

# "ASSESSING THE IMPACT OF REMITTANCES FROM OVERSEAS WORKERS ON POVERTY IN LEBANON (2001-2023)"

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## **ABSTRACT**

Remittances from migrants constitute an important source of income in Lebanon, especially during economic crises. Between 2001 and 2023, remittances increased and accounted for about 14% of GDP in 2021. Studies indicate that remittances contribute to reducing poverty and improving living conditions by financing education and healthcare. For instance, a 2006 study showed that 24.6% of Lebanese households were deprived of basic necessities, but households receiving remittances managed to improve their financial and social status. The study used semi-annual data from Lebanon to analyze the relationship between remittances and poverty using statistical models such as unit root tests and co-integration analysis. The results showed that remittances significantly reduce poverty and improve economic conditions, aligning with previous literature that confirms the role of remittances in enhancing household income and access to education and healthcare. The study recommends enhancing financial inclusion and reducing remittance costs, developing policies to invest remittances in productive projects, and strengthening social safety nets to support vulnerable groups. The study summarizes the impact of remittances on poverty alleviation in Lebanon and the importance of their role in supporting the economy and improving living conditions.

**Keyword:** Remittances, Lebanese economy, Poverty in Lebanon, Financial inclusion.

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## **INTRODUCTION**

Between 2016 and 2017, the global number of 250 million international migrants generated over \$600 billion in remittance flows—defined as the transfer of money between migrants and their families in a local area. Approximately three-quarters of this amount benefited developing and emerging economies, due to the fact that 70% of international migrants come from these countries. Despite the specific effects of remittances on recipient countries, the scientific literature has failed to reach a consensus on their magnitude or net impact. On one hand, remittances can provide funding for economic development in the form of increased investment in human capital or easing credit constraints to boost physical capital accumulation and alleviate poverty. Recently, the topic of financial remittances has gained increasing attention in the context of developing countries, not only as a key public policy issue but also as a research topic in the field of development. Remittances are financial flows resulting from the movement of a country's citizens across borders, including the transfer of money and/or goods by migrants to their home countries. It is an extremely complex subject that is difficult to understand because it involves various economic and social dimensions.

Remittances are believed to be a major and stable source of income. External financing for developing countries has seen steady growth in remittance volumes in recent decades, measured both in absolute

and relative terms; the latter compared to financial aid provided to developing countries by foreign governments and international organizations. Remittances sent home by hardworking migrants make a significant difference in developing countries. According to current estimates, the total volume of remittances directed to developing countries exceeds twice the amount of official development assistance (ODA) and is almost equivalent to the value of foreign direct investment (FDI) and other capital inflows, if not higher in some countries. The Southern Mediterranean region is considered an important corridor for international migration, rooted in the geography of the region itself and the ongoing interaction between the two shores of the Mediterranean Sea.

The wave of migration from the region has intensified due to the failure of economic and social policies that have fueled the region with massive flows of migrants, as well as political upheavals and security instability, particularly in December 2010 following the so-called "Arab Spring," which significantly destabilized many countries in the Southeast Mediterranean region. Indeed, the Southern and Eastern Mediterranean region has witnessed increased political and social instability due to ineffective governance systems, poor economic prospects, and worsening inequality at various levels (rising unemployment rates, especially among youth, and poor access to basic public services, education, and healthcare).

The Lebanese economy is among the most challenged in the Middle East over the past two decades, facing political instability, economic crises, and social unrest. These factors have increased poverty levels and driven many young Lebanese to migrate abroad, becoming a significant source of financial remittances, which are often sent to their families and serve as a vital lifeline for many Lebanese households. These remittances not only provide an income source but also contribute to improving living standards, education, and access to healthcare. However, the actual impact of these remittances on poverty alleviation has not been comprehensively studied over an extended period in Lebanon. According to the World Bank, remittances constituted about 14% of Lebanon's GDP in 2021, reflecting the importance of this money in the national economy. From 2001 to 2023, the total remittances to Lebanon amounted to approximately \$91 billion USD. Despite the significance of remittances from overseas workers in improving living conditions in Lebanon and reducing poverty by enhancing individual consumption, this aspect has not been sufficiently addressed in applied studies, nor has its relationship with inflation and economic growth been tested.

The research hypothesizes that these financial flows have been a significant support to households, especially amidst successive economic crises, thus reducing poverty. The aim of the research is to estimate the effect of these remittances in reducing poverty rates and improving the economic situation in the country. The study is divided into three sections: the first section includes a review of the previous literature; the second section presents the state of poverty and its spread in Lebanon, migration rates, and financial remittances; and the third section provides the econometric methodology used and the results of quantitative analysis. The fourth section contains the conclusions and recommendations derived from the research.

## LITERATURE REVIEW

Several research papers have found that financial remittances have positive effects on economic growth through both direct and indirect impacts. Remittances can be directly used to finance the economy or alleviate credit constraints.

A study by Bernard Poirine in 1997, titled "The Theory of Remittances as Implicit Family Loans," suggests that financial remittances from individuals working abroad to their families are akin to

implicit family loans. This arrangement relies on family trust and cooperation, where money is transferred as an investment in the human capital of other family members, such as covering

educational or healthcare costs, with the expectation of future reciprocity. The study provides economic and statistical evidence supporting the theory and illustrates how remittances extend beyond immediate financial considerations, based on family relationships and future expectations. It indicates that understanding remittances as an implicit family arrangement can significantly impact development policies and national economies, especially in countries heavily dependent on migrant remittances, where they play a crucial role in financing trade deficits, building homes, and starting businesses in the home country. (Poirine, 1997)

A study by Adams Jr. & Page in 2005, titled "Do International Migration and Remittances Reduce Poverty in Developing Countries?" examines the impact of international migration and remittances on poverty in 71 developing countries. The study found that both international migration and remittances significantly contribute to reducing the level, depth, and severity of poverty in the developing world. It discovered that a 10% increase in the share of international migrants in a country's population leads to a 2.1% decrease in the proportion of people living on less than \$1 a day. Similarly, a 10% increase in per capita international remittances leads to a 3.5% decrease in the proportion of people living in poverty. (Adams & Page, 2005)

The 2007 study by Zenteno & Woodruff focused on the impact of migration networks on small businesses, particularly regarding capital costs and easing capital constraints. The study asks whether migration networks are associated with lower capital costs or eased capital constraints. Using data from a survey of over 6,000 self-employed individuals and small business owners in 44 urban areas in Mexico, the study estimated the impact of being connected to migration networks on capital investment levels, capital-to-output ratios, sales, and profits. Results indicate that migration is associated with higher levels of investment and profits but not necessarily higher sales. In high-capital sectors, investment, sales, and profits increased, suggesting that migration networks ease capital constraints. The study concludes that migration networks can play a significant role in easing capital constraints and boosting investment and profits in small businesses, especially in high-capital sectors. (Woodruff & Zenteno, 2007)

Gupta et al. (2007) focused on the impact of financial remittances on financial development and economic growth in developing countries in Sub-Saharan Africa. The study addresses several key aspects, noting that remittances can contribute to economic growth if used for productive investments rather than consumption. However, there is mixed evidence regarding the impact of remittances on economic growth. Financial remittances can promote long-term financial development by deepening financial inclusion. The study highlights that financial development positively affects economic growth, suggesting that migrant remittances can contribute to this growth by enhancing access to formal financial services. It provides a comprehensive view of the challenges and opportunities related to migrant remittances in Sub-Saharan Africa and emphasizes the need for policies that reduce remittance costs and promote financial inclusion to maximize the benefits of these financial flows. (Gupta et al., 2007)

Erhijakpor & Anyanwu (2010) attracted increased attention to international financial remittances flowing to developing countries due to their size and impact on recipient countries. This study used data on poverty and international remittances in 33 African countries from 1990 to 2005 to analyze the impact of remittances on poverty reduction. The study found that remittances, as a percentage of GDP, reduced the level, depth, and severity of poverty in Africa. It showed that a 10% increase in remittances leads to a 2.9% decrease in the number of poor people. Other poverty measures, such as the poverty gap and squared poverty gap, showed similar effects. A 10% increase in remittances

results in a 2.9% and 2.8% decrease in poverty depth and severity, respectively. (Anyanwu & Erhijakpor, 2010)

Dorantes & Pozo (2009) used data from the 2002 National Survey of Household Income and Expenditures in Mexico and found that international remittances increase healthcare expenditures. About 6 pesos of every additional 100 pesos of remittance income are spent on health. The sensitivity of healthcare expenditures to changes in international remittance levels is about three times greater than its response to changes in other income sources.

Additionally, low-income households show a lower response in healthcare spending due to remittances. This may be due to their participation in public programs like PROGRESA. The study also found that households with healthcare coverage through employment or the PROGRESA program spend a smaller portion of increased remittance income on healthcare compared to households without such coverage. Therefore, remittances may help achieve equity in healthcare spending between households with and without health coverage. (Amuedo-Dorantes & Pozo, 2011)

Azizi's study reviewed the impact of workers' remittances on human capital and labor supply in developing countries using data from 122 countries from 1990 to 2015. The study found that between 1990 and 2015, the number of people living outside their home countries increased from 153 million to 244 million. The value of financial remittances rose from \$68 billion to \$553 billion. The study concluded that financial remittances have a significant positive impact on health and education in developing countries, while their impact on female labor force participation is negative. (Azizi, 2018)

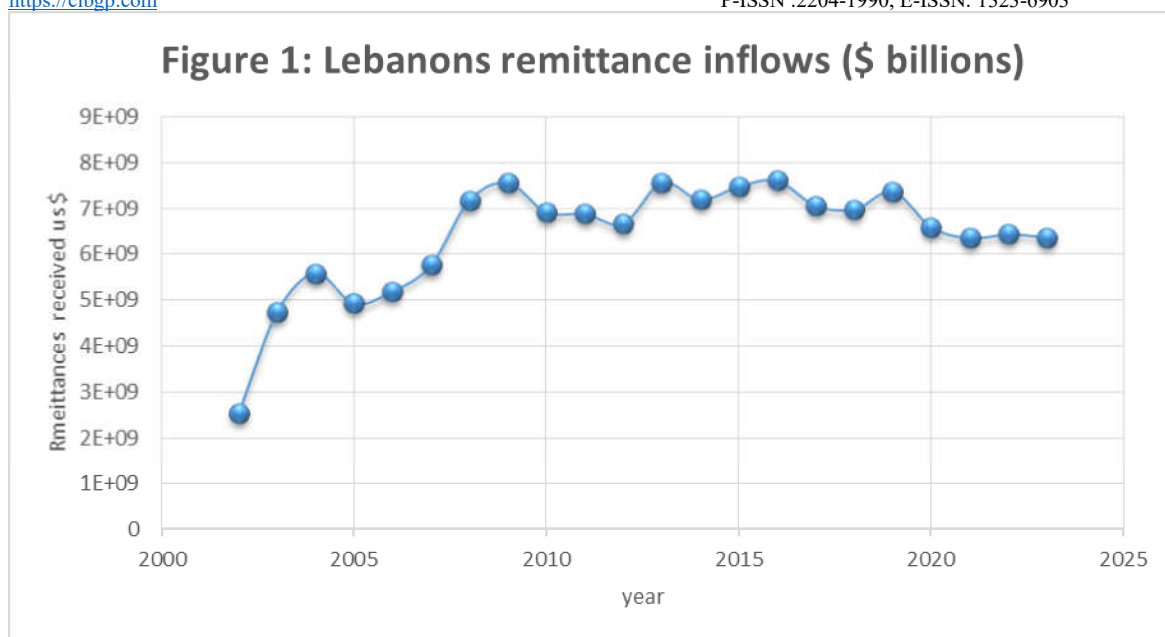
## **POVERTY AND FINANCIAL REMITTANCES IN LEBANON**

### **IMPORTANCE OF FINANCIAL REMITTANCES TO THE LEBANESE ECONOMY**

Lebanon is a prominent example of an economy that relies on financial remittances, with a continuous flow of migrants abroad ensuring regular remittance inflows. Estimates suggest that Lebanon has a diaspora of approximately 14 million people, more than three times its local population, who continue to send billions of dollars back home each year. These financial flows from expatriates have shown remarkable stability in the face of significant political upheavals over recent years.

Overall, Lebanon has consistently attracted financial inflows over the past few decades, which are linked to the following: (1) regional oil wealth, (2) the appeal of the country's real estate and banking sectors, and (3) the presence of a large Lebanese diaspora. These financial inflows are bolstered by five main factors. Two of these factors have a direct impact: oil prices and interest rate spreads; while three factors affect these flows indirectly: foreign reserves, monetary stability, and dollarization of the economy. Additionally, the ability to hold deposits in foreign currencies and the unrestricted convertibility between the local currency and foreign currencies stimulate foreign financial inflows into Lebanon.

Remittances constitute a significant portion of these flows, recording \$2.54 billion in 2002, \$4.74 billion in 2003, \$5.59 billion in 2004, \$4.92 billion in 2005, \$5.20 billion in 2006, \$5.77 billion in 2007, \$7.18 billion in 2008, \$7.56 billion in 2009, \$6.91 billion in 2010, \$6.91 billion in 2011, and \$6.92 billion in 2012 (Awdeh, 2014). As shown in the figure below:



Source: World Bank: <https://data.worldbank.org>

The chart displays remittance flows to Lebanon (in billions of dollars) between 2000 and 2023. The chart shows an upward trend in remittances over time, with remittances starting at a relatively low level in 2000 and then experiencing a notable increase in the following years. In the mid-2000s, remittances continued to rise, peaking in the years just before the global financial crisis of 2008. Since then, remittances have stabilized at a relatively high level, reflecting the ongoing flow of funds from Lebanese expatriates to their home country.

It is noticeable that despite the economic and political crises Lebanon has experienced, including recent financial and economic crises, remittances have remained an important source of national income. In recent years, specifically after 2020, there has been a slight decline in the volume of remittances, but it has remained relatively stable around the \$6 billion mark.

This stability indicates a significant reliance on remittances from Lebanese expatriates to support the local economy and provide financial resources to households in Lebanon, contributing to alleviating internal economic crises. Overall, the chart demonstrates the crucial role of financial remittances in the Lebanese economy and their continuous impact over the past two decades.

## POVERTY INDICATORS IN LEBANON

Poverty is the deprivation of essential assets and opportunities that every person is entitled to. Hence, poverty can be clearly understood from a non-monetary perspective. Despite its widespread use, monetary poverty is not the exclusive model for measuring poverty, and non-monetary dimensions of poverty are useful in evaluating the components of poverty, especially for case study research (Mohammed et al., 2021).

Poverty is also associated with poor outcomes in terms of health, nutrition, and literacy, weak social relationships, insecurity, low self-esteem, and disabilities. In some cases, tools developed to measure monetary poverty can be applied to non-monetary indicators of well-being (Krishnan, 2014).

In 2006, a comparative mapping of living conditions in Lebanon between 1995 and 2004 was conducted using the Living Conditions Index (LCI), which comprises four indicators: housing, water and sanitation, education, and income. The LCI showed that 24.6% of households were deprived as of 2004 (Bazzaz et al., 2021). When isolating only the income-related indicator, 51.6% of households were found to be income-deprived (Al-Jamal & Eichholz, 2016).

## THE ROLE OF REMITTANCES IN IMPROVING LIVING CONDITIONS

Financial remittances play a crucial role in enabling access to education and healthcare. Initially, remittances account for 40% of the income for recipient households. These households fund 40% of their educational costs with remittances, relying on their own resources to cover the remaining 43%. In contrast, households without remittances use their own resources to cover 75% of their educational expenses.

When it comes to accessing healthcare services, the share of uninsured households is higher among those who do not receive remittances (48% compared to 41% for those receiving remittances). Remittances provide 40% of the funding for health insurance costs and also serve as a significant source of funding for medications.

The consumption patterns between households receiving remittances and those that do not are similar. According to Kasparian, the quality of expenditure data is not very accurate, as many households do not track their spending behavior. However, there are no significant differences in the reported consumption shares across categories for both groups, indicating a similar spending pattern among both sets of households (Sbrancia, 2016).

**TABEL (1)**

<b>Use of remittances by spending (% of households)</b>	
Food	61.4
Housing costs	58.9
Improvement in quality of life	53.9
Health	46
Education	18
Buying a house	3.2
Starting a business	1.6
Buying land	0.8

Source: IMF Oil-Price Spillovers in Lebanon: The Role Of Remittances [WWW.IMF.org](http://WWW.IMF.org)

Remittances are a significant and relatively stable source of foreign currency in Lebanon and have a substantial impact on the well-being of recipient households. Survey data show that remittances help households supplement their income, enabling them to access educational and healthcare services that they could not afford otherwise. However, the recent decline in oil prices could reduce remittances by at least 19%, equivalent to approximately \$1.5 billion or 3% of GDP. These estimates may be conservative, but they highlight the importance of remittances in the Lebanese economy and the impact of the recent oil shock.

## **METHODOLOGY**

### **MODEL SPECIFICATION AND DATA**

Based on theories explaining poverty alleviation and the influencing factors, this study employs a model using data from Lebanon, spanning semi-annually from 2001 to 2023. The model includes:

- **PCE**: Per capita consumption expenditure as the dependent variable.
- **REM**: Remittances.
- **INFL**: Inflation rate, representing annual consumer prices (%).
- **GDP**: Per capita GDP at constant prices.

The model is formulated as follows:

$$PCE=f(\text{REM},\text{INFL},\text{GDP})$$

Taking the natural logarithm of the variables, the model is transformed into:

$$\text{LnPCE} = \beta_0 + \beta_1 \text{LnREM} + \beta_2 \text{LnINFL} + \beta_3 \text{LnGDP} + U_t$$

Where:

- **LnPCE**: Natural logarithm of per capita consumption expenditure (constant USD 2010).
- **LnREM**: Natural logarithm of remittances (USD).
- **LnINFL**: Natural logarithm of inflation rate (annual % change).
- **LnGDP**: Natural logarithm of per capita GDP (PPP-adjusted constant USD 2011).

## ECONOMETRIC METHODOLOGY

Applied studies often use the Error Correction Model (ECM) to explore quantitative and causal relationships between economic variables. ECM is used when variables exhibit a co-integrating relationship, and it bridges short-term and long-term economic behaviors, assuming that variables tend to converge towards a long-term equilibrium (Ngai, 2012).

Given that many economic time series are non-stationary, traditional regression methods may lead to spurious results. Therefore, first differences of all variables are taken to avoid this issue.

However, this approach might obscure important long-term relationships.

If  $U_t$  (error term) is found to be stationary after unit root testing, it indicates that while individual variables may be  $I(1)$ , a linear combination of them can be  $I(0)$ . For instance, per capita consumption may be  $I(0)$  even if remittances, inflation, and GDP are  $I(1)$ . This indicates that if variables have a long-term relationship, the regression of per capita consumption on remittances, inflation, and GDP is valid and non-spurious. The presence of co-integration is confirmed if the residuals from the regressions are stationary.

## STEPS OF THE ANALYSIS

**Unit Root Test:** To assess the stability of the variables and determine their integration order.

1. **Co-integration Test:** To check for a long-term equilibrium relationship among PCE, REM, INFL, and GDP using the Johansen co-integration method.
2. **Error Correction Model:** After confirming co-integration, apply ECM to account for short-term deviations and link long-term parameters with short-term dynamics:

$$\Delta \text{PCE} = \beta_0 + \beta_1 \Delta \text{REM} + \beta_2 \Delta \text{INFL} + \beta_3 \Delta \text{GDP} + U_{t-1} + \varepsilon$$

Where:

- $\Delta$  denotes the first difference (changes).
- $U_{t-1}$  is the error correction term, indicating the speed of adjustment towards equilibrium.
- $\varepsilon$  is the random error term.

The  $U_{t-1}$  term should be significant and negative, reflecting how deviations from equilibrium are corrected over time.

This methodology elucidates how per capita consumption is influenced by changes in remittances, inflation, and GDP, and how imbalances are corrected across time periods (Gujarati, 2003).

**Unit Root Test:** Table (2) shows the Philip-Perron (PP) unit root test, and it is clear that all

Level						
LnGEE	LnGDP	LnINF	LnREM	LnPCE		Intercept
-1.2495	-1.5780	-0.7835	-1.8698	-1.7749	t- statics	
0.6497	0.4895	0.8186	0.3450	0.3906	Prob.	
no	no	no	no	no		
-1.75959	-1.3257	-1.7731	-1.7177	-0.8906	t- statics	Intercept&trend
0.7158	0.8749	0.7094	0.7352	0.9519	Prob.	
no	no	no	no	no		
Frist-difference						
LnGEE	LnGDP	LnINF	LnREM	LnPCE		Intercept
-3.7936	-3.1282	-4.5803	-4.53918	-3.5116	t- statics	
0.0043	0.0281	0.0003	0.0004	0.0099	Prob	
**	**	****	****	****		
-3.8122	-3.3713	-4.6408	-4.6741	-3.7368	t- statics	Intercept&trend
0.0204	0.0620	0.0017	0.0015	0.0250	Prob	
**	*	**	**	**		

Philip-Perron (PP) unit root test

**Table (2) Philip-Perron (PP) unit root test**

#### JOHANSEN CO-INTEGRATION TEST RESULTS:

After performing unit root tests on all variables, we can now conduct the Johansen Co-Integration Test to detect any co-integrating equations that link the variables. First, the optimal lag length was determined as shown in Appendix (1), and a lag length of 3 was chosen according to all criteria. The

Level						
LnGEE	LnGDP	LnINF	LnREM	LnPCE		Intercept
-1.2495	-1.5780	-0.7835	-1.8698	-1.7749	t- statics	
0.6497	0.4895	0.8186	0.3450	0.3906	Prob.	
no	no	no	no	no		
-1.75959	-1.3257	-1.7731	-1.7177	-0.8906	t- statics	Intercept&trend
0.7158	0.8749	0.7094	0.7352	0.9519	Prob.	
no	no	no	no	no		
Frist-difference						
LnGEE	LnGDP	LnINF	LnREM	LnPCE		Intercept
-3.7936	-3.1282	-4.5803	-4.53918	-3.5116	t- statics	
0.0043	0.0281	0.0003	0.0004	0.0099	Prob	
**	**	****	****	****		
-3.8122	-3.3713	-4.6408	-4.6741	-3.7368	t- statics	Intercept&trend
0.0204	0.0620	0.0017	0.0015	0.0250	Prob	
**	*	**	**	**		



Johansen Co-Integration Test was then applied, indicating that there is at least one long-term relationship among the variables. As a result, we can proceed with the vector error correction model.

**Table (3) Johansen Co-Integration Test**

Prob.**	0.05	Trace	Hypothesized	
Critical Value	Critical Value	Statistic	Eigenvalue	No. of CE(s)
0.0368	47.8561	49.2429	0.4209	None *
0.1055	29.7970	26.8431	0.2939	At most 1
0.1312	15.4947	12.5741	0.24342	At most 2
0.2862	3.8414	1.1372	0.0274	At most 3

Trace test indicates 1 cointegrating equation(s) at the 0.05 level

\* denotes rejection of the hypothesis at the 0.05 level

\*\*MacKinnon-Haug-Michelis (1999) p-values

### LONG-TERM RELATIONSHIP ESTIMATION RESULTS

After performing the long-term analysis, it was found that the model suffered from autocorrelation issues. Consequently, the analysis was re-run, incorporating the dependent variable with a one-period lag, which resolved the autocorrelation problem. This is shown in Table (4)

**(4) Table  
Long Term Relationship**

Prob.	t-statistics	Std.Error	Coefficient	Variable
0.0044	-3.0189	0.6682	-2.0174	C
0.0253	2.3230	0.0292	0.0679	REM
0.0459	2.0596	0.0035	0.0072	INFL
0.0004	3.7953	0.0880	0.3342	GDP
1.4404	8.5505	0.0754	0.6447	PCE(-1)
8.80740	Mean dependent var	0.9420	R-squared	
0.12084	S.D. dependent var	0.9362	Adjusted R-squared	
-4.0371	Akaike info criterion	0.0305	S.E. of regression	
-3.8364	Schwarz criterion	0.03728	Sum squared resid	
-3.96232	Hannan-Quinn criter.	95.83647	Log likelihood	
1.88677	Durbin-Watson stat	162.58	F-statistic	
		0.0000000	Prob(F-statistic)	

The coefficient of remittances (REM) is 0.06790.06790.0679, positive and statistically significant. This indicates that an increase in remittances from abroad leads to a rise in individual consumption. Given that many Lebanese emigrate due to economic and political conditions, remittances from overseas play a crucial role in reducing poverty by increasing individual consumption and improving the overall economic situation.

The coefficient of inflation (INFL) is 0.00720.00720.0072, positive and statistically significant. This means there is a positive relationship between inflation and individual consumption. This can be attributed to the fact that inflation lowers the real cost of labor, leading to increased employment and thus higher income and consumption. Moderate inflation might also encourage immediate consumption over saving, due to concerns about rising future prices. However, high inflation should be monitored as it may erode purchasing power.

The coefficient of GDP (GDP) is 0.33420.33420.3342, positive and highly statistically significant. This indicates that an increase in per capita GDP leads to a substantial rise in individual consumption. GDP growth, representing economic expansion, reflects improvements in overall economic performance and increases in job opportunities and income, thereby boosting individual consumption. The high values of both R-squared (0.94200.94200.9420) and Adjusted R-squared (0.93620.93620.9362) suggest that the model explains very well the variations in individual consumption over the long term. This enhances confidence in the model and indicates that the selected independent variables play a significant role in determining individual consumption in Lebanon.

### ERROR CORRECTION MODEL (ECM)

Table (4) shows the short-term coefficients of the Error Correction Model. It indicates that the signs of the independent variables have remained consistent with their long-term relationships. However, the significance level of the remittances variable (REM) is at a 10% significance level, while the inflation variable (INFL) has become statistically insignificant in the short term.

(5) Table  
**Error Correction Model**

Prob.	t-statistics	Std.Error	Coefficient	Varabile
0.3503	0.94489	0.00405	0.00383	C
0.0867	1.75588	0.03067	0.05385	D(REM)
0.39580	0.85836	0.00420	0.00361	D(INFL)
0.0000	5.57168	0.113684	0.63341	D(GDP)
0.0100	-2.704374	0.086981	-0.23525	ECT(-1)
	0.0050	Mean dependent var	0.527	R-squared
	0.0374	S.D. dependent var	0.471	Adjusted R-squared
	-4.28111	Akaike info criterion	0.027	S.E. of regression
	-4.0804	Schwarz criterion	0.029	Sum squared resid
	-4.2063 5	Hannan-Quinn criter.	101.326	Log likelihood
	1.97371	Durbin-Watson stat	11.1498	F-statistic
			3.59919	Prob(F-statistic)

The coefficient for GDP per capita growth, representing economic growth, shows a clear and significant impact on improving individual consumption, thus reducing poverty. This is consistent with economic theory, as increased economic growth creates more jobs in the economy, improves individual income, and increases consumption. Economic growth is a critical factor in alleviating poverty.

The Error Correction Term (ECT(-1)) is significant and negative, indicating that there is self-correction in the system when deviations from the long-term equilibrium occur. The negative value suggests that the system corrects deviations and returns to equilibrium relatively quickly.

The self-correction coefficient of -0.23525 means that the system corrects approximately 23.525% of deviations from equilibrium in each time period.

The R-square value indicates that the model explains about 52.7% of the variations in the dependent variable, which is considered moderate

## CONCLUSIONS AND RECOMMENDATIONS

### CONCLUSIONS

1. **Impact of Remittances on Poverty:** The study demonstrates that remittances from workers abroad have played a significant role in improving the economic conditions of Lebanese households from 2001 to 2023. Remittances have significantly contributed to reducing poverty rates, improving living standards, and accessing education and healthcare services.
2. **Stability of Remittances:** Despite the economic and political crises Lebanon has experienced, remittances have shown remarkable stability over the years, reflecting their importance as a stable source of income for Lebanese households.
3. **Improving Quality of Life:** Remittances contribute to improving the quality of life for recipient households by increasing spending on food, housing, health, and education. Studies show that remittances help reduce credit constraints and increase investment in human capital, enhancing overall economic development.
4. **Econometric Analysis:** The econometric analysis indicates that remittances significantly increase per capita consumption in both the short and long term, supporting the research hypothesis.
5. **Positive Impact of Economic Growth and Inflation:** Economic growth and moderate inflation positively impact increasing consumption.

### RECOMMENDATIONS

1. **Facilitating Money Transfers:** The Lebanese government should enhance policies that facilitate money transfers, including reducing associated costs and increasing transparency in the banking system to promote financial inclusion and ensure all households have access to formal financial services to maximize the benefits of remittances.
2. **Encouraging Productive Investments:** Encourage the use of remittances in productive investments such as education, health, and small to medium-sized enterprises to promote sustainable economic development. Providing an attractive investment environment for business activities can help leverage these financial flows for economic development. Offering incentives for recipient families to invest in projects benefiting the local community and creating new job opportunities is also essential.
3. **Strengthening Ties with the Lebanese Diaspora:** Enhance cooperation with Lebanese communities abroad to encourage continuous remittance flows and increase their contribution to the economic development of their home country.
4. **International Partnerships:** Establish programs and partnerships with international organizations to support economic and social development initiatives that rely on remittances.
5. **Maximizing Remittance Resources:** Remittances represent about 20% of Lebanon's GDP, exceeding foreign direct investments and export revenues. Lebanon can improve its efforts to harness the significant remittance resources by adopting a comprehensive plan that significantly increases the diaspora's impact on economic development and job creation. So far, the potential of Lebanese expatriate funds has been largely untapped. There are various ways to mobilize capital from Lebanese expatriates, such as "diaspora bonds," which have already been issued by several countries, such as India.
6. **Targeting Investment Projects:** Other investment tools can target projects of interest to migrants, such as schools, housing, hospitals, and other projects that benefit their families in

Lebanon. Hence, the diaspora's involvement in supporting the real economy can significantly increase by utilizing these tools.

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