

Does Governance in MENA Countries Attract Migrants' Remittances?

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ABSTRACT

Over the past years, international remittance of migrants to the Middle East and North Africa (MENA) has increased dramatically and become more resilient external financing sources than other capital flows, such as FDI, portfolio investment, and foreign aid. Nevertheless, the magnitude of remittances flowing into that region is less than expected. The research, hence, attempts to analyze the impact of governance on the volume of remittances in receiving economies in MENA from 1996 until 2020 by using the pooled mean group, mean group, and dynamic fixed effect methods. The results show that poor governance in MENA stimulates migrants to remit more to support and assist their relatives with their deplorable living conditions. Consequently, policymakers in the MENA region must strive to identify the underlying causes of weak governance and provide applicable solutions, as migrants' remittances cannot entirely eradicate the damage caused by the poor quality of governance. They also should provide an attractive environment for international remittances by applying policies pushing migrants to remit more, such as accelerating administrative procedures for business and increasing the interest rate on foreign currency deposits.

Keywords: Governance; Migrants' Remittances; Middle East and North Africa; Pooled Mean Group.

INTRODUCTION

Millions of individuals migrate and work outside their native countries to seek employment and better living standards. The number of people living outside their home country was around 280.6 million in 2020, increasing yearly [1]. This continuous increase in the number of migrants has resulted in massive inflows of money and goods that they send back to their home

countries, known as international workers' remittances. Thus, according to the world bank definition, international remittances refer to money and goods sent by migrants to their families and relatives back in their birth countries.

In the past few decades, remittances to labor-exporting economies have become one of the largest and most significant international financial flows. Based on world development indicators (2022), the volume of remittances that pass through official channels increased sharply from about \$97.6 billion in 1996 to nearly \$651 billion in 2020 worldwide. Indeed, most of these private transfers remit to developing economies and have become a major source of external financing for those nations.

In fact, the Middle East and North Africa (MENA) rank first globally in terms of remittances received as a percentage of GDP, as indicated in appendix (1). The inflow of remittances to MENA countries has become one of the primary and most vital international flows of financial resources in recent years. The magnitude of migrant remittances to MENA has increased dramatically from \$97.6 billion in 1996 to \$651 billion in 2020. Based on the world bank data (2022), Egypt is the largest recipient of remittances in MENA, attracting about \$29.6 billion in 2020, followed by Morocco at \$7.4 billion and Lebanon at \$6.6 billion. Besides, the volume of migrant remittances to that region has already exceeded major external sources of financing, such as portfolio capital and official development assistance, and competes in size with the foreign direct investment that supports growth, technological change, and the manufacturing sector in the host countries [2]. According to the world bank data (2022), the inflow of remittances is a relatively stable and less volatile source of foreign financing than other financial flows, especially in periods of downturns and economic crises. It also contributed significantly to GDP beyond official development assistance and FDI.

Although the MENA region is among the largest regions in terms of the number of migrants, the size of migrant remittances flowing into that region is less than expected. For instance, based on United Nations data, the number of migrants from the Middle East and North Africa was about 30.6 million citizens in 2020, which is more than three times the number of migrants from Latin America and the Caribbean of about 9.1 million. However, inward remittance to MENA was about \$59 billion in the same year, which is much lower than remittances to Latin America and the Caribbean of about \$105 billion. Based on the above, there is a need to enhance the volume of international remittances to the MENA region, as remittances contribute to economic development by increasing the disposable income of recipients, enhancing human capabilities, and financing productive enterprises [3].

According to theoretical and empirical evidence, governance in an economy may play a vital role in attracting more remittances. Good governance and better institutional quality labor-sending nations may stimulate migrants to remit more, as political stability, accountability and voice, control of corruption, government effectiveness, the rule of law, and quality of regulation affect the business environment positively. Good governance, hence, encourages migrants to send more funds to invest in their native countries and vice versa [4-7]. This association confirms the migrant's decision to remit was motivated by self-interest. However, numerous studies, such as Ajide and Alimi [8], Ajide and Raheem [9], Guetat and Sridi [10], have confirmed that high economic and political risks, pervasive corruption, bureaucracy, and weak institutions in remittance-receiving countries may push migrants to send more funds back home to

compensate and assist their families in poor living conditions. This relationship supports the altruistic motivation of the migrant's decision to remit.

Based on the foregoing, this research aims to investigate the impact of governance on the magnitude of migrant remittances in the MENA region. This paper, therefore, makes a step forward by investigating the effect of governance aspects in MENA countries on the volume of migrant remittances. Several studies examined the impact of political instability in receiving countries on remittance flows, such as Ajide and Alimi [8], Guetat and Sridi [10], Agbegha [11], Jewel [12], while a few research investigated the effect of governance on inward remittance to labor-exporting economies, such as Lartey and Mengova [5], Ajide and Raheem [9]. Nevertheless, there is a dearth of research that investigated this relationship in the MENA region, which is what our study aims to achieve. Moreover, this paper's results will help policymakers see the impact of governance on the migrant remittance flows and make appropriate policies to increase the magnitude of remittances to the countries of that region.

The remainder of this paper is organized as follows. Section two provides the theoretical foundation of this research, while section three demonstrates empirical studies investigating the relationship between governance and migrants' remittance. Section four exhibits the model specification, data and variables description, and the estimation technique. The fifth section presents the analysis of our findings and discussions, whereas the final section summarizes our article and proposes some recommendations for policy implications.

THEORETICAL FOUNDATION

Theoretical underpinnings about remittances and their causes started in the 1980s, especially in the wake of the groundbreaking study on remittance motives conducted by Lucas and Stark [13]. According to Lucas and Stark [13], migrants may send money home for various reasons, including pure altruism, pure self-interest, and tempered altruism or enlightened self-interest. Rapoport and Docquier [14], Stark and Robert [15] indicated that pure altruism means that migrants care for those left behind in their home countries by transferring their remittances. In the same vein, Funkhouser [16] proposed in his behavioral model of remittances that altruistic remittances surge when migrants have higher income potential and their receiving families have lower incomes, their families are in the country of birth, intend to return to their home country again, the number of migrants from the same family is few, and have strong ties with their families and relatives in their home country.

On the other hand, the transfer may be motivated by pure self-interest, as migrants may send remittances to their home countries to invest, acquire assets, and seek an inheritance [4, 13]. The purpose of the remit to the migrant's original country may be investment, and the business environment in the home country plays a vital role in decision-making and the volume of transfers [17]. Migrants could transfer to acquire assets in their origin country and ensure their subsequent maintenance, such as buying a house or/and car or/and investing in the children they leave behind. The motive of the transfers may also be the aspiration to inherit.

Besides, Lucas and Stark [13] called the third motive for remit tempered altruism or enlightened self-interest. Migrants may transfer remittances to repay their previous tacit loans from their families (such as education expenses and the cost of their emigration) or because it could be part of a migration-based risk reduction strategy at the household level.

Based on the foregoing, altruistic transfer rises during crises, catastrophes, wars, and the receiving economy's unpredictability because it acts as a type of insurance against any unfavorable events in the sender's home country. This tries to explain why remittances tend to be more stable during periods of political unrest than other financial flows, while remittances driven by self-interest, which is used mainly for investment purposes, increase in times of political stability [18-21]. A few empirical research studies have been done, which we will discuss in the following section, to validate or refute the aforementioned theoretical presumptions.

LITERATURE REVIEW

Although little empirical work on the influence of governance on migrants' remittances to their countries of origin, these studies showed mixed results. For instance, The study of Singh [7], for instance, investigated the effect of governance indicators on remittance inflows for various countries in the world over the period 1984 – 2016. The results of this study revealed that government stability, less internal conflict, and more democracy in migrants' countries of birth drastically raise their remittances. Moreover, Lartey and Mengova [5], which utilized fixed effects and generalized method of moments (GMM) estimators, demonstrated that good governance in a country attracts more remittances.

Likewise, Abbas, Masood [22] used the GMM method to examine the impact of macroeconomic, financial, and political factors on remittances to Pakistan from 1972 to 2012. Lower internal conflicts and more democracy, based on their results, encourage migrants to transfer more remittances home. Yoshino, Taghizadeh-Hesary [23] also examined the determinants of migrants' remittances in 12 Asia and Pacific middle-income countries over the period (2002 – 2015). They discovered that political stability and better governance lead to more inward remittances. Similarly, Jewel [12] looked into the relationship between political stability, FDI, and remittance inflows in Bangladesh from 1996 to 2013 utilizing a vector error correction model (VECM) and found that countries with a more stable political system received more remittances. In a similar study, Singh, Haacker [6] found that political stability in an economy is positively related to inflows of remittance. Besides, Aydas, Metin-Ozcan [4] stated that decreased political stability during the military regimes reduced inward remittances to Turkey.

Numerous empirical studies, on the other side, have found that remittances from migrants to their home countries increase in the aftermath of natural disasters, crises, conflicts, and political uncertainty [24-26]. For instance, a study by McCracken, Ramlogan-Dobson [27] of 27 LAC countries from 1998 until 2007 discovered that remittances in an economy rise during crises, instability, and disasters as migrants have the propensity to feel compassion for their affected families in their home nations.

Another study by Koczan [28] analyzed the factors affecting remittances sent from Germany to the ex-Yugoslavia. This research summarized that despite the collapse of formal remittance channels, the tendency to send remittances increased during wars and political or economic crises. Also, Ajide and Raheem [9] utilized the GMM method to explore the role of governance in attracting remittance inflows to the ECOWAS Sub-region from 1996 to 2013. They found that economic and political governance indicators slow down the region's ongoing remittances. In the same scenario, Ajide and Alimi [8], using fixed effects and GMM approach, examined the

impact of political instability on inward remittances for twenty-two SSA nations from 1994 until 2015. They proved a positive effect of regime instability on remittance flows to this region. Another work done by Guetat and Sridi [10] examined the impact of several political, financial, and economic risk indicators on remittances flowing to the MENA countries over the period 1984 - 2011. They revealed that political, financial, and economic risks positively affect migrants' remittances. Last but not least, Mustafa and Ali [29] used pooled OLS, fixed effects, and random effects to analyze the macroeconomic determinants of worker remittances in Pakistan during the period 2002–2013. He found that remittances of migrants to their countries of origin are not affected by political instability, suggesting an altruistic motive for remittances.

RESEARCH METHODOLOGY

Model Specification

According to theoretical underpinnings and the empirical research of [5, 7-10, 18, 22, 30], among many others, we specify our functional model as follows:

$$REMIT = f(GOV, INTR, RGDPC, FD) \quad (1)$$

From the equation above, REMIT denotes remittance inflows, GOV is governance, INTR is the interest rate on deposits, RGDPC represents real GDP per capita, and FD is financial development. Therefore, the change in remittances to the MENA region is brought about by the change in governance indicators, the interest rate on deposits, real GDP per capita, and financial development. We would also include the lagged value of remittances in the model as one of the regressors due to the persistence of remittances [7, 9]. Hence, the model specification for this model should take the following form;

$$REMIT_{it} = \beta_0 + \beta_1 REMIT_{it-1} + \beta_2 GOV_{it} + \beta_3 INTR_{it} + \beta_4 RGDPC_{it} + \beta_5 FD_{it} + \mu_{it} \quad (2)$$

In equation (2), $REMIT_{it-1}$ expresses the lag of remittances in country i at time t , μ is the error term, and β_0 is the intercept while $(\beta_1: \beta_5)$ are slope coefficients.

Description of Variables

We utilized, in this research, annual data from 1996 to 2020 for eight MENA countries, namely; Algeria, Egypt, Iran, Jordan, Lebanon, Morocco, Turkey, and Yemen. The research's scope was primarily restricted to the countries that were concerned with migrant' remittances and had available data.

In this paper, inward remittance is a dependent variable measured by received remittances in current US dollars, not as a percentage of GDP. Due to this study aims to measure the impact of governance on the volume of remittances received, thus any change in the ratio of remittances to GDP could arise either from a change in the volume of remittances or a change in GDP, or both, making it difficult to isolate the true impact of remittances [31].

Following the suggestions of the previous literature on governance and remittances [5, 7-10], this paper uses governance, interest rate, real GDP per capita, and financial development as regressors. Our main variable of this study is governance, measured by the average of the six governance indicators (accountability and voice, political stability, the effectiveness of government, quality of regulation, rules of law, and corruption control) proposed by Kraay, Zoido-Lobaton [32]. These dimensions give a country's score in standard normal distribution

units ranging from -2.5 (bad) to +2.5 (good). The expected sign of the governance coefficient cannot be determined a priori but is left to be determined by the data used in the study. When good governance attracts more remittance to the region, the coefficient is positive. This means that better governance encourages migrants to divert more for investment in their native country, supporting the self-interest motive [4-7]. Otherwise, the coefficient is negative when bad governance increases the volume of remittances. This association may explain that poor governance pushes migrants to raise their remittances to support their families consumption in their countries of origin, keeping the altruistic motive [8-10].

Furthermore, the interest rate in this paper is measured by the deposit interest rate paid by commercial or similar banks. The expected sign of the interest rate coefficient is positive, as an increase in the interest rate motivates migrants to send remittances to native countries as deposits to benefit from their returns [8, 10]. The real gross domestic product per capita (US dollar) measures economic development, as economic development and investment opportunities stimulate migrants to remit more with the aspiration to inherit or invest or to return home [13, 18, 29]. Hence, the expected sign for the coefficient of this variable is positive. Finally, financial development is measured by domestic credit provided to the private sector as a percentage of GDP. Financial development can make remitting easier and cheaper, encouraging an increase in the magnitude of funds sent through official channels. The expected sign, thus, is positive following previous studies such as [7-10, 30]. Data of all variables are sourced from world development indicators (WDI) and worldwide governance indicators (WGI), all of the World Bank databases.

Econometric Method

This research utilized pooled mean group (PMG), mean group (MG), and dynamic fixed effect (DFE) techniques, which were developed by Pesaran and Smith [33], Pesaran, Shin [34]. T must always be greater than N in these techniques, or T and N are significantly larger (i.e., > 20). Furthermore, the Hausman test should be conducted to choose the best estimator. The Hausman test accepts the null hypothesis since it is more than 0.05, meaning the PMG estimator is more appropriate in this study than MG and DFE because its estimates are consistent and efficient.

The PMG approach can generate dynamic heterogeneous consistent estimates of the long-run parameters that are asymptotically normal, regardless of whether the underlying independent variables are integrated at the level or first difference. This method can also predict the dynamic short-run and long-run relation between the variables under consideration. Besides that, the PMG considers all countries to be heterogeneous, placing it between the MG, which assumes that slopes and intercepts vary across countries, and the dynamic fixed effect (DFE), which constrains regression coefficients but allows intercepts to vary across nations. This estimator has also proven efficient even with a small sample size, as the standard t- and F-tests are still valid on the long-run parameters from the ECMs.

Lastly, the PMG approach does not constrain that all parameters have to be the same across countries, unlike the generalized method-of-moment (GMM) and the DFE estimates that are more likely to result in inconsistent and misleading coefficients in the long run, mainly when time (T) is relatively large [34].

PRESENTATION AND INTERPRETATION OF ESTIMATED RESULTS

Pre-Estimation Tests

Before estimating our model, the summary of descriptive statistics and correlation matrix of the variables are displayed in Tables 1 and 2, respectively.

Table 1. Descriptive Statistics Summary

Variable	Obs.	Mean	Std. Dev.	Min	Max
<i>REMIT</i>	200	3975.606	4738.503	99	29602.9
<i>GOV</i>	200	-0.6089	0.450439	-2	0.1
<i>INTR</i>	200	11.3982	12.89791	1.2	80.75
<i>RGDPC</i>	200	4534.812	2371.986	1144.42	12038.63
<i>FD</i>	200	45.89475	29.91847	3.01	106.57

Note: REMIT= remittances received, GOV=governance, INTR=deposit interest rates, RGDPC=real GDP per capita, and FD= financial development. Obs. =observations, Std. Dev. = standard deviation, Min = minimum values, and Max = maximum values of the variables.

Table 2. Correlation Matrix

Correlation	<i>REMIT</i>	<i>GOV</i>	<i>INTR</i>	<i>RGDPC</i>	<i>FD</i>
<i>REMIT</i>	1.0000				
<i>GOV</i>	-0.0360	1.0000			
<i>INTR</i>	-0.0787	0.0274	1.0000		
<i>RGDPC</i>	-0.0809	0.2602	0.2528	1.0000	
<i>FD</i>	0.1251	0.5086	-0.2981	0.3939	1.0000

Also, a panel unit root test was conducted for all the series of our dataset. The outcomes of Dickey and Fuller [35], Levin, Lin [36], PERRON [37], Im, Pesaran [38], panel unit root test without and with trend are both displayed in Table 3. The results reveal that all the variables are integrated at the first order I(1).

Table 3: Panel Unit Root Tests

Variable	Statistics	Level I(0)		1 st difference I(1)		Integration order, I(d)
		Constant	Constant & Trend	Constant	Constant & Trend	
<i>REM</i>	LLC t	0.62162	-1.57029*	-9.60133***	-8.60418***	I(1)
	IPS W-stat	1.39281	-0.59459	-9.40722***	-8.52479***	I(1)
	ADF- Fisher	12.8285	26.3109**	114.122***	99.4504***	I(1)
	PP - Fisher	10.8815	9.26910	118.819***	134.735***	I(1)
<i>GOV</i>	LLC t	0.55553	-0.20313	-8.11489***	--7.25632***	I(1)
	IPS W-stat	0.87399	-0.59276	-7.61988***	-6.32889***	I(1)
	ADF- Fisher	15.9971	23.1056	83.0118***	64.9324***	I(1)
	PP - Fisher	9.70919	12.3798	118.049***	146.709***	I(1)

<i>INTR</i>	LLC t	-9.15022***	-2.96471***	-5.99646***	-5.96288***	I(0)
	IPS W-stat	-6.95567***	-0.63510	-7.35687***	-7.68110***	I(1)
	ADF- Fisher	77.7740***	30.1231*	82.3923***	79.4326***	I(1)
	PP - Fisher	72.0217***	40.1418***	90.7444***	122.778***	I(0)
<i>RGDPC</i>	LLC t	-1.17861	1.40272	-0.89256*	-1.16877*	I(1)
	IPS W-stat	1.47826	4.20703	-2.70237***	-2.64652***	I(1)
	ADF- Fisher	10.6750	10.5211	46.8241***	37.0947***	I(1)
	PP - Fisher	7.53349	2.89459	44.1811***	38.7094***	I(1)
<i>FD</i>	LLC t	0.66219	-2.43426***	-7.48184***	-6.62979***	I(1)
	IPS W-stat	1.77189	-1.84247**	-6.87161***	-5.37332***	I(1)
	ADF- Fisher	11.8879	27.0284**	73.3691***	54.5311***	I(1)
	PP - Fisher	13.1301	11.1300	74.0385***	80.0003***	I(1)

Note: ***, **, and * represent significance at the 1%, 5%, and 10% levels, respectively. Automatic lag length selection based on the Schwarz Information Criterion (SIC). Values reported are t-statistic, and the null hypothesis is nonstationarity.

Moreover, Table 4 below indicates the selection of optimal lag length. The selection criteria choose the optimal lag length according to SBIC results because it is considered a consistent model selector, especially in small samples [39, 40]. Consequently, the third model (ARDL 2,1,1,1,1) was found to be the most acceptable model because the value of SBIC for that model was the least among the other three models.

Table 4. Outcomes of Lag Length Selection

Model	Specification	AIC	HQIC	SBIC
1	ARDL(1, 1, 1, 1, 1)	-0.042556	0.325699	0.866013
2	ARDL(1, 2, 2, 2, 2)	-0.240141	0.354732	1.227547
3*	ARDL(2, 1, 1, 1, 1)*	-0.237342	0.187567*	0.811007*
4	ARDL(2, 2, 2, 2, 2)	-0.389422	0.262105	1.218046

Table 5. Findings of the Pedroni Cointegration Test

Pedroni Residual Cointegration Test	Panel Statistics	Group Statistics
Panel v-Statistic	0.152664	-----
Panel rho-Statistic	-0.798248	0.683736
Panel PP-Statistic	-4.420342***	-4.097918***
Panel ADF-Statistic	-4.623667***	-5.294203***

Note: ***, **, and * represent significance at the 1%, 5%, and 10% levels, respectively. Intercept and trend were used in the Pedroni test. The null hypothesis is no cointegration—automatic lag length selection based on SIC with a max lag of 4.

Additionally, the Pedroni panel cointegration test showed that four of the seven statistics are significant at 1%, implying a long-term association between the magnitude of migrant remittances and their regressors, as indicated in Table 5.

Empirical Results of the ARDL Model

In this section, we move ahead to long-run estimations using the PMG, MG, and DFE methods. Table 6 reports the PMG, MG, and DFE estimation results of both long and short-run coefficients of the association between remittances with governance, interest rate, GDP per capita, and financial development, together with the convergence parameter (ECM). According to the Hausman test, the PMG is the consistent and efficient estimator for all models. Thus, our interpretation of results focuses only on the outcomes of PMG estimation.

Table 6. Empirical Results of PMG, MG, and DFE Estimations

Regressand: Flows of Migrant Remittance (<i>REMIT</i>)			
	ARDL (2, 1, 1, 1, 1)		
	<i>PMG</i>	<i>MG</i>	<i>DFE</i>
Long Run Estimation			
<i>GOV</i>	-2.173321*** (0.1760368)	0.1719149 (1.553755)	-2.033411** (0.7900063)
<i>INTR</i>	0.0765117*** (0.0277891)	0.2889558 (0.2035037)	-0.0006333 (0.0255536)
<i>RGDPC</i>	0.0005263*** (0.0001026)	0.0010285** (0.0004775)	-0.00000986 (0.0002523)
<i>FD</i>	0.0012781 (0.0017148)	0.0384549 (0.0298983)	-0.0081521 (0.0136454)
<i>ECT</i>	-0.289382** (0.1190089)	-0.728416*** (0.1562938)	-0.208529*** (0.0577017)
Short Run Estimation			
<i>Constant</i>	1.302474* (0.7433009)	3.471152** (1.47987)	1.51386*** (0.4297412)
Δ <i>REMIT</i> (-1)	0.0051357 (0.164896)	0.1484432 (0.1935932)	-0.319502*** (0.0731651)
Δ <i>GOV</i>	-0.2239043 (0.4438078)	-0.4502929 (0.6329602)	0.0951445 (0.45072)
Δ <i>INTR</i>	0.039249 (0.0254962)	0.0621217* (0.0344573)	0.0065468 (0.0076772)
Δ <i>RGDPC</i>	0.0001825 (0.00015)	0.000012 (0.0001627)	0.0001239 (0.0001485)
Δ <i>FD</i>	0.0229318 (0.0191449)	0.0123461 (0.0174078)	-0.0050408 (0.0076274)
Hausman Test	1.47 [0.6890]	1.04 [0.9034]	
No. of countries	8		
No. of observations	184		
Log-Likelihood	85.35335		

Note: ***, **, and * symbolize significance at the 1%, 5%, and 10% levels, respectively. Standard errors are in parentheses. Δ denotes the respective lag variable.

The regression results of governance with remittance inflows and other variables, such as interest rate on deposits, GDP per capita, and financial development, are shown in Table 3. According to the PMG findings, the sign of the long-run adjustment coefficient (ECT) is as expected and significant at a level of 5%, indicating the dynamism of remittance adjustment from the short run to the long run across MENA countries.

Furthermore, the governance coefficient (-2.17) is inversely associated with remittance received at a 1% significant level, consistent with previous studies, such as [8, 10, 41]. Inward remittance is one of the ways that developing nations can lessen economic crises brought on by weak governance and unstable political systems.

Therefore, this result indicates that poor governance resulting from political instability, bureaucracy, corruption, and ineffectiveness of government encourages migrants from MENA to remit more to their countries of origin to support their families and compensate for the poor living conditions they experience.

Additionally, the interest rate coefficient demonstrates a significant positive correlation between remittances and interest rates at a 1% level, which means that for every 1% increase in interest rates, there is a corresponding 0.08 increase in migrant remittances to MENA. We can interpret this by the fact that high-interest rates on deposits in the countries of origin of migrants stimulate them to send more remittances to take advantage of these high returns. This finding is consistent with previous studies, such as Ajide and Alimi [8], Guetat and Sridi [10].

Similarly, at a 1% level, the real GDP per capita coefficient shows a significant positive relationship with remittances. This indicates that a 1 unit increase in real GDP per capita results in a 0.0005% increase in the magnitude of remittances flowing to the MENA region.

The rise of income per capita is an indicator of economic well-being and investment opportunities in the receiving country, thereby encouraging migrants to transfer more with the aspiration to inherit or to invest or with the intent to return home. This result confirmed the theoretical foundation of Lucas and Stark [13] and is also in line with other empirical studies, such as Akçay and Karasoy [18], Mustafa and Ali [29].

Financial development also reveals a positive but insignificant relationship with the size of migrant remittances in MENA. The positive relationship implies that the development of MENA's financial markets reduces fees and time for sending remittances, which raises the magnitude of transferred remittances through official channels [9, 26, 30, 42]. Lastly, none of the variables is significant in the short run, signifying that none of the regressors impact inward remittances to MENA.

Robustness Test

This paper also utilizes the Dynamic Ordinary Least Squares (DOLS) method to ensure the robustness and validation of our estimation results. The DOLS requires all variables to be integrated at the first order I(1) and have a cointegrating relationship, as in our study.

The DOLS long-run estimates confirm the results from the PMG model in Table 7. The outcomes

in Table 4 demonstrated that the governance coefficient (-1.98) negatively influences migrants' remittance in MENA at a 1% significance level.

Table 7. Empirical Results of Panel DOLS Long-Run Estimates

Regressand: Flows of Migrant Remittance (<i>REMIT</i>)	
Dynamic Ordinary Least Squares (DOLS)	
<i>GOV</i>	-1.977960*** (0.369285)
<i>INTR</i>	0.080973*** (0.016937)
<i>RGDPC</i>	0.000433*** (0.000142)
<i>FD</i>	-0.002403 (0.005445)
<i>R</i> ²	0.909907
<i>Adj. R</i> ²	0.806789
χ^2 Wald-Statistic	14.03176***
No. of countries	8
No. of observations	179

Note: *** signifies significance at a 1% level. We utilize the Newey-West fixed bandwidth and Bartlett kernel function to compute the long-run covariances. Standard errors are in parentheses.

In other words, when governance in MENA is poor, it pushes migrants to remit more to their home countries to help their families in the face of political instability, corruption, and other manifestations of poor governance. In this case, the altruistic motive is the main reason for migrants' remittances to the MENA region.

CONCLUSION, RECOMMENDATIONS, AND FUTURE RESEARCH

Over the past years, migrant remittance in MENA has been a relatively stable and more resilient external source of financing than other capital flows, such as FDI, portfolio investment, and foreign aid. Nevertheless, the magnitude of remittances flowing into that region is less than expected. The research, hence, attempts to analyze the impact of governance on the volume of remittances in receiving economies in MENA from 1996 until 2020 by using the PMG approach. The estimation outcomes reveal that migrants' remittance is negatively affected by governance indicators. This finding implies that political instability, bureaucracy, corruption, and government ineffectiveness encourage MENA migrants to send more money home to compensate and assist their families for their deplorable living conditions, which supports the altruistic motivation of the migrant's decision to remit. Moreover, the deposit interest rate and real GDP per capita positively and significantly impact migrants' remittance to the MENA region, whereas financial development shows a positive but insignificant relationship with the volume of inward remittances to MENA.

Policymakers in the Middle East and North Africa must actively seek to identify the root causes of weak governance indicators to provide appropriate solutions because migrants' remittances cannot entirely eliminate the damage caused by bad governance and instability. Also, they should work towards an attractive environment for international remittances by implementing policies that will encourage the flow of remittances to that region for saving and investment,

such as facilitating administrative procedures for business and raising the interest rate on foreign currency deposits. Moreover, governments of MENA countries should support the hospitality and good reception of migrants from the MENA to keep them in contact with their home countries and encourage them to return often. Finally, future studies may investigate these associations in other regions or countries to see if they will produce similar or different results. It may also use some governance indicators rather than the average of total governance indicators.

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