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Modelling The Role of Institutional Change In A Tourism Growth Model: A Dynamic Analysis

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Abstract: This study aims to investigate the dynamic relationships among foreign direct investment (FDI), financial development, tourism development, and institutional quality in selected MENA countries. The research focuses on assessing the significance of institutional quality within these interlinked dynamics and its impact on the variables under consideration. The study's objective aligns with UNSDG Goal 16, which aims to promote peaceful and inclusive societies with strong institutions that support economic growth and development. The study employs a novel panel Autoregressive Distributed Lag (ARDL) estimation approach to analyze empirical data from 2002 to 2018. This method allows for a comprehensive examination of both short-run and long-run interactions among FDI inflows, financial development, tourism development, and institutional quality across multiple countries in the MENA region. The empirical results indicate that, in the long run, institutional quality negatively influences FDI inflows, financial development, and international tourist arrivals, while it positively impacts real GDP. In the short run, financial development was found to negatively affect real GDP, and international tourist arrivals were observed to negatively impact financial development. Additionally, institutional quality exhibited a negative effect on international tourist arrivals in the short run. Country-wise regression results showed that institutional quality positively influenced international tourist arrivals, FDI inflows, real GDP, and financial development. Furthermore, the study identifies significant unidirectional causal relationships, highlighting the pivotal role of institutional quality in economic growth and development. The study concludes that institutional quality plays a critical role in shaping the dynamics of FDI, financial development, and tourism growth. While institutional quality has a positive impact on long-term economic growth, its negative effects on FDI, financial development, and tourism in the short run suggest the need for improved governance and policy interventions.

Keywords: Autoregressive Distributed Lag (ARDL), Dynamic panel, Financial development, Institutional change, Tourism, Pool mean group, UNSDG Goal 16

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1. Introduction

The relationship between Foreign Direct Investment (FDI) and real output growth has been a contentious topic in economic literature. While previous studies have predominantly focused on the economic impact of FDI and financial development, the role of institutional quality often remains underexplored (Bayraktar et al., 2023; Bhujabal et al., 2024; Olalekan Olaniyi & Mbaya Odhiambo, 2023). Conversely, numerous academic inquiries into the influence of financial development on real output growth have tended to downplay the contribution of FDI and the quality of institutional factors within this dynamic interaction.

Researchers have generally neglected the role of institutional factors in analyzing the dynamic relationship between FDI and financial development concerning economic growth. Consequently, only a few recent studies have delved into the broader connection between FDI and financial development, albeit creating opportunities for further research (Nam et al., 2023; Osei & Kim, 2023; Singh et al., 2023; Magazzino & Mele, 2022). The theoretical framework suggests that FDI can either complement or substitute a robust financial market in channelling the necessary investment funds to stimulate real economic growth. However, the dynamic interaction between FDI, financial development, and institutional quality in achieving aggregate output growth is still not fully understood.

Thus, this study aims to examine the dynamic interplay between FDI and financial development while considering the critical role of institutional quality. Given the importance of a sound governance structure, adherence to democratic principles, and commitment to the rule of law, this research seeks to explore how these institutional factors contribute to sustainable economic growth. By filling the gap in the literature, this study will provide new insights into the broader connection between FDI, financial development, and institutional quality, particularly in the context of selected MENA countries.

2. Literature Review

In the empirical literature, there is widespread agreement among scholars regarding the positive impact of FDI on economic growth, both directly and indirectly, at both micro and macro levels. For example, FDI is recognized for stimulating productivity

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growth, improving managerial capabilities, facilitating technology transfer to domestic markets, and bolstering global trade and financial flows. Demello (1997) notably emphasizes the dual channels through which FDI enhances economic growth: technology diffusion and production stimulation. However, despite the plethora of evidence supporting the positive effects of FDI on economic growth, there are mixed claims regarding its efficacy. Studies by Borensztein et al. (1998) and Carkovic & Levine (2005), among others, have reported relatively limited power of FDI in stimulating economic growth. Some research suggests that the effectiveness of FDI in driving growth is influenced by the strength of a country's financial system (Edison et al., 2002). Additionally, the depth of the financial system in absorbing financial capital and the flexibility of inflows are crucial factors for economic growth.

The impact of FDI on economic growth varies across countries, depending on the development of their financial systems, institutional quality, and governance structures. Therefore, the overall quality of a country's financial system remains essential for maximizing the economic benefits of FDI (Hrames and Lensink, 2003). Moreover, institutional factors such as democratic accountability, political stability, governmental effectiveness, regulatory framework, corruption levels, and rule-based systems play significant roles in determining the positive impact of FDI. Previous empirical studies examining the relationship between FDI and economic growth, incorporating institutional quality, have often relied on single-dimensional variables to define institutional quality. Proxy variables such as governance structures, perceptions of corruption, political uncertainty, and legal frameworks have been used as measures of institutional quality. Empirical findings suggest that measures of institutional quality proxying for political uncertainty, good governance, and legal frameworks have a positive impact on FDI inflows to host countries.

The technological diffusion effect of FDI is robustly supported by the recipient country's financial system, creating a complementary nexus (Alfaro et al., 2004). However, for sustainable economic growth, the role of institutional quality must be considered within this dynamic interaction. Therefore, maintaining a sustainable equilibrium of FDI inflows requires adequate policy measures to enhance the institutional framework of recipient countries, facilitating the welfare gains from FDI. Moreover, evidence suggests that institutional quality plays a crucial role in promoting FDI welfare gains (Benassy Quere et al., 2007; Buchanan et al., 2012).

The significance of institutional quality within the nexus of FDI, financial development, and output growth has been a subject of academic interest for over three decades, focusing on the impact of institutional governance on economic growth and development (see Acemoglu and Johnson, 2005). Evidence suggests that FDI inflows to countries with excellent institutional governance are more broadly and easily enhanced (Acemoglu and Johnson, 2005). Conversely, a poor institutional governance structure significantly reduces FDI inflows. Wei (2000) and Dauda and Stein (2007) highlight channels through which poor institutional quality increases costs for FDI and triggers investment uncertainty. Li and Resnikk (2003) and Belgibayeva and Plekhanov (2015) further emphasize the weakened ability of FDI to promote economic growth due to deteriorating institutional quality. In the Middle East and North Africa (MENA) region, there is a scarcity of empirical studies examining the relationship between institutional quality and FDI inflows within the broader context of the dynamic nexus of FDI, financial development, and economic growth.

In the realm of burgeoning academic research, the recognition of FDI's positive impact on promoting tourism potential in recipient countries is increasingly acknowledged. However, our review of existing studies reveals varying perspectives in the literature concerning the role of tourism in significantly enhancing FDI inflows (Sokhanvar & Jenkins, 2022; Sheng Yin & Hussain, 2021; Luo et al., 2021).When viewed comprehensively, the growth of FDI, coupled with robust financial development and institutional quality in recipient countries, serves as a catalyst for attracting tourism potential, thereby bolstering overall economic growth.

Consequently, numerous countries worldwide, both developed and developing, are striving to attract substantial tourism potential to their economies, aiming to increase arrival numbers and the resulting financial revenues, which contribute significantly to economic growth. Therefore, FDI, facilitated by rapid and robust financial development and credible institutional quality, emerges as a viable pathway toward attracting significant tourism. Notably, institutional quality, characterized by good governance, democratic accountability, political stability, and awareness, plays a crucial role in promoting rapid tourism attraction, which in turn attracts more FDI.

However, the dynamic potential linkages between FDI, financial development, and tourism growth within the causal nexus of institutional quality remain largely unexplored in the existing literature. Consequently, the present study aims to fill this gap by shedding light on key research questions: Is there a dynamic nexus between FDI, financial development, institutional quality, and tourism potential? And what is the causal nexus within that framework? Furthermore, does institutional quality matter in the dynamic relationship between FDI, financial development, and tourism potential?

Considering the dynamic role of institutions in the tourism-economic growth nexus, the significance of governance structures and institutional changes is crucial for developing and sustaining positive tourism growth outcomes. Studies by Li et al. (2024) and Ojonta and Ogbuabor (2024) highlight a direct association between robust governance systems and tourism growth, resulting in enhanced economic output.

Effective institutional arrangements enable government policies to address corruption and create a favourable environment for attracting sustained foreign direct investment (FDI). For instance, stable governance factors promote service quality improvements that deepen institutional quality and support tourism growth (Li et al., 2024). Related studies connect tourism development and sustainability to dynamic institutional changes, showing that good global governance practices promote safe, secure, and sustainable long-term economic growth (Raza et al., 2023), while also ensuring social transformation and FDI attraction. Dynamic institutional quality and investment attractiveness are thus key drivers of real tourism growth and economic development.

MENA countries can enhance their economic connections and cooperative arrangements to foster FDI flows and boost their tourism markets (Raza et al., 2023). Recent emphasis on infrastructure growth and development dynamics underscores the importance of transport, communication, and strategic connections in changing tourism trajectories and increasing tourist arrivals (Ojonta and Ogbuabor, 2024). Government institutions play a crucial role in infrastructure development, which drives growth in tourism and other sectors. Lessons from the global pandemic illustrate how the health sector can moderate the institutional quality-tourism growth nexus (Yue et al., 2023).

New findings in the literature highlight the relationship between FDI and tourism growth, showing that FDI can significantly boost revenue inflows to recipient countries. Low-income countries benefit more from FDI in sectors such as industry and agro-industry, while highly developed countries experience balanced sector-wide growth, leading to positive tourism receipts (Ai-Jun et al., 2024). Sokhanvar (2019) found that the causal interaction among FDI, tourism growth, and economic output expansion varies by country, with some European countries experiencing different outcomes using the Vector Autoregressive (VAR) model with panel causality testing.

Zheng et al. (2023) emphasize the significance of FDI and tourism in economic growth within a natural resources-based framework, using the first-panel cointegration approach for BRICS countries from 1990 to 2020. Faisal et al. (2021) used the ARDL approach with Fourier analysis and found a strong FDI-led growth relationship in selected emerging economies. Emako et al. (2022) studied 19 developing countries from 2005 to 2018, using the generalized method of moments (GMM) regression, and found that FDI's effect on economic growth is sector-specific.

Recent studies have also examined the relationship between FDI, tourism, economic growth, and environmental quality (Sun and Waqas, 2024). Covering 1990 to 2022, they revealed that tourism plays a crucial role when environmental quality concerns are addressed in economic policy. The study recommends strengthening tourism and environmentally friendly policies. Ihtisham-ul-Haq et al. (2023) explored how innovative financial systems and infrastructural changes impact tourism growth in Central Asia, finding that financial innovation positively affects tourism development.

Studies on financial development and tourism growth have highlighted the role of green finance in promoting tourism while minimizing environmental concerns (Sun and Waqas, 2024). Aboagye & Adjei Kwakwa (2023) stressed that promoting financial industry development should include enhancing tourism potential, clean energy usage, and open economic policies. They used Fully Modified Ordinary Least Squares (FMOLS) and quantile regression analysis for 7 African economies from 1995 to 2021.

Luo et al. (2024) argued that digital finance innovation significantly enhanced tourism potential in Chinese cities from 2011 to 2018, associating digital finance growth with increased financial inclusion, entrepreneurial growth, and robust tourism demand. Finally, Brida et al. (2020) demonstrated that the tourism-economic growth association varies among countries, using GDP per capita from 1995 to 2016 and recent econometric techniques. De Siano & Canale (2022) assessed tourism's contribution to GDP per capita growth in Italian provinces from 2005 to 2018 using spatial econometrics, finding a beneficial connection between tourism and economic growth with a nonlinear adverse effect in cases of excessive tourism demand.

To the best of our knowledge, no empirical study has examined the dynamic nexus and causality of FDI, financial development, institutional quality, and tourism growth within the framework of the Autoregressive Distributed Lag (ARDL) model. This empirical research makes significant contributions to the literature in several noteworthy ways. Firstly, it employs the empirically robust Pesaran, Shin, and Smith (PSS, 1999) pooled mean group (PMG) estimation econometric technique, providing superior estimates. Secondly, to enhance the empirical and intuitive interpretability of the model, the methodology draws from the simple ARDL cointegration approach, adapting it to estimate the panel regression model by incorporating different cross-sectional intercept terms, dynamic short-run, and cointegration coefficients. By estimating the dynamic linkages of the model variables, the study gains the added advantage of exploring the causality of the variables in a multivariate sense. Following this approach, the study bridges the gap in the literature by investigating the dynamic causal nexus of FDI, financial development, institutional quality, tourism potential, and economic growth.

Subsequently, our study reexamined the complex relationships between foreign direct investment (FDI), financial development, tourism, and institutional quality in selected MENA countries. Thus, by using the novel panel ARDL estimation method, the research investigated these dynamics from 2002 to 2018. The findings highlighted the significant impact of institutional quality on various economic indicators. While institutional

quality negatively affected FDI, financial development, and tourism in the long run, it positively influenced economic output growth. Short-term analyses revealed nuanced interactions, with financial development hindering output growth and institutional quality impacting tourism negatively. The study emphasized the critical role of tailored institutional reforms in fostering sustainable economic development and attracting investment and tourism in MENA countries.

3. Research Method

Our study employs panel Autoregressive Distributed Lag (ARDL) models as dynamic estimation tools for empirical analysis. These models utilize the regression approach of normal least squares, incorporating lagged regressors as both dependent and independent variables. In panel data analysis, regular ARDL estimation following the standard approach often encounters drawbacks due to the inherent correlation of mean-differenced regressors and stochastic specifications. This issue tends to diminish with larger data observations rather than by increasing the cross-section in the sample. To address the standard ARDL estimation problem associated with panel samples, Arellano-Bond (1991) developed the dynamic approach of the Generalized Method of Moments (GMM) panel data estimator. However, for large samples, the GMM estimator performs inadequately and is therefore inappropriate.

To robustly circumvent these challenges, an alternative specification introduced by Pesaran, Shin, and Smith (PSS, 1999) known as the pooled mean group (PMG) data estimation proves suitable. Thus, the PSS (1999) panel ARDL approach remains applicable even when dealing with mixed integration orders in the dataset, as shown in the panel unit root Table 1. The corresponding cross-sectional independence test is presented in Table 2. The null hypothesis of the test is that there is no cross-sectional dependence among the units examined against the alternative of cross-sectional independence.

The PSS (1999) panel ARDL methodology modifies the ordinary ARDL cointegration approach to a panel estimation framework, incorporating respective cross-sectional intercepts, short-run dynamic coefficients, and cointegration terms accordingly.

The PMG ARDL model is formulated as follows:

$$\Delta q_{it} = \delta_i Ec_{it} + \sum_{k=0}^{s-1} \Delta X_{i,t-k}\, \alpha_{i,k} + \sum_{k=1}^{v-1} \beta_{i,k}\, \Delta q_{i,t-k} + \varepsilon_{i,t} \quad (1)$$

Where $Ec_{i,t} = q_{i,t-1} - X_{i,t}\vartheta$ represents the equilibrium correction error term, associated with ϑ, the long-run coefficients, and, δ_i represents the dynamic adjustment coefficients.

To empirically address the research question posed within the nexus of FDI, financial development, and tourism development, we estimate four empirically specified models following the dynamic panel ARDL approach proposed by Pesaran, Shin, and Smith (1999) (PSS, 1999).

$$lnA_t = \beta_0 + \beta_1 lnA_{it-1} + \beta_2 lnB_{it} + \beta_3 lnC_{it} + \beta_4 D_{it} + \beta_5 lnE_{it} + \varepsilon_{it1} \quad (2)$$

$$lnB_t = \gamma_0 + \gamma_1 lnB_{it-1} + \gamma_2 lnC_{it} + \gamma_3 lnE_{it} + \gamma_4 D_{it} + \gamma_5 lnA_{it} + \varepsilon_{it2} \quad (3)$$

$$lnC_t = \pi_0 + \pi_1 lnC_{it-1} + \pi_2 lnE_{it} + \pi_3 lnA_{it} + \pi_4 D_{it} + \pi_5 lnB_{it} + \varepsilon_{it3} \quad (4)$$

$$lnE_t = \varphi_0 + \varphi_1 lnE_{it-1} + \varphi_2 lnA_{it} + \varphi_3 lnB_{it} + \varphi_4 D_{it} + \varphi_5 lnC_{it} + \varepsilon_{it4} \quad (5)$$

with the exception of the institutional quality variable (D), which is presented in categorical form, all other model variables are in their natural logarithmic form. The constant terms are denoted as β_0, γ_0, π_0, and φ_0, while the stochastic white noise terms are represented as ε_{it1}, ε_{it2}, ε_{it3}, and ε_{it4}. In the specified equations, the subscript 'i' refers to the ith term in the series (where i = 1 to 8), and the time dimension is denoted by $'t'$ (ranging from 2002 to 2018).

This study incorporates six significant components to model the institutional quality variable (D), namely: accountability, political stability, government effectiveness, regulatory quality, control of corruption, and rule of law (see Kaufman et al., 2010). These indicators are aggregated from a comprehensive dataset comprising over 30 fundamental variables obtained from global surveys and assessments on governance perception. The government indicator is approximated to range from -2.5 for weak performance to +2.5 for strong performance, with estimates sourced from the World-Wide Governance Indicator (WGI) research website.

To derive the institutional quality variable (D), principal component analysis (PCA) is employed for aggregating the aforementioned indicators, resulting in a more robust and parsimonious model specification.

The remaining data utilized comprises Foreign Direct Investment (A), Financial Development (B), International Tourist Arrivals (C), and Real Gross Domestic Product (E), sourced from the World Bank Development Indicators (WDI).

Foreign Direct Investment (A) denotes the net inflow of investment capital, encompassing equity and earnings reinvestments, measured in United States Dollars (USD). Financial Development (B) is proxied by the

domestic credit extended to the private sector as a percentage of GDP (%GDP). This metric encompasses the financial capital of business corporations and, to a limited extent, financial credit to public sector enterprises.

For modeling tourism development, International Tourist Arrival (C) data is employed, referring to inbound international tourist arrivals within a 12-month period to countries outside their domestic residency. More so the real Gross Domestic Product (E) provides GDP figures in constant 2010 USD.

The selected MENA countries include Algeria, Egypt, Israel, Jordan, Kuwait, Lebanon, Sudan, and Tunisia, chosen primarily based on data availability. As part of the estimated coefficient diagnostic examination, the 95% confidence ellipse plot for all estimated models is presented in Figure 1.

Considering two functional parameters, $F_1(G)$ and $F_2(G)$, and the bivariate functional expression $F(G) = (F_1(G), F_2(G))$, the jointly formed confidence ellipse with a size of α is denoted by the point c, where

$$(c - f(G))' (V(G)\hat{}(-1)) (c - f(G)) = Z\_\alpha$$

Here, G represents the estimated parameter, $V(G)$ denotes the matrix of G, and Z_α signifies the critical value of the distribution. The confidence ellipse diagram in Figure 1 appears nearly circular, suggesting that the estimated variables are serially uncorrelated and the reported estimates are highly robust.

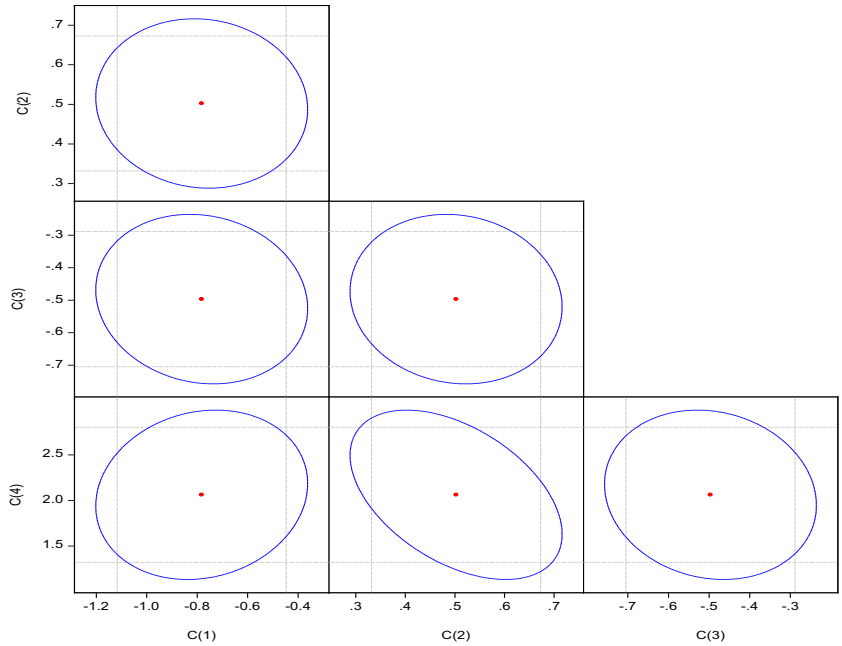

Figure 1: Confidence ellipse for coefficient diagnostic test

Table 1: Panel unit root

	LCC		**IPS**		**Fisher-ADF**	
Variable	*K*	*K&T*	*K*	*K&T*	*K*	*K&T*
lnA	-3.6620***	-4.6208***	-4.8117***	-3.4587***	51.4388***	36.7599***
lnB	-0.35858	-1.19769	-0.36062	-0.51069	18.6811	21.2864
lnC	-3.4547***	-17.618***	-2.7013***	-7.8753***	32.1943***	38.9768***
D	-1.75662**	0.45884	-1.09725	-1.13030	24.0787*	21.3345
lnE	-5.9142***	-3.6760***	-3.1667***	-0.73848	38.1819***	24.5217*
ΔlnA	-10.302***	-9.8139***	-9.3514***	-9.0804***	96.8501***	86.6916***
ΔlnB	-5.4628***	-3.7375***	-4.4839***	-1.7626**	53.2593***	35.5510***
ΔlnC	-10.004***	-5.6393***	-6.6544***	-5.4421***	67.6187***	54.9703***
ΔD	-3.1792***	-4.1222***	-5.5233***	-5.2554***	58.0915***	52.9198***
ΔlnE	-3.4237***	-3.0685***	-2.9178***	-2.6752***	35.6840	32.8787***

Note: The lag length for tests is determined using the Schwarz Information Criterion (SIC). Significance levels are denoted by ***, **, and *, indicating significance at 1%, 5%, and 10%, respectively. The symbol Δ represents the difference operator. LLC refers to the Levin, Lin & Chu (2002) test; IPS denotes the Im, Pesaran, & Shin

(2003) test; and Fisher-ADF signifies the Madala & Wu (1999) panel unit root tests. **Source:** Calculated by the Author.

Table 2: Cross-Sectional Independence Test

	Breusch-Pegan LM	Pesaran-scaled LM	Pesaran CD	df (n = 136)
lnA	53.73714***	3.439269***	4.481480***	28
lnB	107.6187**	10.63949***	-1.068069	28
lnC	271.3617***	32.52057***	16.09690***	28
D	151.9130***	16.55858***	4.888510***	28
lnE	440.0597***	55.06380***	20.96212***	28

Note: Significance levels are indicated by ***, **, and *, representing 1%, 5%, and 10% significance, respectively. The Lagrange Multiplier (LM) tests—Breusch-Pagan LM, Pesaran-scaled LM, and Pesaran CD—are used for the cross-sectional test.

3.1. The PMG ARDL Technical Limitations

In the context of the applied econometric panel method developed by Pesaran, Shin, and Smith (1999), as with several other techniques, there are empirical limitations associated with the PMG ARDL approach. These limitations arise from several factors, such as the requirement for stationarity. In general, the PMG ARDL is applicable when the selected variables for a study are stationary at level I(0) or integrated at the first difference I(1). However, it is less likely to be employed when the variables are integrated at the second order I(2). Thus, an alternative econometric technique must be considered in such cases (Wada, 2017).

Additionally, the adoption of the PMG ARDL is motivated by a relatively long time dimension and numerous cross-sections. For a short period and fewer cross-sections, the PMG ARDL cannot be empirically considered for reliable estimates. Moreover, caution must be exercised when applying the PMG ARDL method since it assumes short-run cross-sectional heterogeneity and long-run parameter homogeneity. Any deviation from these assumptions can potentially affect the empirical findings of a study.

Furthermore, the selection of an inappropriate lag length structure for the study variables can significantly bias the reported findings and inferences. Since the PMG ARDL deals with cross-sectional independent variables within the first-generation techniques of estimation, a more robust specification dealing with cross-section dependence is suggested for cases involving cross-sectional dependent observations.

It is important to note that while the empirical method of the PMG is capable of capturing long-term cointegration, it is unable to empirically handle multiple cointegrating relationships. Additionally, the complexity of estimating and interpreting the PMG ARDL suggests the adoption of simpler methods to empirically address related topics to our research. Thus, potentially biased and inconsistent estimates can be avoided with a more straightforward specification within a simple method.

Empirically, the possibility of endogeneity problems may arise with the PMG method, suggesting the adoption of other dynamic panel approaches like the Generalized Method of Moments (GMM) (see Arellano & Bond, 1991). Finally, the cumbersome and intensely rigorous approach of estimating the PMG ARDL model for studies with large datasets poses constraints on time and resources.

Nonetheless, the PMG ARDL technique remains a powerful econometric tool for dynamic empirical analysis and is generally well-received by researchers.

4. Finding and discussion

4.1. Long-Run Effects

Table 3 displays the results of the estimated PSS (1999) panel ARDL models specified in equations (1) to (4). In Model 1, financial development (B) and institutional quality (C) exhibit a negative and statistically significant relationship with foreign direct investment (A) in the long run (β_2= -0.78214, p < 0.01 and β_4= -0.4967, p < 0.01). Specifically, the results suggest that a 1% expansion in financial development and institutional quality leads to a decrease in foreign direct investment by approximately 0.78% and 0.50%, respectively. This aligns with findings by Bénassy-Quéré et al. (2007) and Daude and Stein (2007), emphasizing the critical role of quality institutional governance in foreign direct investment inflow. Therefore, the lack of a robust financial system supported by strong institutions diminishes FDI inflow (Choong et al., 2004).

Conversely, international tourist arrivals and output growth demonstrate a statistically significant positive relationship with foreign direct investment inflow over time ($\beta_3 = 0.5023, p < 0.01$ and $\beta_5 = 2.0622, p < 0.01$). These results indicate that a 1% increase in international tourist arrivals and output growth results in an increase in foreign direct investment inflow by approximately 0.50% and 2.06%, respectively, in the long run. This supports the output growth-driven foreign direct investment inflow bi-directional nexus (Hermes and Lensink, 2003) and confirms the positive relationship between international tourist arrivals and foreign direct investment inflow (Fauzel, 2020). Therefore, foreign direct investment inflow encourages human capital development, contributing to significant tourism growth and development (Fauzel, 2020).

The estimated results indicate statistically insignificant coefficients for the short-run relationship in Model 1. However, the equilibrium adjustment term is negative and significant ($Ec_t = -1.036118, \mathrm{p} < 0.01$), suggesting a dampened and sluggish adjustment of the model to its long-run equilibrium.

In Model 2, the estimated results reveal a statistically significant negative relationship between institutional governance quality and financial development for the selected countries in the long run ($\gamma_4 = -0206198, p < 0.01$). This indicates that a 1% increase in overall institutional quality governance leads to a decrease in financial development by approximately 0.21% over time. This result aligns with findings suggesting that institutional governance measures that create bottlenecks can increase the cost of doing business (Wei, 2000) and yield negative impacts (Belgibayeva and Plekhanov, 2015; Li and Resnick, 2003).

In the short run, the estimated results in Model 2 reveal a significantly negative relationship between international tourist arrivals and financial development ($\gamma_2 = -0.709050$). This suggests that adverse conditions can impede international tourist arrivals, leading to a negative impact (see Seetanah et al., 2019). While Başarir and Çakir (2015) found a bi-directional relationship between the tourism-financial development nexus, Song and Lin's (2010) study illustrates that uncertain financial conditions can result in a negative relationship between international tourist arrivals and financial development in the long run. Thus, a 1% increase in international tourist arrivals leads to approximately a 0.72% decrease in financial development. The adjustment coefficient of the model from the short run to the long run is negative and significant ($Ec_t = -0.385104, \mathrm{p} < 0.01$) indicating an adjustment of about 39% per period to reach equilibrium.

In Model 3, the estimated results show a statistically significant positive relationship between real output growth, foreign direct investment, and financial development with international tourist arrivals in the long run ($\pi_2 = 0.271202, \mathrm{p} < 0.01$; $\pi_3 = 0.035218, p < 0.01$ and $\pi_5 = 0.271202, \mathrm{p} < 0.01$). This suggests that a 1% increase in real output growth, foreign direct investment inflow, and financial development leads to an increase in international tourist arrivals by approximately 0.27%, 0.035%, and 0.27%, respectively, over the long term. These findings align well with previous research on the economic growth-tourism nexus (Payne and Mervar, 2010) and the bidirectional responses among tourism output growth, FDI, and financial development (Shahbaz et al., 2016).

However, institutional quality is found to have an opposite relationship with international tourist arrivals ($\pi_4 = -0.190937$ p< 0.05) (see also Wei, 2000). This indicates that a 1% increase in institutional quality results in a 0.19% decline in international tourist arrivals in the long run. This finding supports Wei's (2000) assertion that adverse institutional policies discourage foreign investors and international tourists. Although the short-run coefficient is not individually statistically significant, the equilibrium adjustment term is significantly negative ($Ec_t = -0.349786, \mathrm{p} < 0.01$), indicating an adjustment speed of 35% annually toward long-run stability.

Lastly, estimated Model 4 for the studied MENA countries provides evidence of a positively significant relationship between all the regressors and real output growth in the long run ($\varphi_2 = 0.216965, \mathrm{p} < 0.01; \varphi_3 = 0.746193, \mathrm{p} < 0.01; \varphi_4 = 0.310216, \mathrm{p} < 0.01$ and $\varphi_5 = 0.293604$, $\mathrm{p} < 0.01$) . This suggests that a 1% increase in foreign direct investment, financial development, institutional quality, and international tourist arrivals leads to an increase in real output growth by approximately 0.21%, 0.75%, 0.31%, and 0.29% over time, respectively. These results support previous research on the positive relationship between FDI and GDP growth (De Mello, 1997; Lipsey, 2002; Javorcik, 2004) and the importance of a robust financial system for FDI inflow and economic growth (Hermes and Lensink, 2003; Alfaro et al., 2004; Durham, 2004).

Furthermore, the estimated results depict a short-run negative statistically significant relationship between financial development and real output growth ($\varphi_3 = -0.039459, \mathrm{p} < 0.01$) implying that a 1% increase in financial development causes a short-run decrease in real output by 0.04%. This finding is consistent with Demetriades and Hussein (1996), who also found little support for financial development leading to growth in their study. Additionally, the dynamic adjustment coefficient is negative and significant ($Ec_t = -0.040987, \mathrm{p} < 0.01$), indicating a slow adjustment of the estimated model to its long-run equilibrium, at about 4% annually.

In conclusion, using the six categories of institutional variable indicators reported by WGI, we find that while institutional quality plays a positive role in real output growth over time, it exerts a negative impact on the models of foreign direct investment, financial development, and international tourist arrivals. This empirical result suggests that excessive institutional regulation stifles long-run FDI inflow, financial development, and international tourist arrivals.

Table 3: The PSS (1999) panel ARDL (1, 1, 1, 1, 1,) Estimation

Variable	Model 1	Model 2	Model 3	Model 4
Long Run Equation				
lnA	-	-0.008692	0.035218***	0.216965***
lnB	-0.782121***	-	0.254757*	0.746193***
lnC	0.502269***	0.008320	-	0.293604***
D	-0.496662***	-0.206198***	-0.190937**	0.310216**
lnE	2.062233***	0.116136	0.271202**	-

Short Run Equation				
Ec_t	-1.036118***	-0.385104***	-0.349786***	-0.040987***
ΔlnA	-	-0.026544	-0.073730	-0.002567
ΔlnB	3.656488	-	-0.091979	-0.039459***
ΔlnC	5.039808	-0.709050**	-	0.132952
ΔD	-2.216851	0.017036	-0.020715	-0.010385
ΔlnE	8.228817	3.205889	1.213628	-
k	-37.35192***	0.363351	2.269758***	0.528445***
AIC	2.633750	-0.582930	-1.540434	-4.650049
SC	3.918744	0.530732	-0.426772	-3.536387
$H-Q$	3.155939	-0.130366	-1.087870	-4.197485
$Log-LL$	-119.0950	91.63926	156.7495	368.2033

Note: Significance levels are denoted by ***, **, and *, indicating significance at 1%, 5%, and 10%, respectively. AIC stands for Akaike Information Criterion; SC represents the Schwarz Criterion, and H-Q denotes Hannan-Quinn Criteria. Log-LL refers to Log-Likelihood.

4.2. Short-run Country-wise Estimation Results

Table 4 presents the empirical results of the cross-sectional short-run country-wise regression. In Model 1, the coefficients reveal the level of equilibrium adjustment persistence across countries. Algeria demonstrates the highest persistence at 95%, followed by Israel at 78%, Sudan at 77%, and Jordan at 59%. Conversely, Lebanon, Kuwait, Tunisia, and Egypt exhibit prolonged disequilibrium, with percentages exceeding 100%.

The country-wise analysis indicates a positive relationship between financial development and institutional quality with FDI in Lebanon ($\beta_2 = 1.213863, \mathrm{p} < 0.01; \beta_4 = 0.425620, \mathrm{p} < 0.01$), Sudan ($\beta_2 = 0.424299, \mathrm{p} < 0.01; \beta_4 = 0.248118, \mathrm{p} < 0.01$) and Tunisia ($\beta_2 = 0.937771, \mathrm{p} < 0.01; \beta_4 = 0.977954, \mathrm{p} < 0.01$). This aligns with the findings of Kat et al. (2001) and Alfaro et al. (2004), emphasizing the positive relationship between FDI and institutional quality, as well as financial development. Consequently, a 1% increase in financial development and institutional quality in the short run leads to FDI increases in these countries.

Moreover, there exists a statistically significant negative relationship between international tourist arrivals and FDI in Lebanon ($\beta_3 = -0.269710, \mathrm{p} < 0.01$) and Sudan ($\beta_3 = -0.123614, \mathrm{p} < 0.01$), along with an inverse nexus between real output growth and FDI in Sudan $\beta_5 = -5.000710, \mathrm{p} < 0.01$). However, the findings of Fauzel (2018) suggest a beneficial relationship in the long run. Additionally, an increase in real output leads to a decrease in FDI in Sudan in the short run. In Model 2, where financial development is the dependent variable, the system adjusts monotonically to equilibrium, with Kuwait adjusting the fastest and Algeria lagging behind.

Further analysis in Model 2 reveals a negative relationship between output growth and financial development in Israel ($\gamma_3 = -0.872896, \mathrm{p} < 0{,}05$), indicating that a 1% increase in economic output results in a decrease in financial development by 0.87%. This finding is consistent with Herzer (2010) for some developing countries.

Additionally, international tourist arrivals demonstrate a negative association with financial development in Algeria$\gamma_2 = -0.443307, \mathrm{p} < 0.01$) and Egypt ($\gamma_2$ =-0.316052, p< 0.01), and a positive relationship in Israel ($\gamma_2 = 0.148107, \mathrm{p} < 0.01$) and Sudan ($\gamma_2 = 0.235286, \mathrm{p} < 0.01$). This suggests that an increase in international tourist arrivals decreases financial development in Algeria and Egypt while increasing it in Israel and Sudan.

Moreover, institutional quality and FDI exhibit a positive impact on financial development in several countries, including Algeria, Egypt, Israel, Jordan, Kuwait, and Sudan. This aligns with the findings of Kutan et al. (2017) and emphasizes the significance of institutional quality and FDI growth for financial development.

In Model 3, endogenized on international tourist arrivals, Jordan and Tunisia adjust more rapidly toward long-run equilibrium compared to other countries. Real output estimates relate positively with international tourist arrivals in Israel and Kuwait. However, Lebanon, Egypt, Algeria, and Sudan adjust gradually, while Kuwait lags behind.

The institutional quality variable demonstrates a significant positive nexus with international tourist arrivals in Algeria, Kuwait, and Lebanon, while moving in the opposite direction in Israel, Jordan, and Tunisia. Additionally, financial development interacts negatively with international tourist arrivals in Algeria, Egypt, Jordan, Lebanon, and Tunisia, while showing a positive relationship in Israel and Kuwait. These findings are consistent with Kumar and Kumar (2013), Kumar (2014), and Katircioglu et al. (2017).

Finally, in Model 4, endogenized on real output growth, FDI has a varied impact across countries, with positive effects observed in Algeria and Lebanon, and negative effects in Egypt, Israel, Jordan, Kuwait, and Tunisia. Institutional quality shows significant positive coefficients in Algeria, Egypt, Israel, and Lebanon, while being negative in Jordan, Kuwait, and Tunisia. International tourist arrivals positively impact real output growth in all countries except Algeria. These findings underscore the importance of considering country-specific dynamics when formulating policy measures.

Table 4: Country-Wise Estimation

MODEL 1	**Algeria**	**Egypt**	**Iran**	**Jordan**	**Kuwait**	**Lebanon**	**Sudan**	**Tunisia**
Ec_t	-0.946025***	-1.164013***	-0.784104***	-0.585849***	-1.237124***	-1.634522***	-0.771761***	-1.165543***
ΔlnB	-2.193468	23.40643	-1.680723	0.766535	6.377203	1.213863***	0.424299***	0.937771***
ΔlnC	30.34029	11.02510	0.840179	-1.157816	0.720031	-0.269710***	-0.123614***	-1.056000
ΔD	-1.142099	4.799637	0.984392*	0.109275	-24.13770	0.425620***	0.248118***	0.977954**
ΔlnE	-62.39831	135.4604	0.380941	14.69887	-42.15437	-0.783135	-5.000710*	25.62681
k	-35.18677	-50.04604	-26.26084	-18.91234	-50.64296	-51.06339	-26.54643	-40.15655
MODEL 2	**Algeria**	**Egypt**	**Iran**	**Jordan**	**Kuwait**	**Lebanon**	**Sudan**	**Tunisia**
Ec_t	-0.119586***	-0.001429	-0.494348***	-0.484339***	-0.682592***	3.350741	-0.344763***	-4.304514
ΔlnC	-0.443307***	-0.316052***	0.148107***	0.004708	-1.493479	-2.202656	0.235286***	-1.605006
ΔlnE	-3.466197	1.146695	-0.872896**	2.281294	-0.113431	28.86624	-0.077342	-2.117247
ΔD	0.143825***	0.040163**	0.102814***	-0.006254	0.530765***	-1.109656	0.219277***	0.215354
ΔlnA	0.002677***	0.001873***	0.027735***	0.021684***	0.006954***	-0.530988	0.167338***	0.090375
k	0.118785	-0.077162***	1.022159	0.794813	1.250154	-6.380885	-0.444818	6.623764
MODEL 3	**Algeria**	**Egypt**	**Iran**	**Jordan**	**Kuwait**	**Lebanon**	**Sudan**	**Tunisia**
Ec_t	-0.305900***	-0.341561***	-0.230264***	-0.750625***	0.051428***	-0.425807***	-0.197070***	-0.598493***
ΔlnE	-2.930096	2.554118	3.902119*	-0.314330	0.617625***	1.592100	0.587290	3.700198
ΔlnA	0.002121***	0.000290***	0.000380	-0.050996***	0.002062***	-0.117073***	-0.439893***	0.013268***
ΔD	0.164565***	0.027521	-0.305405***	-0.140829***	0.104987***	0.294716***	-0.321365***	0.010094
ΔlnB	-0.214255***	-1.819707***	1.808169***	-0.494786***	0.022301***	-0.143456***	0.289962	-0.184058***
k	1.918693	2.274316	1.444375*	5.260723	-0.294567	2.339475	0.902986	4.312058
MODEL 4	**Algeria**	**Egypt**	**Iran**	**Jordan**	**Kuwait**	**Lebanon**	**Sudan**	**Tunisia**
Ec_t	0.003295***	-0.010036***	-0.069364***	-0.078360***	0.001264***	-0.035150***	-0.020578***	-0.118970***
ΔlnA	0.000308***	-0.001177***	-0.012720***	-0.00009*	-0.000991***	0.001434*	0.000648	-0.008132***
ΔlnB	-0.053940***	-0.005113***	-0.082148***	0.010707***	-0.079037***	-0.014712***	-0.004839	-0.086589***
ΔD	0.043336***	0.012334***	0.034150***	-0.006234***	-0.141426***	0.014087***	-0.001440	-0.037888***
ΔlnC	-0.017950***	0.002870***	0.055283***	0.031106***	0.849469***	0.088467***	0.028754***	0.025615***
k	-0.015981**	0.188478***	0.900676**	0.927007***	-0.061540*	0.469751**	0.365787	1.453384***

Note: Significance levels are denoted by ***, **, and *, indicating significance at 1%, 5%, and 10%.

4.3. Panel Granger causality

Panel Granger causality testing is conducted within a bivariate framework represented by the following equations:

$$q_{it} = \beta_{0i} + \beta_{1i} q_{i,t-1} + \cdots + \beta_{ki} q_{i,t-k} + \gamma_{1,i} g_{i,t-1} + \cdots + \gamma_{k,i} g_{i,t-k} + \varepsilon_{it} \quad (5)$$

$$g_{it} = \beta_{0.i} + \beta_i g_{i.t-1} + \cdots + \beta_{k.i} g_{i,t-k} + \gamma_{1,i} q_{i,t-1} + \cdots + \gamma_{k,i} g_{i,t-k} + \varepsilon_{it} \quad (6)$$

Here, the panel's time dimension is denoted by t, and the cross-sectional dimension by i. Following the approach of Dumitrescu-Hurlin (2012), the coefficients of the cross-sectional regression are allowed to differ across the sample, indicated by:

$$\beta_{0,i} \neq \beta_{o,j} \beta_{1,i} \neq \beta_{1,j} \ldots . \beta_{1,i} \neq \beta_{1,j} \neq \beta_{1,i}; \forall_{i,j}$$

$$\gamma_{1,i} \neq \gamma_{i,j} \ldots . \gamma_{1,i} \neq \gamma_{1,j} \forall_{i,j}$$

Thus, employing the standard cross-sectional causality regression, the test is conducted using the \(\bar{z} \) statistic with a normal distribution.

The results of the causality test are detailed in Table 5. The findings reveal four significant uni-directional causalities: from FDI to real output growth ($p < 0.01$), international tourist arrivals to financial development ($p < 0.01$), institutional quality governance to international tourist arrivals ($p < 0.01$), and real output growth to institutional quality ($p < 0.05$). In each of these cases of Granger causality, the historical behavior of the respective variable reliably predicts the future trajectory of the other variable in the equation. However, the null hypothesis cannot be rejected in the remaining cases examined.

Thus, it is evident that institutional quality plays a pivotal role in the model of international tourist arrivals and real output growth for the MENA-8 countries studied, as also noted by Buchanan et al. (2012). The evidence suggests that as economies achieve long-term economic growth and attract a larger number of international tourists, the significance of institutional quality becomes increasingly prominent.

Table 5: Pairwise Dumitrescu Hurlin Panel Causality Tests

Null Hypothesis:	W-Stat.	Zbar-Stat.	Prob.
lnB does not homogeneously cause lnA	1.42139	-0.94525	0.3445
lnA does not homogeneously cause lnB	2.90926	0.35866	0.7198
lnC does not homogeneously cause lnA	4.24994	1.53357	0.1251
lnA does not homogeneously cause lnC	2.71776	0.19084	0.8487
D does not homogeneously cause lnA	1.66013	-0.73603	0.4617
lnA does not homogeneously cause D	1.83255	-0.58492	0.5586
lnE does not homogeneously cause lnA	2.49840	-0.00140	0.9989
lnA does not homogeneously cause lnE	5.07661**	2.25802	0.0239
lnC does not homogeneously cause lnB	5.87692***	2.95939	0.0031
lnB does not homogeneously cause lnC	3.86640	1.19745	0.2311
D does not homogeneously cause lnB	3.75195	1.09716	0.2726
lnB does not homogeneously cause D	3.34533	0.74081	0.4588
lnE does not homogeneously cause lnB	4.26179	1.54395	0.1226
lnB does not homogeneously cause lnE	1.71646	-0.68666	0.4923
D does not homogeneously cause lnC	9.05230***	5.74215	9.E-09
lnC does not homogeneously cause D	2.75553	0.22393	0.8228
lnE does not homogeneously cause lnC	2.70099	0.17614	0.8602
lnC does not homogeneously cause lnE	2.96910	0.41110	0.6810
lnE does not homogeneously cause D	5.19193**	2.35909	0.0183
D does not homogeneously cause lnE	3.51021	0.88531	0.3760

Note**:** ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

5. Conclusions

This study utilized a novel panel ARDL estimation approach to explore the dynamic relationships among foreign direct investment (FDI) inflows, financial development, tourism development, and institutional quality in selected MENA countries from 2002 to 2018. The research aimed to assess the significance of institutional quality within these interlinked dynamics and examine its impact on the variables under scrutiny.

The empirical results from the long-run models revealed that institutional quality variables exerted a negative influence on FDI inflows, financial development, and international tourist arrivals in the selected MENA countries. However, in the model of real GDP, institutional quality contributed positively to long-term economic output growth.

In the short run, the findings indicated that financial development negatively affected real output growth, while international tourist arrivals had adverse effects on financial development. Moreover, institutional quality

negatively impacted international tourist arrivals.

The short-run, country-wise cross-sectional regression results demonstrated that institutional quality exhibited a positive association in the models of international tourist arrivals, FDI inflows, real GDP, and financial development. Additionally, financial development showed positive impacts in the models of FDI inflows, international tourist arrivals, and real GDP. Furthermore, FDI inflows demonstrated positive effects in the models of financial development, international tourist arrivals, and real GDP. The Dumitrescu-Hurlin (2012) panel Granger causality tests confirmed one-way causality in four different cases, emphasizing the significant role of institutional quality in the models of international tourist arrivals and real output growth.

5.1. Policy Implications

The policy implications of these findings underscore the critical importance for national policymakers to prioritize sustainable governance of institutional quality. This emphasis is vital for fostering FDI inflows and international tourist arrivals while deepening financial development and driving economic growth. Furthermore, the cross-country variations emphasize the need for tailored, country-specific policies to maximize effectiveness.

By enhancing financial development, national policymakers can ease capital inflows and improve access to capital in their domestic economies. This is achieved through the presence of foreign corporations, which drive needed capital toward investment in domestic projects and local infrastructure, consequently promoting economic ventures and long-run financial development. Additionally, FDI policies can spur advancements in management and technical know-how, increasing domestic competitiveness, innovation, and productivity in various countries. As a result, the spillover effect on the financial sector can enhance the growth and development of the financial system, expanding financial development more generally. Moreover, the respective countries analyzed are more likely to achieve potent regulatory financial policies and frameworks that support the development of the financial system through transparent reporting of financial matters, thereby attracting more foreign capital and contributing to national growth.

Furthermore, by prioritizing FDI policies, the economic integration of the countries with the rest of the world can open up the domestic market to global financial capital. This has the potential to promote greater stabilization, efficiency, and liquidity in the domestic financial market, thereby deepening the financial development of the countries. Subsequently, financial stabilization in the domestic economy is further enhanced by the risk-mitigating effects of FDI, diminishing the reliance on volatile domestic capital to promote growth and thus spreading funding risks over various channels. Nonetheless, the overdependence on FDI can concentrate economic and financial power in global corporations and investors, potentially compromising the gains of financial development and creating adverse financial vulnerabilities in the system.

Considering the FDI-international tourism nexus, the infrastructural growth in a country due to FDI inflows contributes to national income growth and infrastructural improvement. This, in turn, attracts more international tourists, making the country a destination of choice. Furthermore, as tourism-related services and infrastructure develop, significant revenue flows from international tourism can be realized. This has the added advantage of promoting the expansion of the country's domestic market, facilitating both cultural and global integration. Subsequently, as international tourism growth deepens, opportunities for employment generation in related sectors grow exponentially. Consequently, domestic disposable income is enhanced, promoting the growth of national tourism. Hence, national policymakers should prudently craft policies to mitigate the uncertainties that reliance on FDI could cause for the tourism sector, ensuring that the development of the national tourism sector is not hindered. Lastly, promoting positive regulatory and policy frameworks to spur the FDI-tourism positive effects is recommended.

Promoting sound institutional governance is crucial for maximizing the positive effect of FDI on economic growth. Equally, the absorptive capacity of the economy is significant in attracting FDI. Strengthening the FDI-economic growth relationship will enhance real investment levels in the respective countries, boosting production and technical advancement through positive diffusion from foreign firms. Over time, these positive effects are likely to increase innovation and competitiveness in host economies. Additionally, as the FDI-economic growth path is enhanced, the sectoral contribution of FDI to economic growth will stimulate value addition in critical sectors of the economy, spreading linkages with the rest of the world. FDI-economic growth policies should focus on ensuring stability in macroeconomic policies to prevent external shocks and vulnerabilities related to FDI inflows. Therefore, economic managers should carefully strengthen policies to create a conducive investment climate that attracts significantly higher FDI inflows, promoting real economic growth.

5.2. Insight on Policy Practicality

This section evaluates the practicality of the study's recommended policies and their alignment with current realities in selected MENA countries: Algeria, Egypt, Israel, Jordan, Kuwait, Lebanon, Sudan, and Tunisia. The reported results are significant for specific policy assessments in each country for several reasons. For instance, in the long run, institutional quality is found to have a negative impact on FDI, financial development, and international tourist arrivals but a positive effect on GDP. Addressing the long-term adverse effects of institutional quality on FDI, financial development, and international tourist arrivals is essential for each country.

Policymakers and industry stakeholders must understand the dynamic interactions of these key variables to achieve desired outcomes. Consequently, future long-term economic policies in the region must be carefully tailored to yield positive results by strengthening institutional quality.

Practically, this means encouraging institutional accountability, a stable political system, effective governance, quality regulation, corruption control, and adherence to legal provisions. Achieving these goals is fundamental to future outcomes. Strengthened institutional quality is more likely to attract significant FDI inflows, deepen financial sector development, and increase inbound foreign tourists.

As long-term results show that positive shocks to institutional quality improve economic growth, long-term policies that holistically address institutional quality indicators will ensure sustained economic growth and development, especially for the countries examined

Despite the positive impact of institutional quality on GDP, its negative impact on FDI, financial development, and international tourist arrivals highlights the need for judicious resource allocation to strengthen key components of institutional quality that impede growth. Misallocation of resources can harm long-term sustainable economic growth, leading to inefficiency, corruption, and ineffective governance.

Recently, countries in the region have taken concrete measures to control corruption and enhance efficiency, thus improving overall institutional quality. Adequate regulatory adjustments are needed to identify and block inefficiencies in institutional policies, fostering a more prosperous business environment conducive to FDI inflows.

Practical policy measures to improve long-term factors such as accountability, political stability, government effectiveness, regulatory quality, corruption control, and rule of law (Kaufman et al., 2010) can help build credible positive perceptions and trust, both domestically and abroad. Given the region's volatility and conflict, these measures can significantly boost economic output growth. Individually, countries can enhance their economic growth sustainably. Conversely, mismanagement, corrupt institutional setups, and instability would lead to adverse economic shocks.

The practicality of the study's findings is relevant for the region's economic growth policy framework, including foreign trade and investment policies and global competitiveness. As global economic trends shift expectations and reset national economic policies, the short-run and long-run findings of this study are relevant for future plans and strategic paths to achieving optimal economic growth, augmented by rapid FDI inflows, tourism growth, and enhanced institutional quality indicators.

Ultimately, the implications of this study should help shape and inform decisions and policies both regionally and nationally, ensuring that actionable policies are based on sound empirical evidence, responsive to current economic challenges, and adaptive for long-term growth sustainability.

6. Limitations/suggestions for future study

The current study focuses on analyzing the pre-pandemic relationship between foreign investment and institutional quality, alongside tourism growth and financial development. The empirical evidence derived from the study covariates pertains to the period preceding the recent global pandemic. However, it did not analyze the disruptive effect of the pandemic shock on the countries studied. Therefore, future studies should incorporate this effect into the functional specification to better understand the disruptive power of such exogenous shocks in the models. Consequently, future research must expand the dataset used in the current study to effectively capture both the pandemic and post-pandemic periods.

Furthermore, the results reported in the current study heavily rely on the empirical methods adopted within the first generation of cointegration analysis. Future studies could dynamically employ more recent second-generation cointegration techniques to analyze cross-sectional dependency in the model using different sets of statistical tests. Additionally, given that the findings in the current study are influenced by the countries sampled, future research may consider varying the country sets with related variable mixes to further explore the dynamic interconnectedness of the covariates and shed more light on their partial effects in empirical models.

It is important to note that the policy implications drawn from the findings in the current study are based on the methodological approach employed. Therefore, caution is advised when generalizing these implications to other contexts. Finally, while the limitations of the current study are acknowledged, the results reported are empirically plausible within the applied methodological framework**.**

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