033	-2.998064
	Critical	0.022674	-3.894989	-2.400542	0.117488	-6.894145	-2.400542
DFI	Computed	-1.956406	-3.622033	-2.998064	-1.956406	-3.622033	-2.998064
	Critical	-1.142314	-2.237275	-2.284540	-1.026948	-2.154426	-2.284540

Source: Prepared by the researchers using EViews software.

After confirming the stationarity of the variables, we proceeded to estimate the model using the ARDL approach, which allows for examining the relationship between variables in both the short and long run. To ensure accurate estimation, we determined the optimal lag length using the Akaike Information Criterion (AIC) and Schwarz Criterion (SC). The results showed that the most efficient model relies on a one-period lag (Lag 1), ensuring a balance between model quality and statistical complexity (Table 4).

Table 4. Determining the Lag Order of the Model

Lag	LogL	LR	FPE	AIC	SC	HQ
0	32.95568	NA	0.000132	-3.258493	-3.159078	-3.241668
1	42.72449	16.45273*	7.22e-05*	-3.865736*	-3.567492*	-3.815261*
2	43.65739	1.374791	0.000102	-3.542883	-3.045810	-3.458758
3	45.60499	2.460138	0.000132	-3.326842	-2.630939	-3.209067
4	51.45913	6.162251	0.000119	-3.522014	-2.627282	-3.370590
5	53.22154	1.484134	0.000178	-3.286478	-2.192917	-3.101404

Source: Prepared by the researchers using EViews software.

Next, we conducted the Bounds Test to verify the presence of a long-run equilibrium relationship between the variables. The results showed that the computed F-statistic (6.016628) exceeded the upper bound of critical values at the 1%, 5%, and 10% significance levels, confirming the existence of cointegration

between the variables. Consequently, it can be concluded that there is a long-term relationship linking financial institutions' efficiency to FDI attraction in Algeria (Table 5).

Table 5. Bounds Test for Cointegration

Calculated Fvalue	Critical Values	Significance Level		
		1%	5%	10%
6.016628	Lower Bound I(0)	4.94	3.62	3.02
	Upper Bound I(1)	5.58	4.16	3.51

Source: Prepared by the researchers using EViews software.

Regarding long-term model estimation, the results indicated that the coefficient of FIEI(-1) was 0.582079, statistically significant at the 1% level (p-value = 0.0086), suggesting that financial institutions' efficiency has a strong and positive impact on FDI inflows. In contrast, the FDI coefficient was not statistically significant, reflecting a weak direct causal relationship between past and present FDI inflows (Table 6).

Table 6. Long-Run Model Estimation: Cointegration Regression Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
FIEI(-1)	0.582079	0.199844	2.912668	0.0086
FDI	0.005631	0.008560	0.657829	0.5181
C	0.287118	0.140923	2.037411	0.0551

Source: Prepared by the researchers using EViews software.

For short-term estimation, the Error Correction Model (ECM) was used to analyse the speed of adjustment toward long-term equilibrium. The error correction term was -0.417921, statistically significant at the 5% level (p-value = 0.0179), indicating that approximately 41.79% of short-term imbalances are corrected in each period, reinforcing the cointegration hypothesis between the variables (Table 7).

Table 7. Short-Run Model Estimation and Error Correction Term

ECM Regression				
Case 2: Restricted Constant and No Trend				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
CointEq(-1)*	-0.417921	0.162004	-2.579704	0.0179

Source: Prepared by the researchers using EViews software

To ensure the reliability and robustness of the model, we conducted several diagnostic tests, including the Autoregressive Conditional Heteroskedasticity (ARCH) test, which confirmed the absence of heteroscedasticity as the probability values were above 5%. The Breusch-Godfrey LM Test for serial correlation showed no autocorrelation in the residuals, enhancing the model's reliability (Table 8 and Table 9).

Table 8. Heteroscedasticity Test (Error Term Stability Test)

Heteroskedasticity Test: ARCH			
F-statistic	0.461635	Prob. F(1,20)	0.5046
Obs*R-squared	0.496342	Prob. Chi-Square(1)	0.4811

Source: Prepared by the researchers using EViews software.

Table 9. Error Independence Test (Autocorrelation of Errors Test)

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	0.066185	Prob. F(2,18)	0.9362
Obs*R-squared	0.167903	Prob. Chi-Square(2)	0.9195

Source: Prepared by the researchers using EViews software.

However, the Ramsey RESET test indicated potential specification issues, as the probability values were below 5%, suggesting that the model may require structural improvements or the inclusion of additional variables. Nonetheless, the structural stability tests using CUSUM and CUSUM of Squares confirmed that the model is stable, as the values remained within the critical boundaries at the 5% significance level (Table 10 and Figure 2).

Table 10. Ramsey RESET Test

Ramsey RESET Test			
Equation: UNTITLED			
Specification: FIEI FDI			
Omitted Variables: Squares of fitted values			
	Value	df	Probability
t-statistic	2.408529	22	0.0248
F-statistic	5.801013	(1, 22)	0.0248
Likelihood ratio	5.616720	1	0.0178

Source: Prepared by the researchers using EViews software.

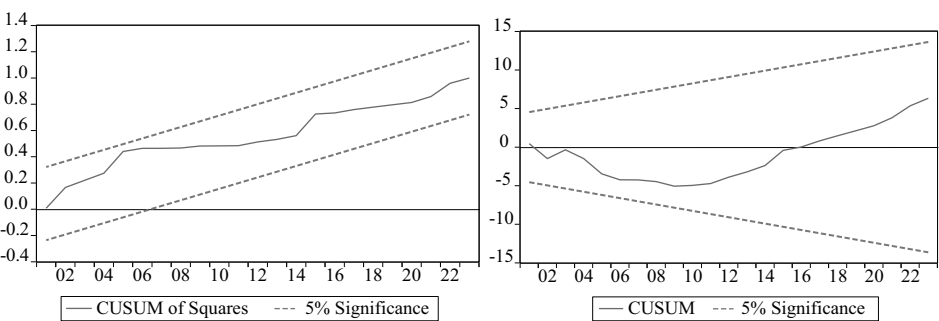


Figure 2. Cumulative Sum of Recursive Residuals (CUSUM) and Cumulative Sum of Squared Recursive Residuals (CUSUM of Squares) Tests
Source: Prepared by the researchers using EViews software.

Finally, the Jarque-Bera test revealed that the residuals follow a normal distribution, confirming the validity of the statistical assumptions used in the model. Based on all these tests, we can conclude that the ARDL model used exhibits a high level of accuracy and reliability, allowing us to draw meaningful conclusions about the relationship between financial institutions’ efficiency and FDI inflows in Algeria (Figure 3).

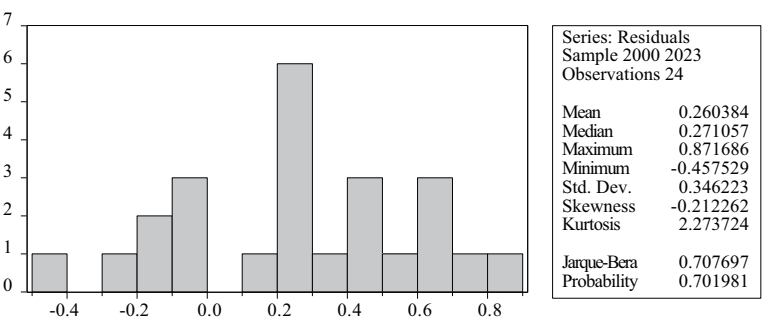


Figure 3. Normality Test of Residuals
Source: Prepared by the researchers using EViews software.

5. DISCUSSIONS

The empirical findings of this study provide valuable insights into the relationship between financial institutions’ effectiveness and foreign direct investment (FDI) inflows in Algeria. The Financial Institutions Effectiveness Index (FIEI) demonstrated relative stability throughout the study period (2000–2023), suggesting that Algeria’s financial institutions maintained a moderate degree of efficiency. This aligns with previous studies (e.g., Ali, 2022; Hassan & Youssef, 2021), which found that financial sector stability fosters investor confidence.

However, despite this stability, FDI inflows exhibited significant volatility, underscoring the role of external economic, political and policy-related factors in shaping investment dynamics.

The unit root tests confirmed that both FIEI and FDI time series were stationary at level ($I(0)$), supporting the robustness of the subsequent cointegration analysis. The Bounds Test revealed a significant long-run relationship between financial institutions' effectiveness and FDI, reinforcing the idea that institutional quality serves as a key determinant of foreign investment attraction. This finding is consistent with [Al-Qahtani \(2020\)](#), who highlighted that strong financial institutions contribute to sustained economic integration and investment flows in GCC countries. Additionally, El-Hadi (2020) found that fiscal policies play a crucial role in attracting FDI in North African countries, suggesting that institutional effectiveness must be complemented by sound macroeconomic policies. Similarly, Ben Issa (2023) demonstrated that fiscal policy components significantly impact FDI inflows in Algeria, further highlighting the interplay between institutional and economic factors.

Long-run implications

The estimated long-run model revealed that the lagged FIEI (-1) had a statistically significant positive effect on FDI inflows, confirming that improvements in institutional effectiveness enhance Algeria's attractiveness to foreign investors. This result aligns with the findings of [Hassan and Youssef \(2021\)](#), who emphasised the crucial role of banking sector efficiency in FDI mobilisation. However, the FDI variable itself did not exhibit statistical significance, indicating that foreign investment inflows may be influenced by additional macroeconomic and political variables beyond institutional efficiency alone. This suggests that, while a strong financial system is a necessary condition for investment attraction, it is not solely sufficient. Factors such as government policies, trade openness and economic stability must also be considered to create a comprehensive investment-friendly environment. Furthermore, [Ben Laamoudi and Akoun \(2022\)](#) employed an ARDL model to analyse the impact of FDI on economic growth in Algeria, emphasising that foreign investment contributes positively to development only when coupled with effective institutional frameworks.

Short-Run Adjustments and Market Dynamics

The Error Correction Term (ECT) of -0.4179 suggests that approximately 41.79% of deviations from long-run equilibrium are corrected each period. This implies that, despite fluctuations, the Algerian economy demonstrates a moderate ability to adjust and stabilize over time. Such findings are crucial for policymakers,

as they indicate that structural reforms aimed at financial institutions will yield positive investment effects, albeit with some delay.

Moreover, the model validation tests confirmed the reliability of the results. The heteroskedasticity test ruled out variance instability issues, ensuring that the estimated relationships remain statistically sound. However, it is important to note that exogenous factors such as global economic crises, political instability and sudden regulatory changes may still exert substantial short-term influence on investment decisions. This aligns with El-Sherif (2021) who found that governance plays a fundamental role in shaping FDI patterns in Arab countries, reinforcing the need for stronger institutional governance in Algeria.

Policy Recommendations and Future Considerations

1. **Strengthening Financial Institutions** – Given the significant long-run relationship between FIEI and FDI, Algeria should focus on enhancing financial transparency, regulatory efficiency and banking sector resilience to sustain investor confidence.
2. **Diversifying Investment Incentives** – While institutional effectiveness is essential, complementary measures such as fiscal incentives, trade openness and economic diversification must be pursued to further attract FDI.
3. **Macroeconomic Stability and Governance** – Addressing external risks, such as policy uncertainty and global economic fluctuations, will be crucial in mitigating the volatility observed in FDI flows.

6. CONCLUSIONS

The study findings confirm that financial institutions' effectiveness plays a fundamental role in Algeria's FDI attractiveness, however, investment inflows are also highly sensitive to external economic and policy-driven factors. These results reinforce the importance of institutional reforms, financial stability and macroeconomic strategies in fostering a sustainable investment climate. Future research should explore additional variables, such as political stability, trade policies and sectoral FDI composition, to provide a more comprehensive understanding of the determinants of foreign investment in Algeria.

Recommendations

- Enhancing financial institutions' efficiency: improving transparency, governance and leveraging innovative financial technologies to increase foreign investors' confidence.

- Diversifying the economy: reducing dependence on traditional sectors such as oil and investing in productive industries like manufacturing, agriculture and technology.
- Improving the investment environment: eliminating bureaucratic obstacles and strengthening political and social stability to make the investment climate more attractive.
- Encouraging international partnerships: establishing strategic partnerships with multinational corporations to bring expertise and advanced technology.
- Developing human resources: implementing advanced training programs to equip the local workforce with skills aligned with investors' needs in targeted sectors.

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Conflict of interest

The authors declare there is no conflict of interest.

REFERENCES

- Ahmed, S. (2013). *Foreign Direct Investment, Trade and Economic Growth: Challenges and Opportunities*. Routledge India. <https://doi.org/10.4324/9781315816203>
- Al-Qahtani, K. (2020). Foreign Direct Investment and Its Impact on Economic Growth and Integration in the Cooperation Council of the Arab Gulf States. *Journal of Economic Studies*, 28(3), 112-129. https://www.kau.edu.sa/Files/320/Researches/66728_38265.pdf
- Algeria Investment Promotion Agency. (2024). *Investment promotion in Algeria. Investissement étranger en Algérie-EN – AAPI*
- Ali, M. (2022). The Determinants of the Flow of Foreign Direct Investment: A Case Study of the Kurdistan Region. *Humanities Journal of University of Zakho*, 10(2), 25-40. <https://hjuoz.uoz.edu.krd/index.php/hum/article/view/1072/802>
- Beck, T, and all. (2007). *Finance, Inequality and the Poor*. *Journal of Economic Growth*, 12(1), 27–49. <https://link.springer.com/article/10.1007/s10887-007-9010-6>

- Bentafat, Mohamed. (2022). The Impact of Fiscal Policy Components on Foreign Direct Investment in Algeria (2000-2020). *Advanced research in economics and business strategy journal*, 03(2), 45-63. <https://asjp.cerist.dz/en/downArticle/757/3/2/210819>
- Ben Laamoudi, A. & Akoun, M. (2022). The Impact of Foreign Direct Investment on Economic Growth in Algeria Using the ARDL Model (1991-2021). <https://dspace.univ-ouargla.dz/jspui/handle/123456789/34957>
- Demirgüç-Kunt, A., & Levine, R. (2022). *Finance, Growth, and Inequality: The Role of Financial Institutions*. MIT Press. <https://doi.org/10.5089/9781513583365.001>
- EcoTimes DZ. (2024). *Investissement: Comment l'Algérie compte attirer les IDE?* <https://ecotimesdz.com/investissement-comment-lalgerie-compte-attirer-les-ide/>
- Nthangu, N. D, and all (2025). *The Impact of Fiscal Policy on Foreign Capital Inflows in Selected Sub-Saharan African Countries*. *International Journal of Economics and Financial Issues*, 15(3). <https://doi.org/10.32479/ijefi.18377>
- El Sherif, M and all (2024). *An Examination of Impact of Regulation Efficiency on Foreign Direct Investment: The Role of Institutional Quality in MENA Region from (2000–2020)*. *Open Journal of Social Sciences*, 12(8). <https://doi.org/10.4236/jss.2024.128024>
- Global Investment Report. (2022). *Trends in Bilateral and Multinational Investments*. UNCTAD Publications. https://unctad.org/system/files/official-document/wir2022_en.pdf
- Hassan, A., & Youssef, M. (2021). The Causal Relationship between Foreign Direct Investment Flows and Financial Development in the Banking Sector: An Applied Study on Egypt. *Contemporary Financial & Digital Journal*, 15(1), 89-104. https://cfdj.journals.ekb.eg/article_133038_1a87acc5d66a4ca5d99b4b9ad3a05e8c.pdf
- Jasmina, and all. (2017). *Foreign Direct Investment, Finance, and Economic Development*. Harvard Business School. https://www.hbs.edu/ris/Publication%20Files/FDICapital_Formatted_20170922_Final_W_c7fcb82c-f318-4632-a589-20118eaeef8.pdf
- James X. Zhan. (2023). *Global Investment Trends and Policies at Times of Uncertainty*. In *Investment Claims* (Yearbook articles). Oxford University Press. <https://oxia.oupplaw.com/abstract/10.1093/law-iic/9780198853343.016.0001/law-iic-9780198853343-document-1>
- Larabi, A., & Nassour, A. (2024). Financial sector in Algeria: Analysing some facts and challenges. *Finance & Markets Review*, 8(2), 4. <https://asjp.cerist.dz/en/downArticle/329/8/3/163293>
- Guntrip, E. (2016). *Self-Determination and Foreign Direct Investment: Reimagining Sovereignty in International Investment Law*. *International & Comparative Law Quarterly*, 65(4), 829–857. <https://doi.org/10.1017/S0020589316000324>
- United Nations Conference on Trade and Development. (2024). *World Investment Report 2024*. <https://unctad.org/publication/world-investment-report-2024>

- World Bank. (2023). *FDI, Development, and Economic Integration: Policies for Sustainable Growth*. World Bank Publications, Washington, DC, , <https://openknowledge.worldbank.org/>
- World Bank. (2023). *Financial Inclusion and Sustainable Development: Global Trends and Policies*. World Bank Publications, Washington, DC. <https://www.albankaldawli.org/ar/topic/financialinclusion/overview>
- World Bank Algeria. (2024). *Country overview*. <https://www.albankaldawli.org/ar/country/algeria/overview>
- Zhang, Y., & Chen, L. (2022). *Financial Institutions and Economic Development in the 21st Century*. Routledge. <https://doi.org/10.4324/9781315704326>

ИНТЕРАКЦИЈА ИЗМЕЋУ ЕФИКАСНОСТИ ФИНАНСИЈСКИХ ИНСТИТУЦИЈА И ТОКА СТРАНИХ УЛАГАЊА: ИНТЕГРАТИВНА АНАЛИЗА У АЛЖИРСКОЈ ЕКОНОМИЈИ 2000–2023.

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- 1 Шареф Бенеша Софиан, Факултет економских, комерцијалних и менаџерских наука,
Универзитет у Релизану, Релизан, Алжир
- 2 Белфодил Камел, Факултет економских, комерцијалних и менаџерских наука,
Универзитет у Релизану, Релизан, Алжир

САЖЕТАК

Ова студија има за циљ да анализира однос између ефикасности финансијских институција и токова страних улагања на основу временских серија података. Резултати су показали да је индекс ефикасности финансијских институција остао релативно стабилан током проучаваног периода, док је индекс тока страних улагања биљежио примјетне флукуације. Користећи тестове за јединични коријен и коинтеграцију, утврђено је да су двије временске серије, FIEI и DFI, стационарне на нивоу ($I(0)$) и да немају проблем са јединичним коријеном. Даље, резултати теста граничних вриједности показали су постојање коинтеграције између ова два индекса на нивоима значајности од 1%, 5% и 10%. Кроз стандардни модел, утврђено је да индекс FIEI (-1) има позитиван и статистички значајан утицај на ток страних улагања, док индекс FDI није показао значајан ефекат. Стопа корекције равнотеже (ECT) износила је 41,79%, што указује на континуирану корекцију разлике између стварних и уравнотежених вриједности.

Кључне ријечи: *ефикасност финансијских институција, страна директна улагања (СДУ), коинтеграција, АРДЛ модел, инвестиционо окружење.*