

**Foreign Capital Inflows and Economic Growth in the MENA Region:
Panel Evidence on FDI and Remittances, 2003–2023**Author: **Nicolas Al Fahel¹***Affiliation:*

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Abstract:

This study examines whether the two largest private external inflows reaching Middle East and North Africa (MENA) economies, foreign direct investment (FDI) and personal remittances, are associated with faster economic growth. Both flows are routinely described as engines of development, yet the evidence remains mixed, and few studies test them side by side while accounting for the region's exposure to common shocks such as oil-price swings, the Arab uprisings and the COVID-19 pandemic. Using World Development Indicators data for nine MENA economies over 2003–2023 (164 country-year observations in the baseline sample), I estimate pooled, country fixed-effects and two-way fixed-effects panel models with Driscoll–Kraay standard errors, which remain valid when countries are hit by the same shocks. In the preferred two-way model, a one-percentage-point increase in FDI inflows relative to GDP is associated with about 0.31 percentage points of additional real GDP growth ($p = .043$), while remittances show a smaller and weaker contemporaneous association (0.22, $p = .064$). When both inflows are lagged by one year, the remittance coefficient rises to 0.53 ($p = .004$), which suggests that remittances support growth with a delay. The FDI result keeps its sign but loses precision when Lebanon is excluded. The findings suggest that policymakers in the region, including in Lebanon, should treat FDI and diaspora remittances as complementary sources of financing, while recognizing the limits of a small-sample observational design.

Keywords:

Foreign Direct Investment, Remittances, Economic Growth, Panel Data, MENA, Lebanon

Introduction:

Most economies in the Middle East and North Africa depend heavily on money that comes from abroad. For the oil importers of the region, domestic savings are rarely enough to finance the investment they need, so foreign direct investment and the money sent home by workers abroad fill a large part of the gap. The oil exporters of the Gulf sit on the other side of the same relationship: they attract foreign investors into their non-oil sectors and, at the same time, host millions of migrant workers who send their earnings back to Egypt, Jordan, Lebanon and beyond.

Lebanon is the extreme case, and it is the reason I chose this topic. In the data used in this study, personal remittances averaged about 20 percent of Lebanese GDP between 2003 and 2023 and climbed above 30 percent after 2021, while FDI inflows fell from more than 14 percent of GDP in 2008 to around 3 percent. The collapse that started in 2019 was described by the World Bank as likely to rank among the three most severe economic crises worldwide since the mid-nineteenth century (World Bank, 2021). In such a setting, the question of whether foreign inflows actually translate into growth is not an academic one: for many Lebanese households and firms, these flows are what keeps economic activity going.

Economic theory gives a clear reason to expect a positive link. Foreign capital adds to domestic investment and, in the case of FDI, can bring technology and management know-how. The empirical record, however, is far less clear. Some studies find that FDI raises growth only under certain conditions, others find no robust effect once reverse causality is addressed, and the literature on remittances is split between those who see them as a source of development finance and those who see them mainly as compensation for bad times. Most studies on the MENA region also look at a single flow, rely on data that stop before 2011, or ignore the fact that countries in the region are hit by the same oil, political and health shocks at the same time. As a result, there is little recent evidence that compares FDI and remittances within one framework and covers the post-2019 period, including the Lebanese crisis and the COVID-19 pandemic.

This study addresses that gap by asking three research questions. First (RQ1), is a higher level of FDI inflows associated with faster real GDP growth in MENA economies? Second (RQ2), are personal remittances associated with faster growth, and does this association appear immediately or with a delay? Third (RQ3), are these associations robust to the inclusion of time effects, to the exclusion of Lebanon, and to alternative model specifications?

To answer these questions, my objectives are to build a panel dataset of nine MENA economies from the World Bank's World Development Indicators for 2003–2023, to estimate the growth effects of FDI and remittances using fixed-effects panel models with standard errors that are robust to common shocks, and to test how sensitive the results are to Lebanon's crisis years and to model choices. The study contributes a recent and transparent piece of evidence for the region and draws practical implications for Lebanese policymakers. The rest of the paper reviews the literature, explains the methodology, presents the results, and discusses the conclusions and limitations.

Literature Review:

The starting point for any study of capital and growth is the neoclassical model of Solow (1956), in which output grows as capital accumulates, but diminishing returns mean that capital accumulation alone cannot sustain growth forever. Mankiw et al. (1992) extended this framework by adding human capital and showed that saving, population growth and education explain a large part of the income differences across countries. Barro (1991) turned these ideas into the cross-country growth regression that most of the later literature follows, in which growth is explained by investment, population growth, macroeconomic stability and openness.

Endogenous growth theory went further: Romer (1990) argued that long-run growth depends on the creation and spread of new ideas, which gives foreign investment a potential role beyond simply adding capital, because multinational firms can transfer technology to the host economy.

The empirical literature on FDI largely confirms that this role exists, but only under certain conditions. Borensztein et al. (1998) found that FDI contributes more to growth than domestic investment, but only when the host country has reached a minimum level of human capital that allows it to absorb new technologies. Alfaro et al. (2004) reached a similar conclusion about financial markets: countries with well-developed local financial systems gain significantly from FDI, while others gain little. This connects to the broader finance-and-growth literature reviewed by Levine (2005), which shows that financial systems that allocate capital efficiently support faster growth. On the other side of the debate, Carkovic and Levine (2005) argued that once the endogeneity of FDI is taken into account, FDI does not have a robust independent effect on growth, because investors tend to go where growth is already strong. Hansen and Rand (2006), however, found Granger causality running from FDI to GDP in a large sample of developing countries, which supports the view that FDI does more than just follow growth.

The remittance literature is equally divided. Chami et al. (2005) argued that remittances are mostly compensatory: they rise when the home economy performs badly and can reduce the incentive to work, which produced a negative relationship with growth in their sample. Giuliano and Ruiz-Arranz (2009) found instead that remittances promote growth in countries with less developed financial systems, because they relax the credit constraints that households and small firms face. Catrinescu et al. (2009) reported a weak but positive long-run effect that becomes stronger where institutions are of better quality. Even where the growth effect is uncertain, the welfare effect is clearer: Adams and Page (2005) showed that international migration and remittances significantly reduce poverty in developing countries. Taken together, these studies suggest that remittances may affect growth indirectly and with some delay, through consumption, education and small-business investment, rather than immediately.

The methodological literature explains why results in this field differ so much. Panel data allow researchers to control for unobserved country characteristics, such as geography, culture or institutions that change slowly, through fixed effects (Baltagi, 2021; Wooldridge, 2010). Standard panel estimators, however, assume that countries are independent of one another, which is unrealistic in a region where oil prices, conflicts and pandemics hit all countries at the same time. Driscoll and Kraay (1998) developed a covariance estimator that remains consistent in the presence of such cross-sectional dependence, and Hoechle (2007) showed that it performs well in panels where the number of years is moderate. Dynamic estimators such as the generalized method of moments of Arellano and Bond (1991) can address reverse causality more directly, but they are designed for panels with many countries and few years, which is the opposite of a regional MENA sample. Most of these cross-country studies rely on the World Bank's World Development Indicators, which remain the standard source of comparable macro-financial data (World Bank, 2026).

Three gaps emerge from this review. First, FDI and remittances are usually studied separately, even though they reach the same economies and may either complement or substitute for each other. Second, evidence for the MENA region rarely covers the period after 2019, which includes the Lebanese financial collapse documented by the World Bank (2021) and the COVID-19 shock. Third, few regional studies use standard errors that account for common shocks, which can make results look more precise than they are. This study responds to all three gaps by estimating the effects of both flows together, using data up to 2023, with Driscoll–Kraay standard errors.

Macroeconomic Stability, Governance, and Financial Distress

Beyond traditional capital accumulation and neoclassical growth models, recent literature emphasizes the critical role of macroeconomic stability and institutional governance in attracting foreign inflows and mitigating systemic financial distress. In vulnerable environments, especially across the MENA region, severe banking sector distress inherently restricts both domestic saving and foreign capital absorption. Assessing such vulnerabilities frequently requires predictive models like the Altman Z-score to gauge banking distress (Elia, Toros, Sawaya, & Balouza, 2021). Achieving long-term banking sustainability and ensuring that FDI translates into tangible economic growth depends heavily on stringent country-level and corporate governance frameworks, particularly during periods of macroeconomic shock (Athari, Saliba, Khalife, & Salameh-Ayanian, 2023; El-Chaarani, Abraham, Khalife, & Salameh-Ayanian, 2023). Furthermore, accurately evaluating the impact of these external inflows requires high technological analytic adeptness—such as utilizing vector autoregression—to disentangle the complex interrelatedness of major macroeconomic variables across regional economies (Bejjani, Toros, Elia, & Jabbour Al Maalouf, 2024).

The Lebanese Crisis and Alternative Financial Resilience

The recent economic collapse in Lebanon provides a stark example of how the absence of reliable banking services alters capital flows and economic behavior. As the traditional financial sector failed, businesses and households were forced to seek alternative financial resilience strategies. This systemic collapse shifted entrepreneurial intentions (Mawad & Freiha, 2024) and drove the rapid adoption of decentralized cryptocurrencies (Aoun, Youssef, & Jabbour Al Maalouf, 2026; El-Chaarani, Mawad, Mawad, & Khalife, 2025) as well as a reliance on physical gold (Beainy & Kamel, 2026; Jabbour Al Maalouf, Sfeir, Nehme, & Mawad, 2026) to bypass failing intermediaries. For small and medium-sized enterprises (SMEs) struggling without access to traditional commercial credit, survival increasingly relies on securing alternative equity financing (Rizk & Sassine, 2023) and leveraging deep business experience to sustain entrepreneurial achievement (Chaanine, Mhanna, Verdie, & Beainy, 2023). In such environments, diaspora remittances transform from simple consumption smoothers into primary lifelines for economic survival.

Global Dynamics, Digital Disruption, and Sustainable Capital

Finally, FDI and remittance flows are continuously shaped by broader global dynamics and technological transformations. Global liquidity remains heavily anchored to the structural dominance of the U.S. dollar (Beainy, Kamel, Subrahmanyam, & Younis, 2025) and is highly sensitive to geopolitical shifts, such as the U.S.-China economic rivalry (Kamel & Beainy, 2025). Concurrently, modern capital inflows are increasingly directed toward digital transformation and sustainable development. Capital allocation is heavily shaped by artificial intelligence investments, which exhibit nonlinear dynamics that can profoundly alter economic growth trajectories (Athari, Sassine, Agyemang, Kirikkaleli, & Saliba, 2026) while requiring smart decision support systems to manage operational disruptions (Subrahmanyam & Beainy, 2027). Consequently, attracting high-quality FDI now depends on a country's alignment with sustainability-oriented equity indices (Kaspard, Kamel, Khalil, & Beainy, 2026), investments in renewable energy frameworks (Subrahmanyam, Khalife, & El-Chaarani, 2024), and active facilitation of green innovation within the circular economy (Kamel et al., 2026).

Methodology:

This study follows a quantitative, longitudinal research design based on secondary data. I built a country-year panel from the World Bank's World Development Indicators (World Bank, 2026), using the database version last updated in July 2026 and downloaded in September 2026. Ten MENA economies were initially selected to represent both oil importers and oil exporters: Algeria,

Egypt, Jordan, Kuwait, Lebanon, Morocco, Oman, Saudi Arabia, Tunisia and the United Arab Emirates. The study period runs from 2003 to 2023.

The United Arab Emirates was excluded because the World Bank reports remittance inflows for it only in 2023; the country is mainly a sender rather than a receiver of remittances. The remaining panel is unbalanced: the gross capital formation and trade series for Jordan are missing after 2007, remittance data for Kuwait start in 2010, and those for Saudi Arabia start in 2005. After keeping only complete observations, the baseline estimation sample contains 164 country-year observations for nine countries.

The dependent variable is annual real GDP growth. The two variables of interest are FDI net inflows and personal remittances received, both expressed as a percentage of GDP; I calculated these ratios by dividing the current US-dollar values of each flow by GDP in current US dollars. Following the growth-regression tradition, I control for investment (gross capital formation as a share of GDP), macroeconomic instability (inflation), openness (exports plus imports as a share of GDP) and population growth. Because Lebanon's GDP-deflator inflation exceeded 85 percent in 2020 and reached 203 percent in 2023, inflation enters the models as $100 \times \ln(1 + \pi/100)$, a standard transformation that reduces the influence of such extreme values. Table 1 defines each variable.

Table 1: Variable definitions and data sources

Variable	Definition	WDI code(s)	Expected sign
GROWTH	Real GDP growth (annual %)	NY.GDP.MKTP.KD.ZG	Dependent
FDI	FDI net inflows $\div$ GDP (current US\$) $\times$ 100	BX.KLT.DINV.CD.WD; NY.GDP.MKTP.CD	+
REM	Personal remittances received $\div$ GDP (current US\$) $\times$ 100	BX.TRF.PWKR.CD.DT; NY.GDP.MKTP.CD	+ / –
GCF	Gross capital formation (% of GDP)	NE.GDI.TOTL.ZS	+
LNINF	$100 \times \ln(1 + \text{GDP-deflator inflation} / 100)$	NY.GDP.DEFL.KD.ZG	–
OPEN	Exports plus imports of goods and services (% of GDP)	NE.EXP.GNFS.ZS; NE.IMP.GNFS.ZS	+
POPG	Population growth (annual %)	SP.POP.GROW	+ / –

Note: All series are from the World Development Indicators (World Bank, 2026). Ratios were computed by the author.

The baseline empirical model is:

$$GROWTH_{it} = \alpha_i + \lambda_t + \beta_1 FDI_{it} + \beta_2 REM_{it} + \gamma_1 GCF_{it} + \gamma_2 LNINF_{it} + \gamma_3 OPEN_{it} + \gamma_4 POPG_{it} + \varepsilon_{it}$$

where i denotes the country, t the year, α_i the country fixed effects, λ_t the year fixed effects and ε_{it} the error term. The coefficients β_1 and β_2 measure how many percentage points of growth are associated with a one-percentage-point increase in FDI or remittances relative to GDP.

I estimate the model in three steps. Model 1 is a pooled ordinary least squares regression, which ignores differences between countries. Model 2 adds country fixed effects, which absorb all characteristics of a country that do not change over time (Wooldridge, 2010). Model 3, the preferred specification, adds year fixed effects as well, which absorb shocks that hit all countries in the same year, such as the 2008–2009 global financial crisis, the 2014–2016 oil-price collapse and the 2020 pandemic (Baltagi, 2021). An F-test compares Model 3 with a model that includes only year effects, to check whether country effects are needed.

In all models, standard errors are computed with the Driscoll and Kraay (1998) method using a Bartlett kernel with two lags, chosen with the rule $\text{floor}[4(T/100)^{(2/9)}]$ for $T = 21$ years (Hoechle, 2007). These standard errors remain valid when the errors are correlated across countries and over time. Because the number of years is small, p-values are based on a t-distribution with $T - 1 = 20$ degrees of freedom, which is more conservative than the normal distribution.

Three robustness checks complete the analysis. Model 4 re-estimates Model 3 without Lebanon, to verify that the results are not driven by the Lebanese collapse. Model 5 replaces current FDI and remittances with their values from the previous year, which reduces the risk that growth drives the inflows rather than the reverse and allows for delayed effects. Model 6 drops gross capital formation and openness, which recovers Jordan's observations after 2007 and raises the sample to 180 observations. Pairwise correlations and variance inflation factors (VIF) are used to check for multicollinearity. All data processing and estimation were carried out in Python using the pandas, NumPy and SciPy libraries. An AI assistant was used as a complementary tool for coding and drafting; all reported figures were generated directly from the downloaded World Bank data, which are provided in the accompanying dataset so that the analysis can be replicated.

Results:

Descriptive statistics

Table 2 reports descriptive statistics for the baseline sample of 164 observations. Real GDP growth averaged 3.08 percent, but it varied widely, from -21.40 percent in Lebanon in 2020 to 12.00 percent in Saudi Arabia in 2022. FDI inflows averaged 3.16 percent of GDP, with a maximum of 23.54 percent in Jordan in 2006 and a minimum of -2.76 percent in Oman in 2015, when disinvestment exceeded new investment. Remittances averaged 5.57 percent of GDP, ranging from almost zero in Kuwait to 33.35 percent in Lebanon in 2023. Inflation was the most dispersed variable, with a standard deviation of 23.40 and a maximum of 202.91 percent in Lebanon in 2023.

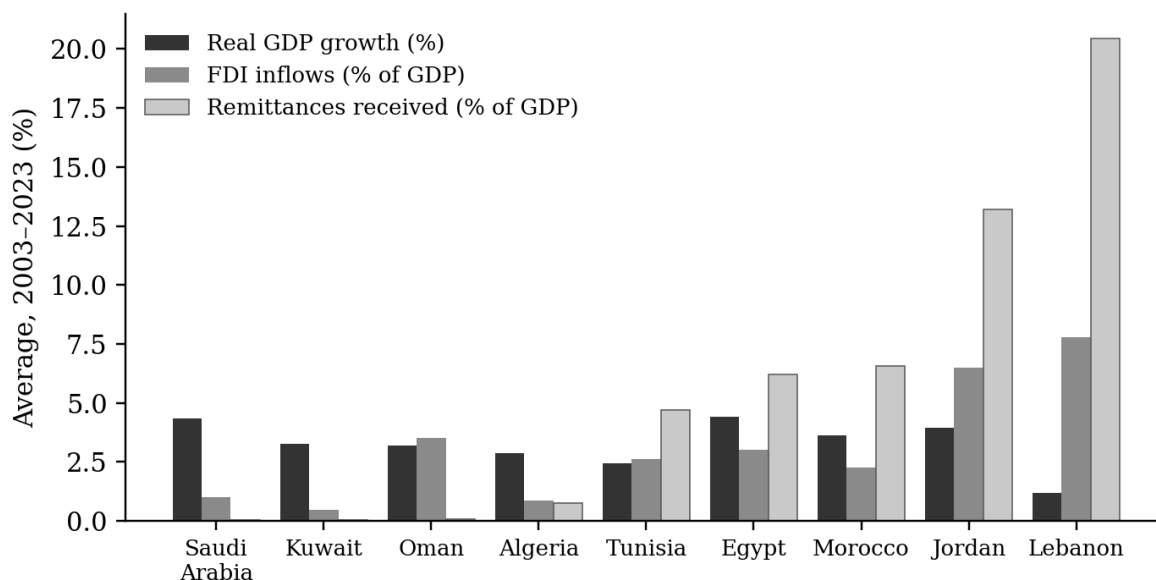
Table 2: Descriptive statistics (baseline sample, N = 164)

Variable	Obs.	Mean	Std. dev.	Min.	Max.
GROWTH	164	3.08	3.94	-21.40	12.00
FDI	164	3.16	3.78	-2.76	23.54
REM	164	5.57	7.29	0.00	33.35
GCF	164	26.34	8.90	1.23	51.78
INF	164	8.62	23.40	-25.96	202.91
OPEN	164	78.39	23.49	29.86	146.91
POPG	164	2.17	2.35	-3.22	14.23

Note: INF is GDP-deflator inflation before transformation. Source: author's calculations based on World Bank (2026).

Figure 1 compares country averages over the full period. The Gulf economies of Saudi Arabia, Kuwait and Oman receive almost no remittances, while Jordan and Lebanon receive the most, averaging 13.20 and 20.46 percent of GDP respectively. Lebanon also recorded the highest average FDI ratio (7.78 percent) but the lowest average growth rate (1.18 percent) of the nine countries.

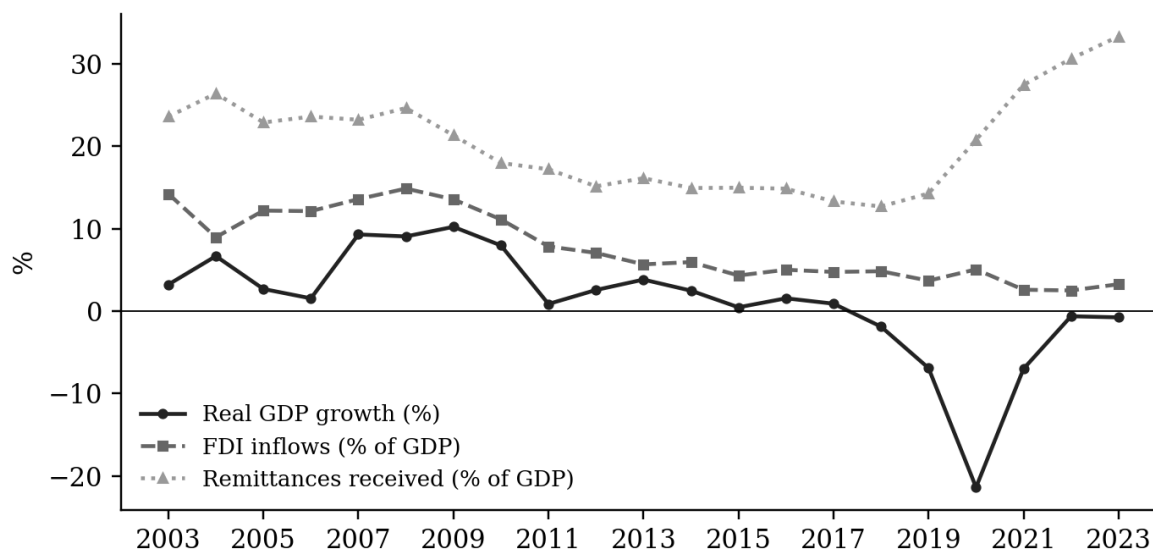
Figure 1: Average real GDP growth, FDI inflows and remittances by country, 2003–2023



Source: author's calculations based on World Bank (2026). Averages use all available years for each series.

Figure 2 follows Lebanon over time. FDI inflows declined steadily from a peak of 14.9 percent of GDP in 2008 to 2.5 percent in 2022. Remittances fell from 26.4 percent of GDP in 2004 to 12.7 percent in 2018 and then rose sharply to 33.3 percent in 2023. Growth turned negative in 2018 and reached –21.4 percent in 2020.

Figure 2: Real GDP growth, FDI inflows and remittances in Lebanon, 2003–2023



Source: author's calculations based on World Bank (2026).

Correlation analysis

Table 3 presents the pairwise correlations. Growth is positively correlated with FDI (0.27), gross capital formation (0.21) and population growth (0.27), and almost uncorrelated with remittances (-0.04). The strongest correlation among the explanatory variables is between FDI and remittances (0.63). All variance inflation factors are below 2.5, well under the common threshold of 10, so multicollinearity is not a serious concern.

Table 3: Correlation matrix and variance inflation factors

	GROW TH	FDI	REM	GCF	LNINF	OPEN	POPG
GROWTH	1.00						
FDI	0.27	1.00					
REM	-0.04	0.63	1.00				
GCF	0.21	-0.08	-0.39	1.00			
LNINF	-0.17	0.03	0.40	-0.41	1.00		
OPEN	0.12	0.39	0.20	-0.09	-0.01	1.00	
POPG	0.27	0.03	-0.19	0.10	-0.16	0.26	1.00
VIF	–	2.09	2.46	1.34	1.40	1.28	1.17

Note: VIF values are computed from the six explanatory variables in the baseline sample.

Regression results

Table 4 reports the main regression results. In the pooled model, FDI has a positive and highly significant coefficient (0.406, $p = .001$), whereas remittances have a small negative coefficient that is not significant (-0.089 , $p = .109$). Once country fixed effects are added (Model 2), the FDI coefficient remains similar (0.372, $p = .002$) and the remittance coefficient becomes positive but insignificant (0.120, $p = .290$). The F-test strongly rejects the hypothesis that country effects are jointly zero ($F(8, 130) = 3.26$, $p = .002$), which supports the fixed-effects approach.

In the preferred two-way fixed-effects model (Model 3), the FDI coefficient is 0.309 and significant at the 5 percent level ($p = .043$): a one-percentage-point increase in FDI inflows relative to GDP is associated with 0.31 percentage points of higher real GDP growth. Remittances have a coefficient of 0.223, significant only at the 10 percent level ($p = .064$). Population growth is positive and marginally significant (0.229, $p = .077$), while gross capital formation, inflation and openness are not significant. The within R^2 is 0.240.

Table 4: Main results. Dependent variable: real GDP growth (%)

Variable	(1) Pooled OLS	(2) Country FE	(3) Two-way FE
FDI	0.406*** (0.107)	0.372*** (0.105)	0.309** (0.142)
REM	-0.089 (0.053)	0.120 (0.111)	0.223* (0.114)
GCF	0.065** (0.029)	0.170 (0.099)	0.111 (0.068)
LNINF	-0.006 (0.017)	-0.006 (0.024)	-0.047 (0.035)
OPEN	-0.006 (0.009)	0.068 (0.045)	0.001 (0.025)
POPG	0.368** (0.151)	0.299*** (0.097)	0.229* (0.123)
Constant	0.318 (1.781)	—	—
Country FE	No	Yes	Yes
Year FE	No	No	Yes
Observations	164	164	164
Countries	9	9	9
R ²	0.200	0.288	0.240

Note: Driscoll–Kraay standard errors in parentheses. *** $p < .01$, ** $p < .05$, * $p < .10$. R² is the within R² for the fixed-effects models. Year FE absorb common annual shocks.

Robustness checks

Table 5 reports the robustness checks. When Lebanon is excluded (Model 4), the FDI coefficient falls to 0.224 and becomes significant only at the 10 percent level ($p = .092$), while the remittance coefficient rises to 0.344 ($p = .056$). When FDI and remittances enter with a one-year lag (Model 5), the lagged remittance coefficient increases to 0.525 and is significant at the 1 percent level ($p = .004$), and lagged FDI remains positive at 0.245 ($p = .061$). In this model, gross capital formation also becomes significant (0.114, $p = .047$) and inflation becomes negative and marginally significant (-0.052 , $p = .080$). With the reduced set of controls and 180 observations (Model 6), FDI remains significant (0.306, $p = .032$), while remittances are not (0.133, $p = .209$).

In summary, regarding RQ1, FDI shows a positive association with growth in all six models, significant at the 5 percent level in four of them and at the 10 percent level in the other two. Regarding RQ2, the contemporaneous association of remittances with growth is weak, but the lagged association is positive and strongly significant. Regarding RQ3, the sign of both coefficients is stable across specifications once country effects are included, although the precision of the FDI estimate falls when Lebanon is removed.

Table 5: Robustness checks. Dependent variable: real GDP growth (%)

Variable	(4) Excl. Lebanon	(5) Lagged inflows	(6) Reduced controls
FDI	0.224* (0.126)	—	0.306** (0.133)
REM	0.344* (0.169)	—	0.133 (0.102)
FDI(t-1)	—	0.245* (0.123)	—
REM(t-1)	—	0.525*** (0.159)	—
GCF	0.076 (0.048)	0.114** (0.054)	—
LNINF	0.020 (0.032)	-0.052* (0.028)	-0.060 (0.038)
OPEN	-0.023 (0.022)	-0.025 (0.022)	—
POPG	0.264* (0.131)	0.218 (0.130)	0.235* (0.115)
Country FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Observations	143	155	180
Countries	8	9	9
R ²	0.095	0.320	0.216

Note: All models include country and year fixed effects. Driscoll–Kraay standard errors in parentheses. *** $p < .01$, ** $p < .05$, * $p < .10$. FDI(t-1) and REM(t-1) are one-year lags.

Discussion and Conclusion:

This study asked whether FDI and remittances, the two main private external flows reaching MENA economies, are associated with faster economic growth. Using a panel of nine countries over 2003–2023, fixed effects for countries and years, and standard errors that allow for common regional shocks, I find that FDI is consistently and positively associated with growth: in the preferred model, one additional percentage point of FDI relative to GDP goes together with about 0.31 percentage points of extra growth. Remittances show a weaker immediate association, but their effect becomes large and clearly significant when they are lagged by one year.

From a theoretical point of view, the FDI result is consistent with the view that foreign investment brings more than capital, as argued by Borensztein et al. (1998), and the fact that it survives the inclusion of year effects suggests that it is not simply driven by regional booms. The remittance results help reconcile the opposing positions in the literature. The weak contemporaneous link fits the compensatory view of Chami et al. (2005), since remittances often rise when the home economy is doing badly, while the strong lagged link fits the view of Giuliano and Ruiz-Arranz (2009) that remittances ease credit constraints and finance activity over time.

For policymakers, and particularly for Lebanon, the practical implication is that FDI and diaspora money should be treated as complementary rather than competing sources of financing. Policies that improve the investment climate, such as legal certainty, a functioning banking system and stable exchange-rate arrangements, are needed to rebuild the FDI inflows that Lebanon has lost since 2008. At the same time, since remittances seem to support growth mainly with a delay, instruments that channel part of these flows into productive investment, such as diaspora bonds or matched small-business financing, could increase their developmental impact. Restoring trust in the banking sector is a precondition for both.

This study has several limitations. First, the sample is small: nine countries and 164 observations in the baseline model, with Jordan contributing only five years to it. Second, fixed effects and lagged regressors reduce but do not eliminate reverse causality, so the results should be read as associations rather than proven causal effects. Third, data gaps prevented me from controlling for human capital, financial development and institutional quality, which the literature identifies as important conditions. Fourth, official statistics miss informal remittances, which likely increased in Lebanon after 2019 as cash replaced the banking system, and part of the rise in Lebanon's remittance ratio reflects the collapse of GDP rather than higher inflows.

Future research could extend the sample to more MENA and comparable emerging economies so that dynamic estimators such as the Arellano and Bond (1991) method can be applied, test whether the effects depend on financial development or institutional quality through interaction terms, separate FDI by sector, and study Lebanon specifically with higher-frequency data once the post-crisis statistics become more reliable.

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