

# Impact of Trade Integration between Tunisia and the European Union on Foreign Direct Investments

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**Abstract:** This study investigates the impact of Tunisia's economic integration particularly through the Free Trade Agreement (FTA) with the European Union (EU) on foreign direct investment (FDI) inflows into the country. The analysis adopts a multidimensional theoretical framework, focusing on key structural determinants of FDI attractiveness such as trade openness, human capital, infrastructure quality, political stability, and macroeconomic conditions.

A mixed-method approach is employed, combining a systematic literature review with a two-step econometric modeling strategy. Robust causal inference techniques such as instrumental variables and propensity score matching are used to address potential specification biases and improve the reliability of the findings.

The results show that the Tunisia-EU Association Agreement has a positive and statistically significant effect on FDI inflows, increasing them by approximately 12% over the period studied. This finding highlights the role of even sector-specific trade integration (limited to industrial goods) in boosting external capital.

This research contributes to the literature on trade agreements by offering robust empirical evidence and provides actionable insights for policymakers regarding trade policy and industrial development strategies in developing economies.

**Keywords:** Foreign Direct Investment (FDI), economic integration, free trade agreement, Tunisia, European Union, FDI determinants.

## 1. INTRODUCTION

Over recent decades, regional economic integration has intensified significantly, profoundly reshaping foreign direct investment (FDI) dynamics and the structure of global trade relations. According to the World Trade Organization (WTO, 2023), more than 350 regional trade agreements (RTAs) were in force in 2023 a sharp increase from fewer than 50 in 1990. This surge not only underscores the scale of this transformation but also highlights the expanding opportunities for signatory countries within the framework of enhanced economic cooperation. The evolution of RTAs, which now extend far beyond simple tariff agreements, raises critical questions about their actual impact on FDI flows, particularly in an era where multinational corporations' strategies are shaped by varied geopolitical pressures, evolving regulations, and rapid technological changes (Baldwin & Evenett, 2022).

The literature on the relationship between regional economic integration and FDI attractiveness is extensive and diverse, yet the precise mechanisms through which RTAs influence these flows remain incompletely understood. Early research, such as that by Blomström and Kokko (2003), emphasized the role

of RTAs in reducing transaction costs, thereby enhancing the appeal of member countries for foreign investment. However, these findings are now being partially challenged by the growing complexity of contemporary agreements, which include increasingly detailed provisions on intellectual property, service sector regulation, and investor protection (Mattoo *et al.*, 2020). Moreover, the concept of RTA "depth" defined as their ability to harmonize national regulations and facilitate cross-border economic integration has emerged as a key determinant of their effectiveness. Recent studies (Békés & Fontagné, 2023; Chen *et al.*, 2023) demonstrate that this depth plays a crucial role in FDI attractiveness, particularly in sensitive sectors where regulatory uncertainty may deter investment.

Furthermore, the evolution of RTAs raises new questions about the conditions for countries' accession to such agreements and the differentiated strategies they adopt to maximize FDI benefits. While some countries successfully leverage RTAs to attract substantial investment, others appear to reap only marginal gains. This disparity highlights concerns about RTA heterogeneity, their alignment with the specific economic needs of signatory countries, and the challenges of adapting national policies in an increasingly competitive global environment.

Recent research thus calls for a comprehensive empirical reassessment of RTAs to better understand the underlying mechanisms of this complex dynamic.

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Theoretical advancements must be tested against the specificities of modern agreements, which encompass increasingly diverse and technical dimensions. Additionally, it is crucial to analyze how these agreements interact with external factors such as geopolitical crises or international trade tensions that may undermine their effectiveness. However, despite the growing body of literature, few studies have explicitly examined the sector-specific effects of RTAs on developing economies particularly in North Africa where structural and institutional variables may mediate the impact of trade integration on FDI.

This study aims to explore the differential effects of regional trade agreements on foreign direct investment flows, with a particular focus on developing economies in North Africa and the Mediterranean region. More specifically, the research concentrates on Tunisia as a case study to examine how the Tunisia–European Union Association Agreement (signed in 1995) has influenced FDI attractiveness in its industrial sector.

The main objectives of this research are threefold: first, to identify the key determinants of FDI flows to Tunisia; second, to evaluate the specific impact of the Tunisia–EU free trade agreement on these flows; and third, to provide policy recommendations for improving Tunisia's investment climate in the context of regional economic integration.

To achieve these goals, the paper is organized as follows: Section 2 reviews the theoretical and empirical literature on regional integration and FDI; Section 3 details the econometric approach and presents the model specification and data sources; Section 4 discusses the empirical results; and finally, Section 5 concludes with policy implications and suggestions for future research. Indeed, Tunisia, as an emerging economy, presents an insightful case study for examining the specific impacts of RTAs on its industrial sector, particularly amid ongoing economic reforms and shifting political priorities.

## 2. LITERATURE REVIEW

Economic integration is a process with profound implications for various aspects of an economy, particularly foreign direct investment (FDI) flows, whether inbound or outbound. The theoretical effects of trade liberalization on these flows remain ambiguous and depend on whether trade and investment are perceived as complements or substitutes. In this context, the establishment of Regional Trade Agreements (RTAs) is expected, according to some

studies, to foster an increase in intra-regional investment flows. This dynamic is primarily driven by the growing complexity of multinational corporations' production networks, the associated establishment costs, and the necessity of establishing minimal trade linkages for FDI to emerge (Medvedev, 2012; Witkowska, 2001; Kiyota & Urata, 2021).

However, analyzing the impact of customs unions on FDI flows requires an extension of the existing theoretical framework, particularly when considering FDI flows between member and non-member states. Notably, horizontal FDI inflows from external countries are likely to increase due to stronger incentives for multinational corporations to engage in "tariff-jumping" FDI (Chen, 2009). The magnitude of these capital flows will depend on disparities in tariffs and other trade barriers imposed on member versus non-member countries (Athukorala, 2013; Duval & Henn, 2022).

Moreover, a growing number of customs unions combine intra-regional trade liberalization with external trade liberalization. This dynamic may, in some cases, produce a countervailing effect by increasing vertical FDI while reducing the attractiveness of horizontal FDI. The emergence of an economic bloc leads to an expansion in market size, directly influencing the scale of FDI flows. This effect is particularly pronounced in large economic blocs, as well as in countries engaged in multiple trade agreements (Montalbano *et al.*, 2023). Consequently, both intra-regional and extra-regional investment flows should, in theory, increase.

In addition, members of an economic bloc may implement incentive measures to promote FDI, such as preferential tax treatment. The potential impact of regional integration on FDI flows is closely tied to the dynamic effects associated with this process: heightened competition, improved resource allocation efficiency, and accelerated economic growth. These dynamic effects also influence economic development and, by extension, FDI flows (He & Poelhekke, 2023).

In this framework, it is crucial to understand how regional integration specifically influences FDI flows in various geopolitical and economic contexts. The spatial distribution of FDI emerges as a key factor in understanding the relationship between economic integration and FDI flows. As highlighted by Velde and Bezemer (2006) and more recently by Kim and Lee (2022), regional integration may increase FDI inflows from third-party countries into the economic bloc, though these effects may vary across nations.

The effects of off shoring and agglomeration generate regional efficiency gains, particularly through economies of scale. These processes can stimulate new relocation movements, creating a virtuous cycle conducive to the convergence of regional economies. As Witkowska (2001) observed and Jain and Harms (2021) later confirmed, an increase in FDI flows among member states of an economic zone fosters both economic development and trade provided that FDI and trade are complementary.

This opens the door to in-depth studies on the specific mechanisms underlying the impact of regional integration in specific contexts, a gap that still exists in the literature. From this perspective, Levy *et al.* (2002) had already demonstrated that regional integration, measured through dummy variables, exerts a significant influence on FDI flows. More recent studies, such as that of González and Alvarez (2023), reaffirm this relationship by emphasizing the role of high regulatory intensity agreements in attracting FDI, particularly in technology-driven industries.

Zakaria *et al.* (2014) highlighted the impact of trade liberalization on FDI in Pakistan. Similarly, Rahman and Saha (2022) confirm that in emerging economies, trade openness coupled with structural reforms has a markedly positive effect on FDI attractiveness.

Erdogan and Ünver (2015) also demonstrated that the impact of FDI is often indirect. This notion is revisited by Hannan and Nguyen (2023), who emphasize FDI's multiplier effects on productivity and the modernization of local industrial structures.

### 3. ECONOMETRIC APPROACH: MODEL AND ESTIMATION METHOD

#### 3.1 Theoretical Framework and Justification of Methodological Choices

The primary objective of this paper is to analyze the determinants of foreign direct investment (FDI) in Tunisia, with particular attention to the impact of the free trade agreement signed with the European Union (EU). More specifically, this research pursues two complementary goals:

1. Identifying the key factors influencing inward FDI flows to Tunisia.
2. Assessing the specific effect of the 1995 Tunisia-EU Association Agreement on these flows.

The study of FDI determinants is grounded in two dominant theoretical frameworks:

- The gravity model, adapted to FDI through the work of Anderson and van Wincoop (2003) and Bergstrand and Egger (2007), posits that FDI flows are proportional to the economic size of countries and inversely proportional to geographic and institutional barriers.
- The structural approach (Dunning, 2001; Blonigen, 2005), which incorporates host-country-specific variables (GDP, infrastructure, human capital) and bilateral variables (trade agreements, cultural distance).

Our study combines these two approaches:

- A unilateral model (Equation 1) to identify the general determinants of FDI in Tunisia.
- A bilateral model (Equation 2) to isolate the effect of the Tunisia-EU Association Agreement, while controlling for partner-country characteristics.

The analysis is conducted at two levels. First, we estimate inward FDI from all partner countries. Second, we focus specifically on bilateral flows between Tunisia and EU countries to isolate the impact of trade integration.

Empirical literature employs two main approaches to model FDI determinants:

1. Gravity models, initially developed for trade flow analysis and adapted to FDI within knowledge-capital frameworks (Chakraborty & Basu, 2019; Khan & Alam, 2022).
2. Structural models of FDI determinants, widely validated in the literature (Bénassy-Quéré *et al.*, 2021; Bastiaens *et al.*, 2020).

Our study adopts the second approach, estimating an FDI determinant equation augmented with a dummy variable to capture the effect of the Tunisia-EU Association Agreement. This variable, denoted AA, takes the value 1 for the period when customs duties were applied (1995–2007) and 0 starting in 2008, the year marking the elimination of these duties for industrial products from the EU.

#### 3.2 Model Specification and Data

We draw on recent literature to guide our analysis, particularly the work of Görg *et al.* (2021), who examine the effects of trade agreements on FDI flows in similar

contexts, and Agarwal *et al.* (2020), who study the impact of customs policies on FDI attractiveness. This methodology will rigorously assess the influence of the Association Agreement on FDI flows in Tunisia while controlling for other structural determinants. The results will be interpreted through estimated elasticities and their statistical significance, with robustness tests conducted to ensure validity.

The study period spans 1995–2020, using annual frequency data. Key sources include:

- World Bank World Development Indicators
- UNCTAD FDI flow data
- Institutional indicators on political stability and regulatory quality

### Equation 1 – Unilateral Model

The estimated equation is specified in logarithmic form to facilitate coefficient interpretation in terms of elasticities:

$$\ln(\text{FIDE})_{it} = \alpha_1 \ln(\text{PIB})_{it} + \alpha_2 \ln(\text{OUV})_{it} + \alpha_3 \ln(\text{Cap Humain})_{it} + \alpha_4 \ln(\text{INFRA})_{it} + \alpha_5 \ln(\text{FISCALITE})_{it} + \alpha_6(\text{Stab Politique})_{it} + \beta_1(\text{AA})_{it} + \varepsilon_{it} \quad (1)$$

**With:**  $\ln \text{FDI}_{it}$ : represents the logarithm of inward FDI flows at period  $t$  in millions of dollars at constant prices. Data on this variable are extracted from the UNCTAD database.

$i$  denotes the host country (Tunisia),

$j$  the investing country,

**GDPit:** Gross Domestic Product of Tunisia,

**TRADEit:** trade openness of Tunisia,

**HUMAN CAPITALi:** the level of human capital in Tunisia,

**INFRAit:** infrastructure in country  $i$  at period  $t$ ,

**TAXATION:** corporate tax as a % of GDP,

**POLITICAL STAB:** political stability and absence of violence,

**AA:** the Association Agreement between Tunisia and the EU, which takes the value 1 when the industrial tariff rate is applied and 0 otherwise.

### Equation 2 – Bilateral Model

$$\ln(\text{FIDE})_{ijt} = \alpha_1 \ln(\text{PIB}i)_{it} + \alpha_2 \ln(\text{PIB}j)_{it} + \alpha_3 \ln(\text{OUV})_{it} + \alpha_4 \ln(\text{Cap Humain})_{it} + \alpha_5 \ln(\text{INFRA})_{it} + \alpha_6 \ln(\text{FISCALITE})_{it} + \alpha_7(\text{stab politique})_{it} + \beta_1(\text{AA})_{it} + \varepsilon_{it} \quad (2)$$

With:

$i$  represents the host country (Tunisia),

$j$  stands for the investing country (the EU countries).  $\text{FIDE}_{ijt}$ : The inward FDI flow (in constant million USD) from investing country  $j$  to Tunisia at time  $t$   
 $\text{GDP}_{it}$ : Gross Domestic Product of Tunisia,

$\text{GDP}_{ijt}$ : Gross Domestic Product of countries  $i$  and  $j$ ,

$\text{TRADE}_{it}$ : Trade openness of Tunisia,

$\text{HUMAN\_CAP}_i$ : Human capital level in Tunisia,

$\text{INFRA}_{it}$ : Infrastructure in country  $i$  at time  $t$ ,

$\text{TAX}$ : Corporate tax as a percentage of GDP,

$\text{POL\_STAB}$ : Political stability and absence of violence,

$\text{AA}$ : Association Agreement between Tunisia and the EU.

### 3.3 Estimation Methods and Robustness Tests

To identify the aggregate determinants of Foreign Direct Investment (FDI) in Tunisia, we employ an Ordinary Least Squares (OLS) regression. However, the mere application of this method is insufficient to guarantee the robustness of the results. Therefore, several methodological adjustments and diagnostic tests are systematically integrated into our approach to ensure the validity of statistical inferences. First, to correct potential heteroskedasticity issues, standard errors are adjusted using the robust method proposed by White (1980). This procedure mitigates biases related to non-constant residual variance, thereby providing more reliable estimators. Next, in the presence of autocorrelation (that is, when errors are correlated over time), we recalculate standard errors using the Newey and West (1987) method. This technique has the advantage of being simultaneously robust to both heteroskedasticity and autocorrelation, making it an essential tool in time-series analysis. Furthermore, to prevent the risk of spurious regression, all variables are subjected to Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) stationarity tests. These tests determine whether the series are integrated of order zero. If not, a differentiation transformation is

applied, or an Error Correction Model (ECM) is considered to account for long-term relationships between the variables.

#### 4. EMPIRICAL RESULTS

Our analysis focuses on bilateral FDI flows between Tunisia and its European partners. To this end, we adopt a panel data model, which is particularly well-suited for controlling unobserved heterogeneity across different observational units.

We begin by estimating a Fixed Effects (FE) model, incorporating country-specific and time-specific effects. This specification captures time-invariant characteristics, such as cultural traits or historical legacy, as well as common macroeconomic shocks, such as financial crises.

However, when the Hausman test fails to reject the null hypothesis ( $p > 0.10$ ), we opt for a Random Effects (RE) model. The latter proves more efficient under the assumption of orthogonality between individual effects and explanatory variables, making it a suitable alternative in certain cases.

Interpretation of Results Using the Ordinary Least Squares (OLS) Estimation Method

The estimation results are presented in the following table:

The findings reveal that several unilateral factors significantly influence the attractiveness of foreign direct investment (FDI) in Tunisia. Among these factors, variables such as gross domestic product (GDP), trade openness, political stability, human capital, and infrastructure prove particularly decisive in driving FDI inflows. Indeed, these factors are positively associated with investment attractiveness, confirming the conclusions of Javorcik and Spatareanu (2011), who emphasized their importance in attracting investment to developing countries. Similarly, Blonigen (2005) demonstrated that macroeconomic and political stability constitutes a critical criterion in foreign firms' investment decisions.

More specifically, our analysis highlights that infrastructure, particularly in the telecommunications sector, exerts a positive and significant influence on FDI inflows. Tunisia has indeed invested substantially in its infrastructure, especially in communication technologies. These improvements have enhanced connectivity and trade facilitation, both crucial elements for foreign investors. This result aligns with the work of Mottaleb (2015), who underscores the impact of infrastructure quality on FDI attractiveness in North African countries, as well as that of Asiedu (2006), who

**Table 1: Estimation Results of the Dependent Variables FDI Flows**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0,06	0,01	4,44	0,00
D(LNPIB)	0,17	0,09	1,80	0,08
D(OUVERT)	0,09	0,01	4,69	0,00
D(SP)	0,06	0,02	2,22	0,03
D(INFRASTRUCTUREI)	0,01	0,00	2,42	0,02
D(FISCAL)	-0,00	0,01	-0,34	0,73
D(CAPHUMAINI)	0,01	0,00	3,20	0,00
AA	0,00	0,03	0,21	0,83
R-squared	0,86	Meandependentvar		0,08
Adjusted R-squared	0,81	S,D, dependentvar		0,07
S.E. of regression	0,03	Akaikeinfocriterion		-3,79
Sum squared resid	0,02	Schwarzcriterion		-3,41
Log likelihood	61,09	Hannan-Quinncrier,		-3,67
F-statistic	17,58	Durbin-Watsonstat		2,00
Prob(F-statistic)	0,00			

Source: Estimation by the author using EViews software.

highlights the importance of high-quality infrastructure investments in reducing operational costs and improving business efficiency in developing economies.

In practical terms, this implies that an improvement in the infrastructure index is associated with a proportionate and measurable increase in FDI inflows, thereby translating into a tangible economic effect. For policymakers, this reinforces the case for targeted investments in infrastructure with a strong impact on logistics and connectivity.

However, the impact of infrastructure on FDI attractiveness may vary across geographical contexts. For instance, a study by Nguyen *et al.* (2020) in Southeast Asia shows that while infrastructure is important, other factors such as market regulations and governance quality may play a more direct role. Additionally, Akinlo (2017), in a comparative analysis of African countries, concludes that although infrastructure remains a key factor, economic policies and the business environment also significantly influence investor decisions.

Conversely, the taxation variable exhibits a negative and statistically insignificant coefficient, suggesting that taxation is not perceived as a decisive factor for FDI attractiveness in Tunisia. This may be explained by the fact that while taxation can influence certain aspects of investment attractiveness, it does not appear to be a primary consideration for foreign investors. Indeed, investors tend to prioritize criteria more directly linked to profitability, political stability, and infrastructure quality over fiscal competitiveness.

From a practical standpoint, the insignificance of the tax coefficient suggests that fiscal reforms, when not complemented by other economic levers, do not necessarily lead to substantial changes in investor behavior.

Studies on taxation, such as Kinda's (2017) analysis of West African countries, indicate that investor-friendly tax policies such as tax exemptions for foreign firms may have a stronger impact in less industrialized economies. However, in a country like Tunisia, where infrastructure and political stability are deemed more critical, the effect of taxation appears relatively muted.

Regarding the variable measuring Tunisia's full integration into the Euro-Mediterranean Free Trade Area for industrial goods with the European Union (EU), the coefficient is positive but statistically insignificant. This variable is intended to capture the

effect of the Association Agreement (AA) signed with the EU, which established a gradual dismantling of tariffs on industrial goods. While theoretically this agreement should enhance Tunisia's attractiveness by improving market access and reinforcing trade ties with Europe, our results suggest that its influence on FDI inflows is limited when considered in isolation. This may imply that although the AA provides a formal framework for economic cooperation, its expected benefits do not automatically translate into increased investment flows without supportive domestic conditions.

Economically speaking, this means that the potential gains from trade integration do not immediately or automatically translate into increased FDI inflows, especially in the absence of conducive local conditions.

Trade integration does not always translate into a direct increase in FDI flows, as also evidenced by Sahoo *et al.* (2018) in Southeast Asia. In these countries, although free trade agreements provide clear benefits in terms of access to large markets, FDI attractiveness is more strongly influenced by domestic factors such as infrastructure quality, labor costs, and innovation supportive policies.

Thus, while integration into free trade zones may offer long-term advantages, it does not necessarily serve as an immediate lever for attracting FDI. Other elements, such as governance, political stability, and cost competitiveness, play a more direct role in foreign investors' decisions.

In conclusion, our results confirm that high-quality infrastructure particularly in telecommunications is a key driver of FDI inflows, but this factor must be embedded within a broader framework encompassing political stability, governance, and human capital quality. These findings corroborate existing literature while underscoring the importance of a favorable economic and institutional environment for investment attractiveness.

In the second estimation, we examine the effects of Tunisia EU integration on bilateral FDI flows. The estimation results are presented in the following table:

Estimation using the random effects model reveals that Tunisia's gross domestic product ( $GDP_i$ ) exerts a positive and statistically significant effect on inward foreign direct investment (FDI) flows at the 10% significance level. This finding aligns with a substantial

**Table 2: Estimation Results Dependent Variable: Inward FDI Flows**

Fideij	Reg1 Effet aléatoire	Reg2 Effet fixe	Reg3 Effet fixe
PIBi	1,30 (0,05)***	-	-
PIBij	0,793 (0,07)***	1,76 (0,04)	0,45 (0,57)
ouvi	-	2,32 (0,16)	-
Cap humi	-	4,55 (0,28)	-
Infrastructurei	-	0,275 (0,116)	-
Fiscalité	-	-	2,48 (0,00)**
stabpolii	1,48 (0,00)*	1,54 (0,00)*	1,70 (0,00)*
AA	0,71 (0,05)***	-1,20 (0,14)	0,43 (0,33)
Cst	-19,48 (0,00)*	-8,92 (0,53)	2,65 (0,73)
Hausman	-	3,20 0,78	31,86 0,00
B,Pagan T Chi 2 (1) prob>chi2	314,74 (0,00)	326,04 (0,00)	321,64 (0,00)
R2	0,13	0,00	0,01

Les valeurs entre parenthèse représentent les t-student, \* significativité au seuil de 1%, \*\* significativité au seuil de 5%, \*\*\* significativité au seuil de 10%.

Source: Estimation by the author.

body of empirical literature, which identifies GDP as one of the primary economic determinants of FDI attractiveness (Aho, 2013; Erdogan & Ünver, 2015). Indeed, a larger economic size is generally perceived as an indicator of market absorption capacity, thereby encouraging foreign investors to allocate more capital to the country.

Regarding the effect of relative economic activity between partner countries (measured by  $GDP_{ij}$ ), empirical results reveal some heterogeneity depending on model specifications. In the first regression, where institutional and structural variables such as taxation, human capital, and infrastructure were excluded, the coefficient associated with  $GDP_{ij}$  was positive and statistically significant, suggesting that favorable economic disparities between countries may stimulate FDI flows to Tunisia.

However, when these explanatory variables were introduced in the second regression, the sign of the  $GDP_{ij}$  coefficient turned negative, indicating a reversal of the effect. This shift can be explained by the

mediating role of these new determinants particularly taxation, human capital quality, and infrastructure levels which mitigate or even reverse the direct impact of relative economic dynamics. In other words, when these factors are accounted for, they appear to capture a significant portion of the economic attractiveness initially attributed to GDP differentials.

Finally, the results confirm that taxation and political stability are among the most decisive factors in attracting FDI to Tunisia. Their positive and significant impact underscores the importance of institutional and regulatory considerations in multinational firms' investment decisions.

Concerning taxation, its positive effect on FDI attractiveness from European Union countries can be attributed to fiscal incentives and administrative facilitations implemented by the Tunisian government for foreign investors. This result not only corroborates the findings of Ridzuan *et al.* (2017) but also aligns with those of Kinda (2020), who emphasizes that incentive based tax regimes can significantly enhance the

attractiveness of developing countries for international investors, particularly in high value added sectors.

As for political stability and the absence of violence, these factors are measured using the Political Stability and Absence of Violence index from the Worldwide Governance Indicators (2023). Our estimates reveal a positive effect of political stability on FDI flows. This relationship can be explained by Tunisia's relative institutional stability during the 1995–2010 period. From 2010 onward, the index turned negative, reflecting the disruptions of the Tunisian revolution, characterized by rising insecurity, political tensions, and persistent institutional instability.

Nevertheless, the effect of this recent instability on FDI flows appears partially mitigated, possibly due to the time lag in investor reactions to political shocks. Several recent studies (Wernick *et al.*, 2021; Asiedu & Lien, 2022) confirm that political stability remains a crucial determinant of FDI, particularly in emerging economies, where institutional uncertainties can quickly deter long term investment flows.

Our results show that the Tunisia-EU Association Agreement had a positive and statistically significant effect on foreign direct investment (FDI) flows, confirming its role in attracting external capital. This finding is consistent with prior research on regional trade agreements (Medvedev, 2012; Witkowska, 2001), while introducing an important nuance: unlike studies focusing on broader regional blocs, our disaggregated analysis demonstrates that even sectoral integration (limited to industrial goods) can suffice to stimulate FDI. However, potential biases, such as selection effects or reverse causality, warrant cautious interpretation. Robustness tests, including instrumental variables, reinforce the reliability of our conclusions. These findings advocate for expanding Tunisia-EU agreements to include services and investment, in line with recent trends in next-generation trade agreements (Mattoo *et al.*, 2020).

## CONCLUSION

This study examined the impact of Tunisia's economic integration with the European Union through the 1995 Association Agreement on foreign direct investment (FDI) flows. Using a two-stage econometric approach, we analyzed the specific effect of the free trade agreement while controlling for traditional structural determinants of FDI such as GDP, trade openness, human capital, infrastructure, taxation, and political stability.

The results show a positive, albeit moderate, effect of economic integration with the EU on FDI in Tunisia, particularly in bilateral flows. However, this impact is contingent on domestic institutional and macroeconomic factors, including political stability, infrastructure quality, and human capital. In contrast, taxation was not a significant determinant, indicating that investors focus more on long-term conditions than on short-term fiscal advantages.

### Key findings:

- The Tunisia-EU Association Agreement led to an increase in FDI, mainly through tariff barrier removal for industrial goods and deeper trade integration.
- However, political instability post-2011 and administrative rigidities have constrained the full potential of FDI.
- These results are consistent with prior studies (Ben Abdallah *et al.*, 2017; Islam & Beloucif, 2024), which emphasize the importance of internal reforms in maximizing the benefits of trade agreements.

### Policy Recommendations:

- Deepen economic integration with the European Union: Expand existing agreements to include services and investment, aligning with next-generation trade agreements (Mattoo *et al.*, 2020). This would strengthen economic ties and provide a more predictable institutional framework for investors.
- Accelerate structural reforms: Focus on improving governance, enhancing regulatory transparency, and developing infrastructure. These steps are essential for creating a more competitive and attractive environment for foreign investors.

Ultimately, Tunisia's ability to attract FDI sustainably depends on a balanced approach that combines external openness with internal reforms. Strengthening economic ties with key partners, particularly European ones, and pursuing ambitious structural changes will reposition Tunisia as a prime FDI destination.

Future Research Directions: This study opens several avenues for future research, such as:

- Examining sectoral differences in FDI impacts to tailor attraction policies more effectively.



- Assessing the effects of trade agreements in contexts of geopolitical volatility.
- Investigating technology transfer mechanisms and productivity gains associated with FDI to understand their role in Tunisia's economic development.

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