Remittances, Governance and Economic Growth: Empirical Evidence from MENA Region

Wadad Saad[1] & Hassan Ayoub[2]

[1] Doctoral School of Law, Political, Administrative and Economic Sciences, Lebanese University, Lebanon

[2] Faculty of Economics and Business Administration, Lebanese University, Lebanon

Correspondence: Wadad Saad, Doctoral School of Law, Political, Administrative and Economic Sciences, Lebanese University, Sin el Fil, Lebanon. Tel: 961-3-880-036. E-mail: wsaad96@hotmail.com and wsaad@ul.edu.lb

Abstract

In this study we examine the effects of remittances and governance on economic growth in ten MENA countries. We choose these countries because they have relatively stable political situations. Using annual data from the World Bank over the period 2002-2017, we estimate panel autoregressive distributed lag (ARDL) models due to the existence of mixed levels of integration among series involved in this study. Control variables such as gross capital formation, consumption per capita and openness among others are integrated in these models. A governance composite is computed using the 6 governance indicators from the world bank. These indicators are used individually in different ARDL models with their interactions with the remittances to explore their impact on economic growth. The findings indicate a negative impact of the remittance on economic growth in the quasi-totality of the models. However, while governance composite shows a positive impact on economic growth, taking into consideration the dimensions of governance leads to conflicting results.

Keywords: remittances, governance, economic growth, ARDL model, MENA countries

1. Introduction

Since 2004, the Development Committee of the World Bank and the IMF have emphasized the importance of remittances and their effects on the real economy. MENA countries are particularly affected by international emigration because of the substantial growth of remittances from their emigrants. Indeed, these transfers have been on an upward trend since 2011. They increased gradually from 1.43% of GDP in 2011, to reach 6.5% in 2017 (World Bank, 2018). This rate is among the highest in the world. The question is: do remittances contribute to economic growth in the MENA region? Our hypothesis is that good governance could promote the positive impact of remittances on economic growth.

This question is relevant in the context of those countries facing a deficit of foreign direct investment and savings, much of which is characterized by political instability, macroeconomic dysfunctions, insecurity, bureaucratic red tape and corruption. These structural problems may compromise the impact of these transfers on the economic growth of these countries. Despite the recognition of the role that these problems can play, very little researches, to our knowledge, dynamically assess the role of remittance interaction with governance in growth in the context of MENA countries. This spurs Catrinescu et al. (2009) to emphasize that governance was an element that was largely omitted in the literature.

From an economic development point of view, it is important to know whether remittances are used for consumption or channeled into investments. As a results, we can distinguish between productive and unproductive remittances. In the former, remittances are mainly spent on consumption with a small portion addressed to unproductive saving and investments, essentially in housing, land and jewelry (Chami, Fullenkamp, & Jahjah, 2003). The latter assumes a positive impact of remittances on economic growth since they enhance investments in physical and human capital (Edwards & Ureta, 2003).

Thus, remittances could be significantly correlated with other variables that, in turn, affect economic growth. As a result, it becomes useful to know the mechanisms by which remittances interact with other explanatory variables to affect economic growth.

Our study aims to analyze the role of these transfers in economic growth by referring specifically to MENA countries and by integrating a variable of interaction between transfers and governance in an ARDL panel model. In particular, we wish to test whether generalized good governance is an important condition for a more favorable impact of transfers on economic growth in the MENA countries.

This paper is organized as follows: section 2 is devoted to the review of the literature on the impact of remittances on economic growth. Section 3 presents the economic growth and remittances in the countries involved in this study. As to section 4, it displays the methodology adopted in this research. With respect to section 5, it presents the obtained results. Finally, the last section concludes this study.

2. Literature Review

Two approaches have been developed to analyze the transfer of funds. The first concerns the study of their impact (Note 1). While the second highlights the analysis of their determinants. This second line of research has been divided into microeconomic and macroeconomic approaches (Docquier & Rapoport, 2003). The microeconomic approach focuses on the socio-demographic characteristics (Note 2) of migrants and their families (Agarwal & Horowitz, 2002; Germenji, Beka, & Sarris 2001; Gubert, 2002; Dorantes & Pozo, 2006). While the second approach takes into account the macroeconomic variables of both host and home countries (El-Sakka & McNabb, 1999; Faini, 1994; Glytsos, 1997; Higgins, Hysenbegasi, & Pozo, 2004; Niimi et al., 2010, 2012; Singh, 2012; Yuni, Omeje, & Asogwa, 2013).

Some contributions have focused on the positive effect of transfers on economic growth through several variables: the reinforcement of the health service (Adams, 2004), the increase in the investment rate (Woodruff & Zenteno, 2007; Giuliano & Ruiz-Arranz, 2009), the enhancement of the financial development (Stark & Lucas, 1988; Lucas, 2005), the accumulation of human capital ((Edwards & Ureta, 2003; Rapoport & Docquier, 2005; Calero et al., 2009; Combes & Ebeke, 2011), the improvement in total factor productivity (Leon-Ledesma & Piracha, 2004; Chami et al., 2003; Abdih et al., 2012), poverty reduction (Akobeng, 2016; Majeed, 2015; Adams Jr &Cuecuecha, 2013).

While others studies have emphasized the negative impact of remittances on economic growth of the recipient country through the following variables: the increase in the external deficit and the disequilibrium balance of payments (Kireyev, 2006; Lueth & Ruiz-Arranz, 2007). The reduction of labor supply (Chami et al., 2008; El-Hamma, 2017), the decline in exports and employment (World Bank, 2006), the creation of moral hazards (Gubert, 2002), the increase in the inflation rate (Khan & Islam, 2013), the reduction of the country's competitiveness (Dutch syndrome) (Amuedo-Dorantes, Pozo, & Vargas-Silva, 2010; Bourdet & Falck, 2006; Acosta, Lartey, & Mandelman, 2009).

It is clear that these contributions have analysed the positive and negative direct effects of remittances on economic growth. However, it is important to investigate the impact of the interaction of remittances with other variables on economic growth such as governance in all its aspects. Certain studies have considered the interaction of remittances with other variables that include: financial development (Giuliano & Ruiz-Arranz, 2009), institutional quality (Abdith et al., 2008, Singh, Haacker, & Lee, 2009), human capital, political institutions, and financial development, Fajnzylber et al. (2008), good governance (Catrinescu et al., 2008; Giuliano & Ruiz-Arranz, 2009), financial development and institutional quality (Bjuggren et al., 2010), banking efficiency (Bettin & Zazzaro, 2012), stability of the economic growth regime (De Haas, 2008, Adams & Klobodu, 2016).

These studies are based on different contexts, and use various methodologies. these researches do not allow drawing definitive conclusions, and are subjected to debates at both the methodological and technical levels. Therefore, the literature on the impact of remittances seems inconclusive, covering quite varied, complex (sometimes negative or positive or conditional positive or no significant effect) results. De Haas (2005) stipulates that some of these findings may result from the omission of certain relevant variables.

3. Remittances and Economic Growth in the Sample Countries

Figure 1 shows that the remittances to Egypt are the highest in our sample. It reaches $23.68 billion in 2017. Egypt is assumed to be one of the major exporters of migrant workers during that period. It is followed by Lebanon, Morocco and Jordan with 7.77, 6.82 and 4.43 US$ billions respectively. The remittances flows into Sudan are the lowest among the study sample with $0.22 billion.
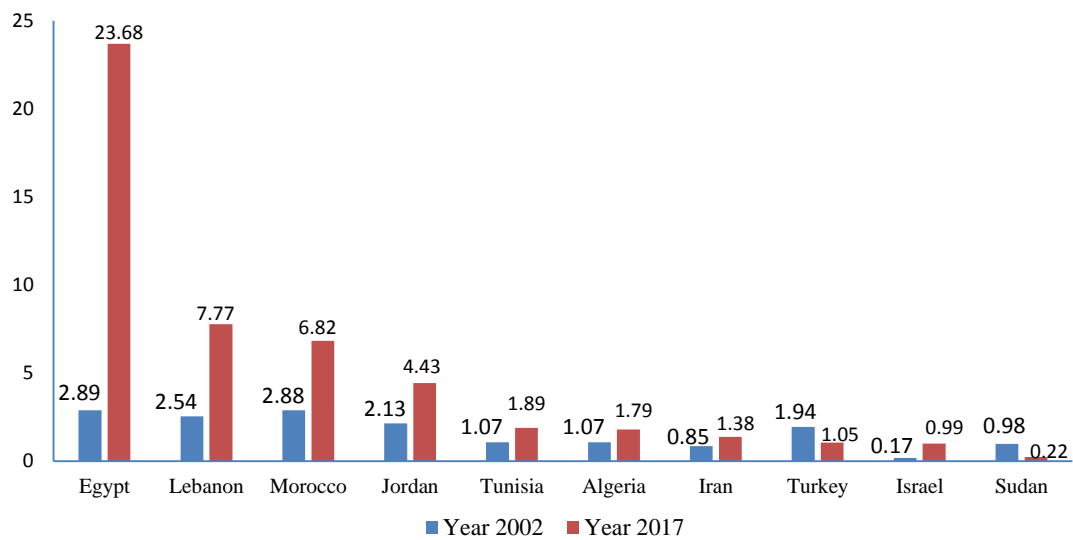
Figure 1. Remittances to countries sample, in billions of USD

However, this order change with the personal remittances as percentage of GDP, received in 2017 (see figure 2). Lebanon registered the highest percentage (13.21%), followed by Jordan (11.06%), Egypt (10.06%), Morocco (6.22%) and Tunisia (4.74%). The lowest percentage is shown in Turkey with a percentage of 0.12%. Comparing the remittances to the countries sample between the years 2002 and 2017 we notice that they have increased in values in 2017, except for Turkey and Sudan.
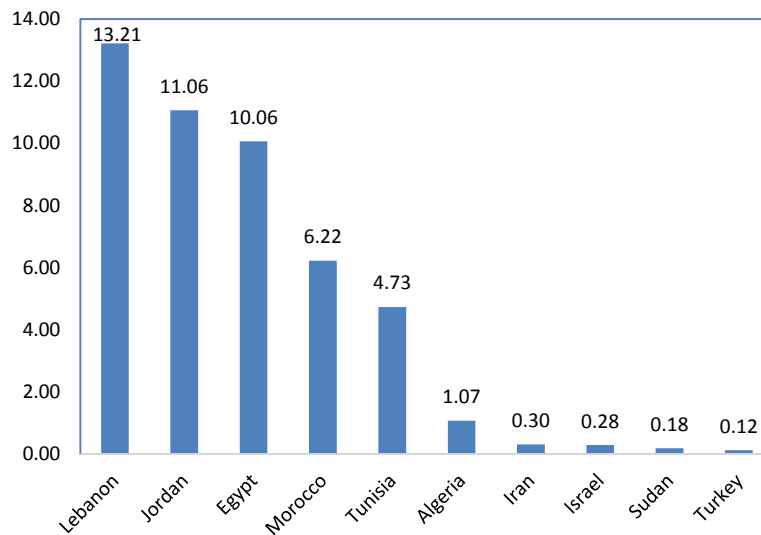

Figure 2. Personal remittances, received (% of GDP), 2017

Figure 3 indicates that, in 2017, Israel has the highest real GDP per capita ($34134,81), followed by Turkey ($14936.40), Lebanon ($7102,64) and Iran ($6910.57). The remaining countries have a real GDP per capita lower than $5000 to reach $1959.15 in Sudan.
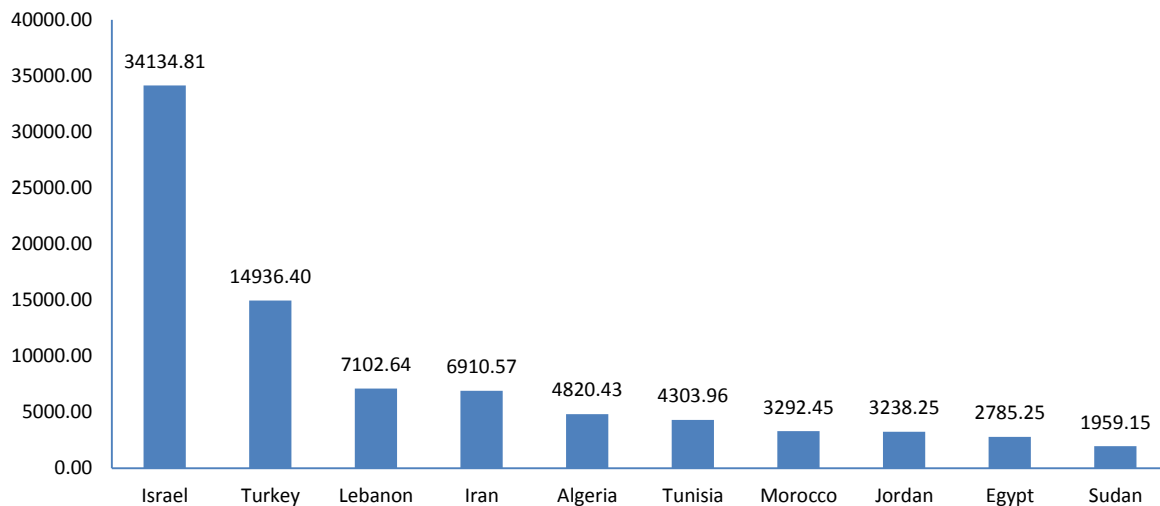
Figure 3. GDP per capita (constant 2010 US$, 2017) for MENA countries under study

4. Methodology and Data Description

4.1 Data Description

In order to explore the relationship between Remittances, governance and economic growth in MENA countries, 10 countries are considered as follows: Egypt, Lebanon, Iran, Israel, Tunisia, Jordan, morocco, Algeria, Sudan, and Turkey. We tried to avoid countries with major political problems such as Syria, Yamen and Libya among others.

Annual data from 2002 to 2017 are taken from the world bank. Economic growth is measured by real GDP per capita and considered as dependant variable. The set of independent variables involved in this study consists of:

- The investment, expressed as gross capital formation to GDP, is expected to have a positive impact on GDP per capita

- Population growth, should affect economic growth negatively (Solow, 1956).

- Financial development is proxied by credits to private sector in percentage of GDP. Recent theoretical and empirical researches indicate the presence of a positive impact of financial development on economic growth (Levine, 1997). The financial sector size is mainly determined by the size of an economy. Hence, the financial development is enhanced by the economic growth.

- Openness which stimulates economic growth by facilitating the exchange of goods and services.

- Final government expenditures as percentage of GDP.

- Consumption per capita is assumed to have a positive impact on economic growth.

- Remittances as percent of GDP, this variable could be affected by two main factors that encourage migrants to send more money to their countries: helping their families in periods of recession or for investment motivation.

- Inflation which is expressed by the GDP deflator (base year 2010)

- Governance which is considered as a composite and individual indicators. In order to capture wide information about the governance, we consider the worldwide governance indicators presented by the world bank. These indicators capture six key dimensions of governance: control of corruption, political stability, regulatory quality, rule of law, voice and accountability, and governance effectiveness. Hence, we construct an aggregate indicator of governance as a composite variable that represents the overall features of governance. The resulting variable combines the six abovementioned indicators of governance in the literature. Principal component technique is used to get the required composite.

All variables are expressed in logarithmic form, except for Openness and governance indicators. GDP per capita and consumption per capita are taken in constant 2010 USD.

Descriptive statistics for the variables involved in this study are presented in table 1. The results show that the

GDP per capita mean is around 7349.21$, with a maximum of $34134.81. However, the MENA zone undergo from great output volatility with a standard deviation of 8203.93$. As to remittances as percentage of GDP, the mean is 5.76% over the sample period with a maximum of 26.68%. Remittances reveal also a large volatility with a standard deviation of 6.78%. We notice that the standard deviation in the abovementioned variables is largely greater than the mean over the period 2002-2017.

Table 1. Descriptive statistics of the variables involved in the study (without logarithmic form)

Variable	Mean	Median	Maximum	Minimum	Standard Deviation	Observations
GDP per Capita	7349.212	4270.007	34134.81	1074.639	8203.926	160
Gross capital formation (% of GDP)	27.3149	26.3614	50.7091	13.6432	8.066	158
Consumption per capita	4415.841	2439.103	19809.44	792.401	4688.724	155
CPI (GDP deflator)	116.6647	100	449.1082	28.9616	61.4883	160
Population growth	2.0389	1.7642	7.061	0.5997	1.2306	160
Openness	0.6911	0.6508	1.4754	0.191	0.274	159
Remittances (% of GDP)	5.7593	4.237	26.6828	0.0606	6.7812	159
Government expenditure (% of GDP)	15.6572	14.8034	26.8475	4.5793	4.5638	159
Credits to private sector (% of GDP)	51.0894	57.5894	105.4751	4.5776	26.3711	158

4.2 Model and Estimation Methodology

The first step to do before estimating the appropriate model is to test the stationarity of the variables involved in this study. Several tests are used for this purpose such as Levin, Lin and Chu (2002) and Im, Pesaran and Shin (2003). These tests are widely used in panel studies. The former depends on pooled data and the latter is computed as an average of ADF statistics. We employ also Breitung (2000, 2005), ADF and PP unit root tests for this purpose.

The presence of variables that are stationary at level and others at first, difference leads to the use of the autoregressive distributed lag panel model (ARDL panel model). This technique has the advantage of estimating both short run and long run relationships with error correction coefficient.

To investigate the relationship between remittances and economic growth, we use an autoregressive distributed lag model, ARDL($p, q, q, q, q, ..., q$), that is written as follows:

$$y_{it} = \sum_{j=1}^{p} \alpha_i y_{it-j} + \sum_{j=0}^{q} \beta_{ij} X_{i,t-j} + \gamma_i + \varepsilon_{it} \tag{1}$$

where y_{it} is the dependent variable and X_{it} is a $k \times 1$ vector of regressors, α_i is the coefficient of the lagged dependent variable called scalars, β_{ij} are $k \times 1$ coefficient vectors, γ_i is the country specific fixed effect, ($i = 1, 2, \cdots, N; t = 1, 2, \cdots, T$), p, q are optimal lag orders, ε_{it} is the error term. matrix composed of the control variables above-mentioned, γ_i is the country specific effect and ε_{it} is the error term.

The reparametrized ARDL($p, q, q, q, q, ..., q$) error correction model is written as follows:

$$\Delta y_{it} = \theta_i \left(y_{i,t-1} - \delta'_i X_{i,t-1} \right) + \sum_{j=1}^{p-1} \mu_{ij} \Delta y_{it-j} + \sum_{j=0}^{q-1} \beta'_{ij} X_{i,t-j} + \gamma_i + \varepsilon_{it} \tag{2}$$

θ_i is the speed of adjustment coefficient (expected to be negative and significant), δ'_i is the vector of the long run relationships. $ECT_{t-1} = \left(y_{i,t-1} - \delta'_i X_{i,t-1} \right)$ is the error correction term resulting from the long run equilibrium relationship and μ_{ij}, β'_{ij} are the short run dynamic coefficients (see Guo, 2017).

5. Empirical Results

To investigate the effect of remittances and governance on economic growth we need first to test the stationarity of the series involved in this study. Table 2 reports the results obtained for the different variables. Several unit root tests are used to examine whether the variables are stationary at level or at first difference. The rule of thumb in assuming a stationary series consists in having the majority of tests assuring this stationarity.

The results in table 2 show that some variables are stationary at level (GDP per capita, population growth, Gross capital formation, remittances as % of GDP, governance composite and control of corruption) while the remaining variables are stationary at first difference (consumption per capita, credits for private sector, openness, CPI, government expenditures, political stability, regulatory quality, governance effectiveness, rule of law and voice and accountability).

The presence of variables integrated of order 0, I(0), and others integrated of order 1, I(1), justifies the use of the panel autoregressive distributed lag model (panel ARDL). In this latter approach, unit root is applied to exclude

the possibility of I(2) variables (Pesaran et al., 2001). According to the results obtained in table 2 none of the variables is integrated of order 2, I(2). Thus, the use of the panel ARDL to estimate our model appears to be the suitable technique. Long run results are presented in table 3 with the force of adjustment that is supposed to be negative and statistically significant.

Table 2. Test of stationarity of the variables involved in this study

Variable	Test of stationarity at level				
	Null: Unit root (assumes common unit root process)		Null: Unit root (assumes individual unit root process)		
	Levin, Lin & Chu	Breitung	Im, Pesaran and Shin	ADF	PP
Ln(GDP per capita)	-6.1451***	-2.1247**	-2.2468**	43.1310***	20.4406
Ln(Gross Capital Formation as % of GDP)	-5.0033***	-0.7165	-2.0625**	34.0415**	22.2604
Ln(Consumption per Capita)	-0.0162	2.2099	0.8179	16.5528	8.3669
Ln(Population Growth)	-4.1333***	4.0754	-5.9873***	66.4210***	13.7280
Ln(Remittances as % of GDP)	-6.5997***	-0.0468	-3.9093***	52.7854***	34.6288**
Ln(Credits for private sector)	-0.7526	-5.2534***	-0.1478	27.6061	30.7046
Openness	-4.2454***	0.4272	-1.5982	28.1757	37.1698**
Ln(CPI)	-4.8669***	2.6218	-1.3614	32.6263**	28.0090
Governance Index	-2.3785***	0.8793	-1.8752**	38.6589***	42.3806***
Ln(Government expenditures as % of GDP)	-2.2569**	0.7710	0.0927	16.3784	24.8064
Political Stability	-1.9446**	0.9239	-1.2487	28.1050	27.2825
Regulatory Quality	-2.6576***	-0.2663	-0.7570	29.1049	32.7211**
Governance Effectiveness	-3.1622***	-1.7911**	-1.4409	29.3760	20.6269
Rule of Law	-2.5077***	0.6019	-1.1925	29.6875	38.0428
Voice and Accountability	-1.8618**	2.3625	-0.0740	20.9451	17.9974
Control of Corruption	-5.4913***	-0.2847	-2.8432***	37.9208***	51.0349***
	Test of stationarity in the first level				
	Null: Unit root (assumes common unit root process)		Null: Unit root (assumes individual unit root process)		
	Levin, Lin & Chu	Breitung	Im, Pesaran and Shin	ADF	PP
Ln(GDP per capita)					
Ln(Gross Capital Formation as % of GDP)					
Ln(Consumption per Capita)	-3.4339***	-1.0341	-2.0799***	39.7146***	52.5076***
Ln(Population Growth)					
Ln(Remittances as % of GDP)					
Ln(Credits for private sector)	-6.5674***	-3.2173***	-3.8346***	51.4706***	65.8004***
Openness	-6.5181***	-1.7640**	-3.6154***	49.9181***	90.2366***
Ln(CPI)	-4.8630***	0.6134	-3.3283***	46.4556***	68.0758***
Governance Index					
Ln(Government expenditures as % of GDP)	-7.0289***	-3.6306***	-3.9029***	49.2552***	57.8373***
Political Stability	-9.3521***	-4.6966***	-6.9229***	75.9840***	87.8667***
Regulatory Quality	-7.9981***	-3.0954***	-5.3420***	62.7196***	96.7814***
Governance Effectiveness	-8.5967***	-5.3027***	-6.4326***	72.8865***	91.0101***
Rule of Law	-8.3703***	-4.3002***	-8.0592***	83.3894***	86.4678***
Voice and Accountability	-10.3598***	-6.0472***	-6.5249***	73.3091***	91.7052***
Control of Corruption					

***, and ** indicate significance at 1% and 5% respectively.

In this study eight ARDL (1, 1, 1, 1, 1, 1, 1) models are estimated. The dependent variable in these models is real GDP per capita. The regressors are divided into two categories. The first one is composed of variables that appear in all models (gross capital formation, consumption per capita, remittances as % of GDP, credits for private sector and openness). The second one is composed of CPI, government expenditures, governance composite, governance indicators and the interactions of these two latter with the remittances. Variables of the

second category appear in some models .

The long run results with the coefficients of the ECT are reported in table 3. The results reveal that the coefficient of the error correction term is negative and statistically significant in all specifications. This indicates that these models converge towards equilibrium. The speed of adjustment in these models is between 11% and 26%. In all models, gross capital formation, consumption per capita and openness have positive and statistically significant impact on GDP per capita (except for model 7 where gross capital formation is not significant). This indicates that higher level of these variables is associated with higher level in economic growth. However, population growth reveals a negative and significant effect on economic growth in all models. In addition, model 1 indicates that public spending has a negative effect on the growth rate of MENA countries. This is in line with the studies done by Jongwanich (2007) and Acosta et al. (2009). It validates the idea that significant government intervention in the economy affects economic growth (Fer & Henrekson, 2001). Moreover, the estimations show that high inflation is associated with a lower growth rate. As to remittances and governance, they appear to have a negative effect on economic growth. These findings are not in line with the literature, which stipulates a positive effect of remittances on economic growth (Klobodu et al., 2016, Imai et al., 2014, Nyamongo et al., 2012). This suggests that remittances to countries in the MENA region are intended to finance the daily needs of households while compromising their work search or engagement in the implementation of risky investment projects (Ebeke, 2012). This result corroborates that resulting from the work of Chami et al. (2005).

These observations legitimize our questioning about the nature of the relationship that can exist between remittances and economic growth. As a result, it is necessary to examine whether governance and its dimensions influence the impact of remittances on economic growth in MENA countries. We investigate whether there is a relationship of substitutability or complementarity between remittances and the six dimensions of governance in promoting economic growth in MENA countries.

It is assumed that remittances and financial development have a complementary effect in stimulating GDP per capita growth. This suggests that remittances have a positive effect on economic growth only if the national banking system is sufficiently developed. In the light of model 1, we get a reverse statement. Similar results were obtained by Bettin and Zazzaro (2012) and Nyamongo et al. (2012).

In model 2, the governance composite is integrated in the model with its interaction with remittances. The relationship between these two variables and economic growth is statistically significant at 1%. Transfers negatively affect economic growth while governance is positively related to economic growth. This means that good governance could reduce the negative impact of remittances on economic growth. However, the effect of the interaction term is weak (0.0073) in this specification. Thus, remittances and good governance are assumed to be complements in stimulating economic growth.

In all models, except for models 7 and 8, remittances have a negative and significant effect on GDP per capita. This can be explained by the possibility that remittances may reduce the work effort of beneficiary households since receiving households opt to live of migrants' transfers rather than by working. (El Hamma, 2017; Chami et al., 2005), accelerate inflation (Khan & Islam, 2013) and appreciate the real exchange rate accompanied by a reallocation of resources from the commercial to non-commercial sector (Amuedo-Dorantes et al., 2010; Bourdet & Falck, 2006; Acosta et al., 2009). Moreover, it is important to see whether remittances are spent on consumption or are used for productive investments. The former assumption does not necessary affect positively the economic growth, especially when a country is import-oriented. However, the latter assumption spurs the economic growth and plays a potential role on increasing the economic productivity.

If we consider the variables of interest represented by the remittances and their interaction with the governance composite and governance indicators we notice that in model 1 the results reveal a negative impact of remittances and governance composite on economic growth that is statistically significant at 1%.

In models from 3 to 8, the governance composite is substituted by individual governance indicators as well as the interaction of each indicator with the remittances. Hence, for each model, from 3 to 8, we use an indicator of governance and its interaction with remittances. This procedure will allow us to better assess which of these components are effective in conveying the effect of remittances to economic growth.

According to the results in table 3, the direct effect of governance variables is positive (with the exception of regulatory quality, voice of accountability and political stability). This suggests that countries in which the level of quality of governance is high register a higher growth rate than those where the level is low. This finding is consistent with the results of El-Hamma (2018) for MENA countries, Farooq et al. (2013) for Pakistan, Agostino et al. (2016) for African countries, Huang (2015) for Asia Pacific countries and Alam (2017) for a panel of 86 countries.

Table 3. Panel ARDL (1, 1, 1, 1, 1, 1, 1) long run results (dependent variable Real GDP per capita)

Variable	Model 1	Model 2	Model 3	Model 4
Ln(Gross Capital Formation as % of GDP)	0.2670***	0.1767***	0.2964***	0.2923***
Ln(Consumption per Capita)	1.1191***	1.0703***	0.9413***	0.9390***
Ln(Population Growth)	-0.4056***	-0.2568***	-0.0345***	-0.1298***
Ln(Remittances as % of GDP)	-0.0232***	-0.0774***	-0.1302***	-0.0752***
Ln(Credits for private sector)	0.0419**	-0.1423***	-0.0289***	-0.0574***
Openness	0.6024***	0.3293***	0.0829***	0.3946***
Ln(CPI)	-0.0783***	-0.0217*	0.0186*	0.0046
Governance composite	-0.0324***	0.0233**		
Ln(Government expenditures as % of GDP)	-0.4454***			
(Governance composite)*Ln(Remittances as % of GDP)		0.0073***		
Political Stability			0.0011	
(Political Stability)*Ln(Remittances as % of GDP)			-0.0188***	
Regulatory Quality				-0.0082***
(Regulatory Quality)*Ln(Remittances as % of GDP)				-0.1164***
Governance Effectiveness				
(Governance Effectiveness) *Ln(Remittances as % of GDP)				
Rule of Law				
(Rule of Law)*Ln(Remittances as % of GDP)				
Voice and Accountability				
(Voice and Accountability)* Ln(Remittances as % of GDP)				
Control of Corruption				
(Control of Corruption)*Ln(Remittances as % of GDP)				
ECT	-0.1082**	-0.1531**	-0.2577*	-0.1701***

Variable	Model 5	Model 6	Model 7	Model 8
Ln(Gross Capital Formation as % of GDP)	0.1274**	0.1419***	0.0505	0.1219***
Ln(Consumption per Capita)	1.1042***	1.0568***	1.1700***	0.9699***
Ln(Population Growth)	-0.1129***	-0.2683***	-0.0409***	-0.3905***
Ln(Remittances as % of GDP)	-0.0370**	-0.1027***	-0.1149***	0.1394***
Ln(Credits for private sector)	-0.0471**	-0.0833***	-0.0963***	0.0215
Openness	0.0536	0.2449***	0.1887***	0.1217**
Ln(CPI)		0.0117	-0.2059***	
Governance composite				
Ln(Government expenditures as % of GDP)				
(Governance composite)*Ln(Remittances as % of GDP)				
Political Stability				
(Political Stability)*Ln(Remittances as % of GDP)				
Regulatory Quality				
(Regulatory Quality)*Ln(Remittances as % of GDP)				
Governance Effectiveness	0.1757***			
(Governance Effectiveness) *Ln(Remittances as % of GDP)	0.0418***			
Rule of Law		0.0619*		
(Rule of Law)*Ln(Remittances as % of GDP)		0.0171		
Voice and Accountability			-0.2187***	
(Voice and Accountability)* Ln(Remittances as % of GDP)			0.0299***	
Control of Corruption				-0.3765***
(Control of Corruption)*Ln(Remittances as % of GDP)				0.1396***
ECT	-0.1538**	-0.1904***	-0.1532*	-0.1521**

***, ** and * indicate significance at 1%, 5% and 10% respectively.

In models 3 and 4, the interaction between remittances and political stability, from one hand, and remittances and regulatory quality, on the other hand, have a negative impact on economic growth. This could be explained by the reduction of informal remittances that flow into the country easily in situation of political instability and weak regulations. MENA regions is known as a continuously unstable region. This political instability pushes remitters to send more money to their families for consumption purpose since this situation is usually accompanied by a high level of unemployment and high emigration rate of skilled and highly educated persons. Remittances come to compensate the monetary shortfalls resulting from these issues.

In models 5, 6 and 7 the interaction between remittances and each of governance effectiveness, rule of law and voice of accountability has a positive and statistically significant impact on economic growth. This is due to the transmission of migrant norms, behaviours and attitudes at the household level (non-monetary remittances). The reduced costs of transportation and communications allow migrants to remain in continued contact with their relatives in the country of origin and to participate in the social, economic and political life in both countries (at home and abroad). In this way, migrants could influence political and institutional processes in their country of origin (Burgess, 2012; Philips, 2012). This influence takes the name of social remittances that can be expressed as ideas, practices, identities and social capital that migrants internalise in the host country and remit to their countries of origin (levitt, 1998). However, Levitt states that good and bad practice can be transmitted but migrants who send monetary remittances are more efficient in influencing social behaviour of their family members.

In model 8, the control of corruption has a negative and statistically significant effect on economic growth. While the impact of the interaction between remittances and control of corruption on economic growth is positive and statistically significant at 1%. This can be explained by the fact that migrants who work in a country that is characterized by relatively high control of corruption, compared to the country of origin, may transfer good practice from the host to the home country (this is called value effect). However, the relatives of the migrants who receive the monetary remittances may have relatively larger financial resources and be more willing and able to pay a bribe, for instance, to public officials in order to get an accelerated and high –quality public service (monetary effect). In addition, remittance recipients may be a prime extortion target for corruption-prone public officials – again, because of the larger financial resources that people with migration connections are often associated with. Such monetary channels will, arguably, result in a detrimental impact of migration on the incidence of corruption.

The control of corruption in the context of the considered countries contributes to favoring the positive impact of transfers on economic growth. This result seems to validate the idea that administratively located corruption helps to stimulate economic growth while reducing rigidities (Aidt et al., 2008). In addition, it confirms the result of Wang and You (2012) according to which a number of countries very affected by corruption display exceptionally high growth rates, like China. On the other hand, when it is concentrated at the political level, it has a detrimental effect on growth since the resources that are diverted by the government reduce the well-being of the society (Leff, 1964). It seems that remittances are intended to finance the current consumption of beneficiary families in MENA countries. As a result, they contribute to compromising labor supply, productivity and the realization of investment projects.

MENA countries involved in this study are known to have high prevalence of corruption. As a result, the remittances in this sense has a positive and statistically significant effect on economic growth.

All in all, the use of the six governance indicators in the models 3-8, in term of their interaction with remittances, has resulted in different impacts on economic growth. Three of them show a positive impact on economic growth and the remaining three indicators reveal a negative impact. All the coefficients of these interactions are statistically significant. It can therefore be concluded that governance dimensions do not influence the relationship between transfers and growth in the same way. On the other hand, it is important to notice that in the MENA countries, the political situation as well as the regulatory quality consist in governance indicators that aggravate the negative impact of the transfer of funds on economic growth. In addition, it seems that corruption is more concentrated at the administrative level than the political one.

6. Conclusion

The effect of emigration on the country of origin is not limited to the money remittances only but also to the remittances of ideas, institutional arrangements, norms and attitudes. These intangibles are transmitted by emigrants through the correspondence, visits and return to home country. They exert remarkable influence and change on the development of the country of origin by spreading the behavioural norms and institutional arrangement absorbed and internalised in their attempts to prosper in the receiving country (Levitt, 2001). As a results, we can distinguish two aspects of the remittances: monetary and non-monetary (social, political or institutional remittances). These latter can be revealed in the control of corruption governance effectiveness, regulatory role and quality of law. This paper investigates whether remittances in its twofold aspects have an effect on economic growth.

Previous studies have shown conflicting results. These differences stem from the use of different empirical frameworks, from the presence of different institutional aspects and various structural features among countries under study.

Using eight panel ARDL models, this paper has investigated the relationship between GDP per capita and the following variables: remittances, credits for private sector, openness, consumption per capita, the interaction between remittance and a composite of governance. This later latter was substituted by the interaction between remittances and the 6 governance indicators. Ten MENA countries are considered to do this research and annual data are taken from 2002 to 2017. Thus, we estimated eight models to test the hypothesis that the effect of remittances on economic growth depends on the quality of governance.

The results indicate that remittances have globally negative impact on economic growth due the use of the transfer of funds mainly on the consumption. Moreover, the interaction between remittances and each of governance composite, governance effectiveness, rule of law, voice and accountability and control for corruption show a positive impact on economic growth. This implies that a higher level of institutional quality (enforcement of contracts, property rights, absence of corruption) could reassure migrants and recipient households about the situation in their country and therefore encourage their initiatives to invest, innovate contribute to economic activity. However, the interaction between remittances and political stability and regulatory quality appears to be negative. This finding stems from the fact that situations with political instability and poor regulatory quality encourage the transfers of funds in informal channels. The presence of political stability and enhanced regulatory quality could reduce these informal remittances remarkably. In addition, the propensity of migrants to remit (again, particularly through formal channels) may depend on the institutional, cultural, and informational gaps between migrants and the host country's financial system (Albareto & Mistrulli, 2011).

The findings of this study indicate that the remittances are mainly directed to consumption and since Lebanon is an import-oriented country, the economic growth is negatively affected by the remittances. Hence, encouraging the investment activities is a major step to enhance the economic growth. This could be realized by decreasing the interest rate and dispensing the starts ups from the taxes for a limited time. Moreover, it is very importance to enhance the governance in all countries under study since they suffer from bad governance in all its dimension. The obtained results revealed the positive impact of the governance composite on economic growth thereby divulges the importance of enhancing the indicators involved in the governance. This paper highlights an important issue for policymakers. The obtained results could help them to put appropriate strategies to booster relatively the economic growth and reduce the obstacles that deter the flow of remittances into the recipient countries.

Acknowledgments

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Notes

Note 1. In terms of impact, three main fields are explored: (1) the impact on income distribution, poverty reduction and individual well-being (2) the impact on the trade balance deficits and the balance of current operations (3) and the impact on the economy in general, by examining the effects on employment, productivity and above all economic growth.

Note 2. Income, level of education, marital status, age, sex, duration, costs of migration, spouse and wealth of migrants.

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