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ATTRACTIVITE TERRITORIALE, TOURISME ET BALANCE DES PAIEMENTS : UNE APPROCHE ARDL

TERRITORIAL ATTRACTIVENESS, TOURISM AND THE BALANCE OF PAYMENTS: AN ARDL APPROACH

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Résumé :

Objective : La présente recherche examine l'impact de l'attractivité territoriale sur les recettes touristiques du Maroc et leur contribution à la balance des services. **Methods :** À partir de données annuelles couvrant la période 2004-2020, nous mobilisons l'approche ARDL par les bornes pour analyser les dynamiques de court et de long terme. **Results :** Nos résultats révèlent que l'attractivité territoriale, exprimée par les investissements directs étrangers, n'exerce aucun effet significatif sur les recettes touristiques du pays, ce qui suggère que l'attractivité territoriale générale ne se traduit pas automatiquement par une amélioration de la balance des services via les canaux touristiques. En revanche, le développement économique, mesuré par le PIB réel par habitant, s'avère être le principal déterminant des recettes touristiques, avec une élasticité à long terme de 1,25. Cela indique que le développement économique structurel constitue le principal moteur de la contribution du secteur touristique à la balance des services. Le taux de change ne présente quant à lui aucune influence significative. Enfin, le système affiche un ajustement rapide, avec 90% des déviations corrigées en l'espace d'un an. **Conclusion :** Ces résultats suggèrent que l'amélioration de la balance des services par le biais du tourisme dépend principalement du développement économique structurel et de politiques spécifiques au secteur touristique, plutôt que l'attractivité territoriale générale ou de la compétitivité prix.

Mots clés : Tourisme, Balance des paiements, Attractivité territoriale, ARDL, Maroc.

Abstract:

The present research examines the impact of territorial attractiveness on Morocco's tourism revenues and its subsequent contribution to the services balance. Using annual data from 2004 to 2020, we employ the Autoregressive Distributed Lag (ARDL) bounds testing approach to analyze both short-run and long-run dynamics. Our findings reveal that territorial attractiveness, proxied by foreign direct investment, shows no significant effect on the country's tourism revenues, suggesting that general territorial attractiveness does not automatically translate into improved services balance through tourism channels. In contrast, economic development, measured by real GDP per capita, turns out to be the primary determinant of tourism receipts, with a long-run elasticity of 1.25, indicating that structural economic development is the key driver of the tourism sector's contribution to the services balance. Exchange rate shows no significant influence. Finally, the system shows rapid adjustment with 90% of deviations corrected within one year. These results suggest that enhancing the services balance through tourism depends primarily on structural economic development and tourism-specific policies rather than general territorial attractiveness or price competitiveness.

Keywords: Tourism, Balance of payments, Territorial attractiveness, ARDL, Morocco.

Introduction

Tourism is an essential component of the global economy. It ranks among the most important economic activities in the world. For many countries, it constitutes the primary export product (Coscia et al., 2016). According to the World Travel & Tourism Council, the travel and tourism sector contributed US\$10.9 trillion to global GDP in 2024. International tourism plays a significant role in stimulating investment in new infrastructure (Schubert et al., 2011). This sector also generates employment opportunities (Po & Huang, 2008) for individuals both directly and indirectly linked to the activity; the resulting income benefits the workers meeting this demand as well as the host regions (Kalantzi et al., 2023). Furthermore, the sector contributes to the balance of payments (Schubert et al., 2011) by bringing in hard currency, which can help bridge foreign exchange deficits and finance imports of capital goods. Its role is even more crucial in developing countries (Lee & Chang, 2008). In Morocco, tourism contributes 7.3% to the national GDP (High Commission for Planning [HCP], 2025), while revenues generated by international visitors reached a record high of 112 billion dirhams (Directorate of Studies and Financial Forecasts [DEPF], 2025), confirming both the sector's economic weight and its importance in generating foreign currency revenue.

It is widely acknowledged in the literature that the characteristics of a territory particularly its resources, accessibility, economic environment, and image can contribute to boosting tourism demand. Research on destination attractiveness has primarily focused on identifying the territorial characteristics likely to attract visitors and analyzing their contribution to destination competitiveness. However, the literature on territorial attractiveness remains relatively less developed when it comes to examining the link with tourism revenues. Although some studies have examined this relationship in various contexts, the link between territorial attractiveness and tourism revenues remains relatively underexplored in the Moroccan context, particularly regarding the contribution of these revenues to the balance of services.

Given its economic significance, many developing economies have adopted tourism-based development strategies to enhance their territorial appeal and attract investment, talent, and visitors (Camagni, 2002). As Africa's leading tourist destination, Morocco perfectly exemplifies these efforts (UNWTO, 2025). However, this leading position is limited to quantitative results (international arrivals) and is counterbalanced by qualitative results (tourism revenue), an area in which Egypt holds the advantage across the continent. It is precisely this contrast that drives our research question: to what extent does territorial attractiveness influence Morocco's tourism revenues and, by extension, its balance of services? Thus, the aim of this research is to examine the impact of territorial attractiveness on Morocco's tourism revenues and to assess, by extension, its implications for the balance of services. To achieve this objective, the study employs an autoregressive distributed lag (ARDL) approach, applied to annual data from Morocco covering the period 2004-2020. The remainder of the article is structured as follows: Section 1 reviews the literature regarding the key concepts of our research and the relationships between them; Section 2 presents the methodology; Section 3 outlines the results; and Section 4 discusses the findings. Finally, the conclusion, study limitations, and suggestions for future research are addressed in the last section.

Literature review

1. Territorial attractiveness

The concept of territorial attractiveness emerged in the late 1980s and 1990s within regional economics and economic geography, in a context of intensified competition between territories amid growing globalization. It refers to a territory's capacity to attract,

host, and retain mobile resources capital, firms, and activities by offering favorable economic, institutional, and socio-spatial conditions. A seminal definition is provided by Hatem (2004), who defines territorial attractiveness as the ability of a territory to offer economic agents the most favorable conditions for the location and development of their activities. This approach places attractiveness within a logic of revealed preferences, where investment and location choices reflect a territory's competitive positioning. Attractiveness is thus closely linked to territorial competitiveness and inter-territorial competition for mobile factors of production. Camagni (2002) further conceptualizes attractiveness through the notion of territorial capital, defined as the set of localized tangible and intangible assets such as infrastructure, human capital, institutional quality, social capital, and relational networks that generate sustainable competitive advantages. In this perspective, attractiveness does not rely solely on cost factors but results from interactions between actors, institutions, and localized resources within innovative territorial systems.

The literature generally converges on a multidimensional understanding of territorial attractiveness. A first dimension is economic attractiveness, linked to infrastructure quality, market size, accessibility, and agglomeration economies (Porter, 1990). A second dimension concerns institutional attractiveness, reflecting governance quality, regulatory stability, and legal security (Rodríguez-Pose & Storper, 2006). A third dimension is residential and social attractiveness, associated with quality of life, environmental conditions, and public services. More recent works also emphasize the growing importance of symbolic and image-based dimensions, highlighting the role of reputation and territorial image in shaping external perceptions (Anholt, 2010). Within this framework, tourism attractiveness constitutes a specific dimension of territorial attractiveness. While general territorial attractiveness aims to attract firms and productive capital, tourism attractiveness relates to a territory's ability to attract visitors by mobilizing natural, cultural, and experiential resources (Crouch & Ritchie, 1999; Dwyer & Kim, 2003). These two forms of attractiveness may overlap only partially, as the factors driving foreign investment differ from those shaping tourism appeal.

The empirical literature distinguishes two main categories of determinants of tourism attractiveness: economic and structural/institutional. Economic determinants mainly influence international tourism demand. They include origin country income, inflation, exchange rate, transport costs and demand structure. Structural and institutional

determinants on the other hand shape the sustainability, quality, and competitiveness of the tourism supply. These include tourism infrastructure, security and political stability, governance and public policies, host country image, and big events among others. Tourism attractiveness thus becomes a strategic driver of territorial development, contributing to economic diversification, balance of payments stability, and the international visibility of the country.

2. The balance of payments

The balance of payments (BoP) is a fundamental concept in international economics. It is a key indicator for open economies, as it indicates whether the country is running a deficit or a surplus and identifies the origin of imbalances. Fundamentally, the BOP is a systematic record of all economic transactions, both private and governmental, between a country's residents and foreign residents over a specified period (Kindleberger, 1965; Fieleke, 1996; Jones and Christiansen, 1979). Following international standards (IMF, UN), the BoP employs double-entry bookkeeping structured into three major categories: the current account, the capital account, and the financial account.

The current account captures the transfer of real resources like goods, services and income (IMF eLibrary, "Structure and Characteristics of the Current Account"). It is composed of the trade balance, primary income balance, and secondary income balance. The trade balance is further decomposed into the goods (merchandise) account and the services account. The latter records cross-border transactions not captured by customs, including travel, transportation, insurance, financial and banking services, construction, telecommunications, computer and information services, maintenance and repair services, government services not elsewhere included, charges for the use of intellectual property, as well as other business, personal, cultural, and recreational services.

3. Territorial attractiveness, tourism revenues and the balance of payments

A country's attractiveness can be directly measured through its tourism revenues. These revenues represent foreign demand, translated through expenditure (Coscia et al., 2016; Song & Li, 2008; Khemthong et al., 2024). Tourism revenues depend on several determinants. These include the number of visitors, the average cost per day, the length of stay, the presence of low-cost airlines, a relatively low rate of infringement, geographic distance, GDP per capita of the country of origin and other cultural factors (Khemthong et al., 2024; Coscia et al., 2016).

Tourism is a strategic sector that contributes to economic growth, job creation, and the balance of payments (Crouch & Ritchie, 1999; Dwyer & Kim, 2003). As a key source of foreign currency, international tourism strengthens the balance of payments by increasing demand for local goods, services, and currency in host countries (Oh, 2005; Kim & Chen, 2006; FaladeObalade & Dubey, 2014). The contribution of international tourism to the balance of payments is even more important in developing countries, for which the sector's revenues constitute a primary income source (Tosun et al., 2009; Song et al., 2012; FaladeObalade & Dubey, 2014; Sinclair & Stabler, 1997). Recent country-level evidence corroborates this pattern across a range of developing and emerging economies. Using ARDL-type frameworks, Sadiku (2022) shows that tourism receipts represent a significant source of foreign-currency inflows within the balance of payments of the Republic of North Macedonia, while Janković et al. (2022) find that a reorientation of domestic tourism demand can meaningfully reduce Serbia's current account deficit. Employing a non-linear ARDL approach, Rafiq et al. (2021) further show that positive tourism shocks narrow Pakistan's balance-of-payments deficit more strongly than negative shocks widen it, pointing to an asymmetric relationship between tourism and the external balance. For Türkiye, Cihangir et al. (2014) provide early VAR-based evidence that net tourism revenues exert a positive effect on the current account, a finding corroborated more recently by Ertürk (2025), who confirms the favorable and statistically significant contribution of tourism revenue to financing Türkiye's current account deficit. Together, these studies reinforce tourism's role as a stabilizing channel for the balance of payments in economies structurally dependent on external financing. Real world examples of how tourism revenues improve the BoP include the Turkish experience (Tosun, 1999). After a chronic problem of a negative balance of payments, and recognizing the weight of tourism and its importance for the economy, the Turkish government established an agency to manage all tourism-related issues (Tosun & Timothy, 2001; Tosun et al., 2003). For several years, foreign currency earnings from tourism have been viewed as a solution for certain problems affecting the Turkish economy (Tosun et al., 2003).

The Moroccan experience further supports this. According to the exchange office, (2025), the overarching issue was a widening current account deficit, which grew by 19.5% to reach -18.5 billion DH in 2024. This deficit was primarily driven by the persistent trade balance deficit, creating a need for foreign currency. However, offsetting this, is the

performance of the services sector, whose balance achieved a substantial surplus of 134.2 billion DH. This performance was mainly driven by the travel sector, as revenues from tourism reached an all-time high at 112.5 billion DH, with a net tourism surplus of 83.1 billion DH. Tourism revenues represent a significant share of Morocco's foreign currency inflows, surpassing FDI and equaling remittances. The tourism sector is a vital engine for Morocco's economy, generating the necessary foreign currency to offset the country's trade deficit and ensure macroeconomic stability. The sector's performance is evidence of the effectiveness of the country's tourism roadmap, which aims to increase Morocco's attractiveness as a destination. This roadmap, is built on a better offer structure, diversification of source markets, continuous improvement of transport infrastructure and strong international promotion campaigns (Ministry of Tourism, 2025).

Taken together, this literature suggests two distinct channels through which a territory's characteristics affect the services balance: an investment channel, whereby institutional and economic conditions attract mobile capital (Camagni, 2002; Hatem, 2004), and a visitor channel, whereby natural, cultural and experiential assets attract tourists (Crouch & Ritchie, 1999; Dwyer & Kim, 2003). Recent empirical work indicates these channels do not always move together (Rojas, 2024), which motivates treating FDI-based attractiveness and tourism performance as empirically separable questions rather than assuming one proxies for the other.

Building on this literature, the main hypothesis we are testing can be formulated as :

- *H1. Territorial attractiveness positively influences Morocco's tourism revenues.*

This hypothesis is tested using an ARDL bounds-testing framework, described below.

Methodology

1. Data

This study uses annual data for Morocco covering the 2004-2020 period. The timeframe was selected due to data constraint, as consistent annual series for tourism revenues are not available beyond 2020. The dependent variable is international tourism receipts (in current US dollars). Independent variables include territorial attractiveness proxied by net foreign direct investment flows, real GDP per capita (in constant 2015 US dollars) and real effective exchange rate index (2010 set to 100). All variables are log transformed prior to estimation.

2. Model specification

Given the integration properties of the variables and the relatively small sample size, the Autoregressive Distributed Lag (ARDL) approach is employed to investigate both short-run and long-run relationships.

The baseline functional relationship is expressed as follows:

$$TR_t = f(FDI_t, GDP_t, REER_t)$$

After logarithmic transformation, the econometric specification becomes:

$$\ln(TR_t) = \alpha_0 + \alpha_1 \ln(FDI_t) + \alpha_2 \ln(GDP_t) + \alpha_3 \ln(REER_t) + \varepsilon_t$$

where TR denotes tourism revenues, FDI refers to foreign direct investment, GDP denotes gross domestic product, REER represents the real effective exchange rate, and ε_t denotes the error term.

The selected model is ARDL (1,0,2,0), where tourism receipts enter with one lag, GDP per capita with two lags, and FDI and REER without lags. Lag lengths are selected using AIC information criteria.

Results

1. Summary statistics

Summary statistics of all our variables are presented in Table 1.

Table 1. Summary statistics

Statistic	LTR	LFDI	LGDP	LREER
Mean	22.76185	0.781202	7.958689	4.610501
Median	22.82752	0.884649	7.981887	4.605170
Maximum	23.02074	1.178653	8.121106	4.672700
Minimum	22.23045	0.156211	7.741135	4.557893
Std. Dev.	0.284450	0.338985	0.118237	0.033946
Skewness	-1.325940	-0.681571	-0.450543	0.223602
Kurtosis	3.493031	2.078118	2.049737	1.843861
Jarque-Bera	5.153509	1.918184	1.214760	1.087194
Probability	0.076020	0.383241	0.544776	0.580656
Sum	386.9514	13.28043	135.2977	78.37851
Sum Sq. Dev.	0.937090	1.921473	0.223620	0.018457
Observations	17	17	17	17

Source: Authors' elaboration using EViews12 Student version

TR exhibit a relatively stable evolution throughout the study period. Similarly, real GDPpc and REER both show low dispersion, consistent with Morocco's gradual and steady development trajectory, and its price stability over the study period. By contrast, FDI display a higher degree of volatility, reflecting their sensitivity to economic conditions and external shocks. The Jarque-Bera test indicates a non-normal distribution, which is expected in macroeconomic data.

2. Unit root tests

Prior to estimation, the time-series properties of the variables are examined to avoid spurious regression results. The Augmented Dickey-Fuller (ADF) and the Phillips Perron (PP) unit root test are applied under the null hypothesis of a unit root.

Table 2: ADF test results

Variable	ADF Test Statistic	ADF p-value	PP Test Statistic	PP p-value
LTR	-2.594574	0.1143	-2.355510	0.1683
LFDI	-2.313927	0.1795	-2.313927	0.1795
LGDP	-4.764759	0.0031	-2.433584	0.1488
LREER	-2.001354	0.2832	-1.999139	0.2841

Source: Authors' elaboration using EViews12 Student version

The ADF and PP test results indicate mixed orders of integration across the variables. Tourism receipts, FDI, and the real effective exchange rate are non-stationary in levels but become stationary after first differencing. In contrast, real GDP per capita is stationary at levels under the ADF test, suggesting that it is stationary without differencing. Overall, the variables are either $I(0)$ or $I(1)$, satisfying the requirement for applying the ARDL bounds testing approach.

3. ARDL estimation results

The ARDL estimation results are presented in Table 3 below.

Table 3: ARDL (1,0,2,0) estimation results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LTR(-1)	0.097491	0.262449	0.371466	0.7199
LFDI	-0.141727	0.101886	-1.391031	0.2017
LGDP	7.688137	1.180880	6.510515	0.0002***
LGDP(-1)	-0.668456	1.873620	-0.356773	0.7305
LGDP(-2)	-5.895325	1.924168	-3.063831	0.0155**
LREER	-0.568039	1.119220	-0.507531	0.6255
C	14.07327	9.221268	1.526175	0.1655
R-squared	0.871629	Mean dependent var	22.82005	
Adjusted R-squared	0.775351	S.D. dependent var	0.186947	
S.E. of regression	0.088607	Akaike info criterion	-1.704477	
F-statistic	9.053226	Prob(F-statistic)	0.003282	
Durbin-Watson stat	2.563723			

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Source: Authors' elaboration using EViews12 Student version

GDP is positive and statistically significant, suggesting strong short-run sensitivity of tourism revenues to economic development. However, this effect reverses for both GDP lags, and loses significance at lag 1, indicating complex dynamic adjustments. The lagged dependent variable (LTR(-1)) has a small but insignificant effect, suggesting relatively weak yearly persistence in tourism receipts. FDI and REER both have negative but statistically insignificant effects.

The model exhibits strong overall fit, explaining approximately 87% of the variation in tourism receipts. The adjusted R-squared (0.775) confirms this explanatory power. The Durbin-Watson statistic of 2.56 is close to 2, providing preliminary evidence against first-order serial correlation in the residuals.

4. Cointegration analysis

To test for the existence of a long-run relationship, we apply the ARDL bounds test for cointegration. The results are reported in Table 4.

Table 4: ARDL Bounds test for cointegration

Test Statistic	Value	Significance Level	I(0) Bound	I(1) Bound
F-statistic	6.237	10%	2.676	3.586
k = 3		5%	3.272	4.306
		1%	4.614	5.966

Note: Critical values are for finite sample size (n=30). Case 2: Restricted Constant and No Trend.

Source: Authors' elaboration using EViews12 Student version

The computed F-statistic of 6.237 exceeds the upper bound critical value (4.306) at the 5% significance level, and the upper bound at the 1% level (5.966). This suggests that a stable long-run equilibrium relationship exists among our variables.

5. Long-run and short-run dynamics

Having established the existence of cointegration, we now examine the magnitude and significance of long-run relationships and short-run adjustment dynamics. The results are reported below.

Table 5: Estimated long-run coefficients

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LFDI	-0.157037	0.105870	-1.483303	0.1763
LGDP	1.245810	0.447082	2.786534	0.0237**
LREER	-0.629400	1.211130	-0.519680	0.6174
C	15.59348	8.321727	1.873828	0.0978*

Source: Authors' elaboration using EViews12 Student version

Real GDP per capita emerges as the only statistically significant determinant of tourism receipts in the long run, with a coefficient of 1.246 ($p=0.024$). This implies that a 1% increase in GDP per capita is associated with approximately a 1.25% increase in tourism revenues over the long run. This positions tourism as a luxury good, as tourism receipts increase proportionally faster than income with economic development. In contrast, FDI inflows, our proxy for territorial attractiveness, exhibits a negative but statistically insignificant coefficient (-0.157, $p=0.176$). REER shows the expected negative sign, though insignificant, consistent with the theoretical prediction that real appreciation reduces price competitiveness for international visitors.

Table 6: Error Correction (Short-run dynamics)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	14.07327	9.221268	1.526175	0.1655
ECT = LTR(-1)*	-0.902509	0.262449	-3.438805	0.0088*
LFDI	-0.141727	0.101886	-1.391031	0.2017
LGDP(-1)	1.124355	0.437220	2.571598	0.0330**
LREER	-0.568039	1.119220	-0.507531	0.6255
D(LGDP)	7.688137	1.180880	6.510515	0.0002***
D(LGDP(-1))	5.895325	1.924168	3.063831	0.0155**

Source: Authors' elaboration using EViews12 Student version

The error correction term (ECT) coefficient is highly significant and within range, indicating that about 90.3% of deviations from long-run equilibrium are corrected within one year. This highlights the sector's resilience and its strong self-correcting mechanisms. Short-run dynamics show that current GDP changes strongly boost tourism revenues, with the first lag also positive and significant, while the lagged level of GDP remains significant, underscoring the structural role of economic development. FDI and REER consistently show no significant short-run effects, suggesting they play a limited role in Morocco's tourism dynamics.

6. Diagnostics tests

To ensure reliable inference, we run standard diagnostics tests for serial correlation, heteroscedasticity, normality and parameter stability. The results are reported in Tables 7 and 8, and Figures 1 and 2 below.

Table 7: Breusch-Godfrey Serial Correlation LM test

Statistic	Value	df	Probability
F-statistic	4.687511	(1, 7)	0.0671
Obs*R-squared	6.016051	1	0.0142

Source: Authors' elaboration using EViews12 Student version

The F-statistic has a p-value of 0.067, indicating no evidence of serial correlation.

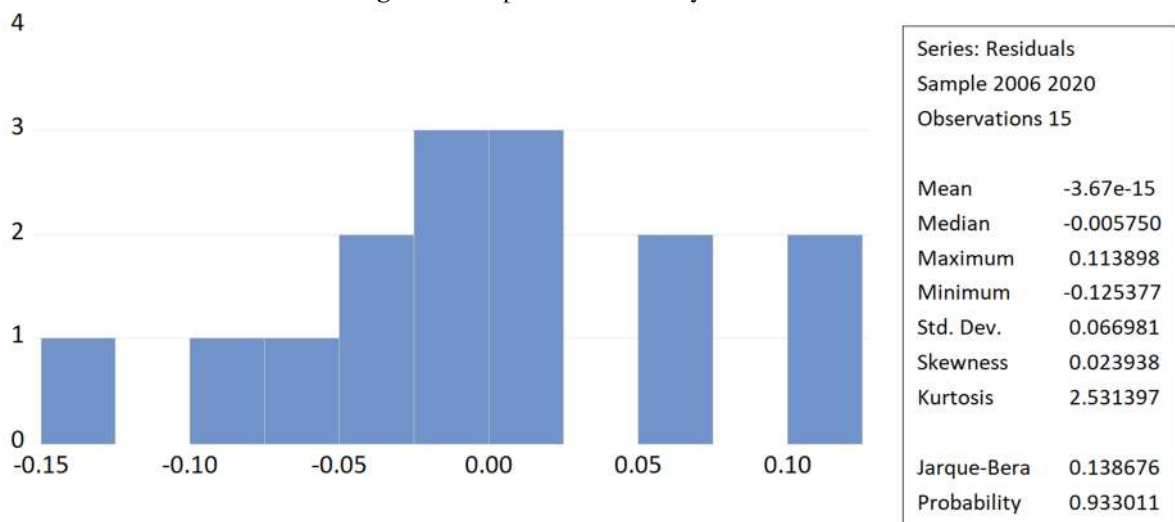
Table 8: Breusch-Pagan-Godfrey Heteroskedasticity test

Statistic	Value	df	Probability
F-statistic	1.224739	(6, 8)	0.3843
Obs*R-squared	7.181613	6	0.3044
Scaled explained SS	1.564146	6	0.9551

Source: Authors' elaboration using EViews12 Student version

All three test statistics produce high p-values, supplying no evidence of heteroscedasticity.

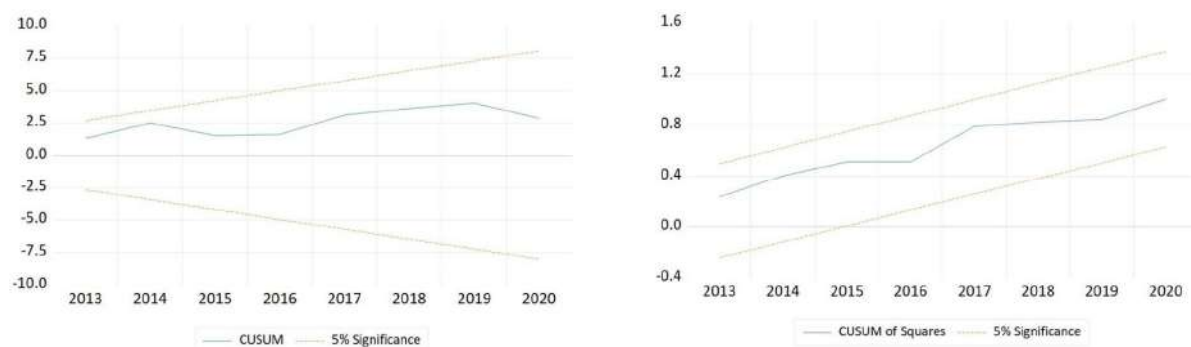
Figure 1: Jarque-Bera normality test



Source: Authors' elaboration using EViews12 Student version

The Jarque-Bera test statistic has a p-value of 0.933, providing strong evidence that the residuals are normally distributed.

Figure 2: CUSUM and CUSUMSQ stability tests



Source: Authors' elaboration using EViews12 Student version

Both the CUSUM and CUSUMSQ statistics remain within the 5% critical bounds throughout the sample period, indicating that the estimated parameters are stable over time.

Discussion of findings

The results of this study speak to two interrelated questions relating to whether general territorial attractiveness translates into tourism performance and to what actually drives Morocco's tourism revenues.

The long-run coefficient on FDI is negative and statistically insignificant ($\beta = -0.157$, $p = 0.176$), leading us to reject H1. This result challenges an assumption embedded in much territorial-marketing discourse, which states that a territory's general capacity to attract mobile capital and its capacity to attract visitors move together, or that the former is a leading indicator of the latter (Camagni, 2002). Our finding suggests instead that these are two structurally distinct forms of attractiveness, built on different asset bases. Investment location decisions respond to institutional quality, market access, and cost conditions, while tourism demand responds to heritage, climate, and destination image (Crouch & Ritchie, 1999; Dwyer & Kim, 2003). This distinction confirms, and extends to Morocco, recent cross-country evidence showing that the tourism-balance-of-payments relationship is itself context-dependent (Rojas, 2024).

Real GDP per capita is the only variable with a significant long-run effect, with an elasticity of 1.245 ($p = 0.024$), confirming a broader empirical literature linking economic development to tourism performance (e.g., Kim & Chen, 2006; Lee & Chang, 2008; Khemthong et al., 2024). This positions Morocco's inbound tourism receipts as behaving like a luxury good with respect to the country's own economic development, meaning, as the domestic economy grows, tourism revenues grow disproportionately faster; unlike the FDI and REER results discussed above, this is a straightforward confirmation rather than a discrepancy requiring explanation. Practically, this suggests tourism follows Morocco's broader economic growth rather than driving it on its own. Investment in infrastructure, institutional improvements, human capital, and related services likely all play a role in this link, though testing each channel directly is beyond what our data can show.

The real effective exchange rate shows the theoretically expected negative sign but is not statistically significant ($p = 0.617$). This qualifies, rather than contradicts, the standard tourism-demand model, in which relative prices are typically treated as a first-order determinant of international arrivals and spending (e.g., Sinclair & Stabler, 1997; Song

& Li, 2008); the sign is theoretically consistent, but the lack of significance indicates that, for Morocco specifically, price competitiveness plays at most a secondary role. A plausible explanation is that Morocco's tourism product has relatively low substitutability, which would reduce visitors' sensitivity to currency-driven price movements. This is also consistent with a heterogeneous tourism market in which higher-spending, less price-sensitive cultural and leisure segments account for a disproportionate share of revenue. The result nonetheless leaves open whether REER's insignificance reflects a genuine absence of a price channel or the limited power created by the small sample. Therefore, we treat it as suggestive rather than conclusive.

The error correction term is highly significant and correctly signed (-0.903 , $p = 0.009$), indicating that approximately 90% of any deviation from the long-run equilibrium between tourism revenues, FDI, GDP per capita, and the exchange rate is corrected within a single year. This is a notably fast adjustment speed, and it is consistent with the resilience the sector displayed during the COVID-19 shock and subsequent rebound, when tourism revenues recovered quickly once travel restrictions were lifted. It also confirms, and extends for the first time to Morocco's services balance, the pattern reported by Mohaidat, Alyousef and Malawi (2024) for Jordan, in which tourism functions as a meaningful stabilizing channel for the balance of payments, suggesting that rapid error-correction may be a structural feature of tourism-dependent developing economies rather than a country-specific idiosyncrasy.

Taken together, the overall picture that emerges is one in which Morocco's tourism sector is anchored to the country's own structural development rather than to either investment-oriented attractiveness or short-run price competitiveness. This has a direct bearing on how the sector interacts with the services balance. Tourism's contribution to offsetting Morocco's trade deficit is best understood as a byproduct of broader economic growth and sector-specific policy (infrastructure, marketing, hospitality capacity) rather than as something that can be engineered primarily through FDI promotion or exchange rate management.

Conclusion

Using an ARDL framework on annual data for Morocco over the period 2004-2020, three findings stand out. First, territorial attractiveness in the FDI sense shows no significant long-run association with tourism revenues, indicating that general capital-attractiveness

and tourism-attractiveness are distinct dimensions of territorial performance rather than interchangeable outcomes of the same underlying conditions. Second, real GDP per capita is the dominant long-run determinant of tourism revenues, while real exchange rate has no statistically significant effect. Third, the system adjusts rapidly to shocks, with roughly 90% of deviations from equilibrium corrected within a year, pointing to a structurally resilient relationship between these variables.

Our findings suggest that policies designed to attract foreign investment, while valuable for other economic objectives, will not automatically enhance tourism's contribution to the services balance. Instead, broad-based structural economic progress is fundamental to strengthening tourism revenues and improving the services balance. Additionally, tourism-specific policies such as heritage preservation, destination marketing, hospitality training and cultural programming remain essential complements to general economic development for maximizing tourism's contribution to the services balance.

This study faces several limitations worth noting. The small sample size limits estimation precision. While the model passes standard diagnostic tests, null results should be treated as provisional rather than definitive as they may reflect low statistical power as much as a true absence of effect. The use of FDI as a proxy for territorial attractiveness also limits the scope of our analysis as it only captures the investment dimension of attractiveness but not its institutional, residential, or symbolic dimensions (Anholt, 2010; Rodríguez-Pose & Storper, 2006), any of which could interact differently with tourism outcomes. Future research should address this by using multidimensional measures of territorial attractiveness. Finally, the study is confined to a single country and a pre-2021 time frame, which limits generalizability to the post-pandemic tourism landscape. Future research could address these limitations by extending the analysis to a longer country panel and possibly constructing a multidimensional attractiveness index to better capture the concept.

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