

Remittances as an Instrument of Economic Development in Egypt: Exploring the Impact of Remittances, Export, and Official Development Assistance on Economic Growth

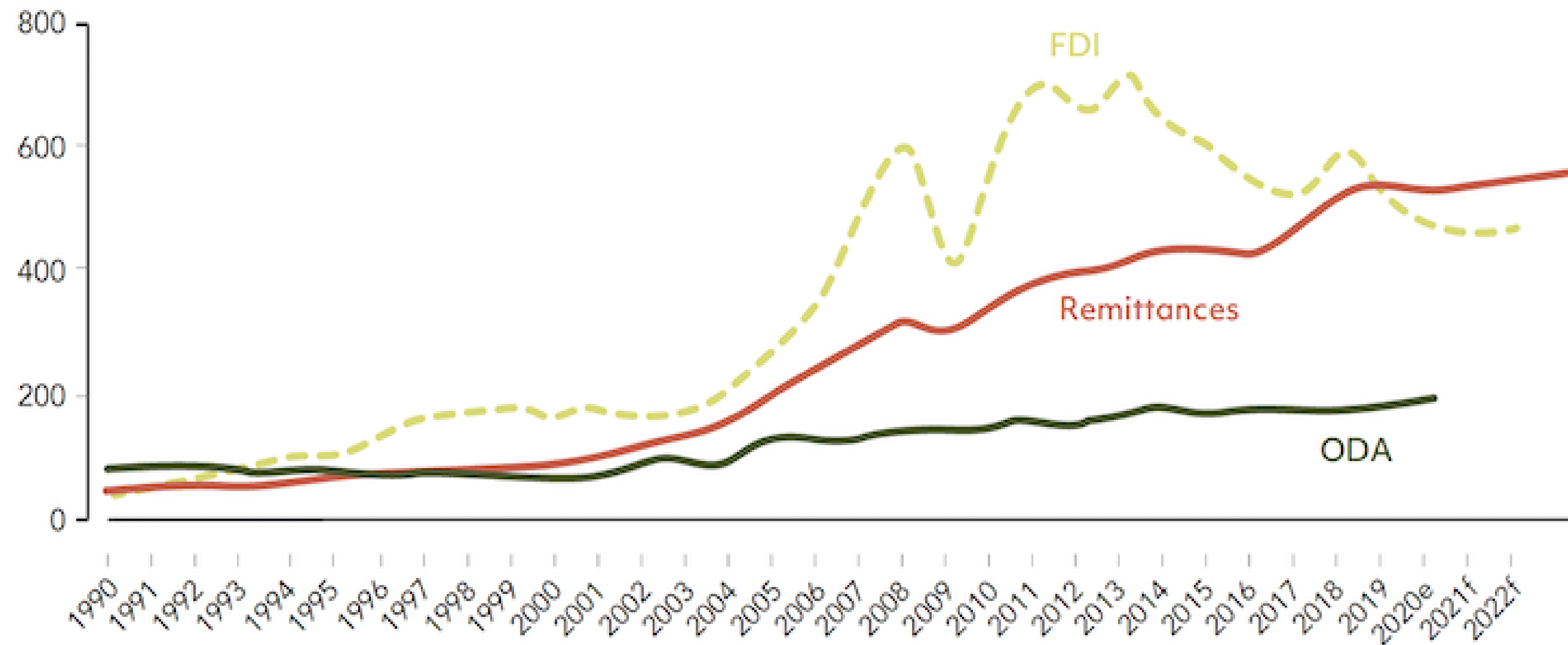
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- **What role do remittances have on the home country?**



Figure 1.1a Remittances, Foreign Direct Investment, and Official Development Assistance Flows to Low- and Middle-Income Countries, 1990–2022

(\$ billion)



Fears Regarding Remittances

Remittances do not lead to productive investment but fuel consumption.

Distribution of remittances is uneven and increases income and wealth inequalities.

Remittance expenditures may result in inflation.

Remittances may increase dependency with the risk of sudden decline.

Remittances adversely affect agricultural development by removing incentives to labors

Optimism Regarding Remittances

Micro-level: non-productive investments and consumption improves standard of living and quality of life (Stahl & Arnold 1986). Can sustain people over in times of crisis (Van Hear, cited in Østergaard-Nielsen 2003b) and help diversify household risks.

Macro-level: consumption increases demand, producing multiplier effects that stimulate home-country industries and economies (Stahl and Arnold 1986).

Remittance income is more evenly distributed than both overseas development aid and foreign direct investment (Hugo 2003).

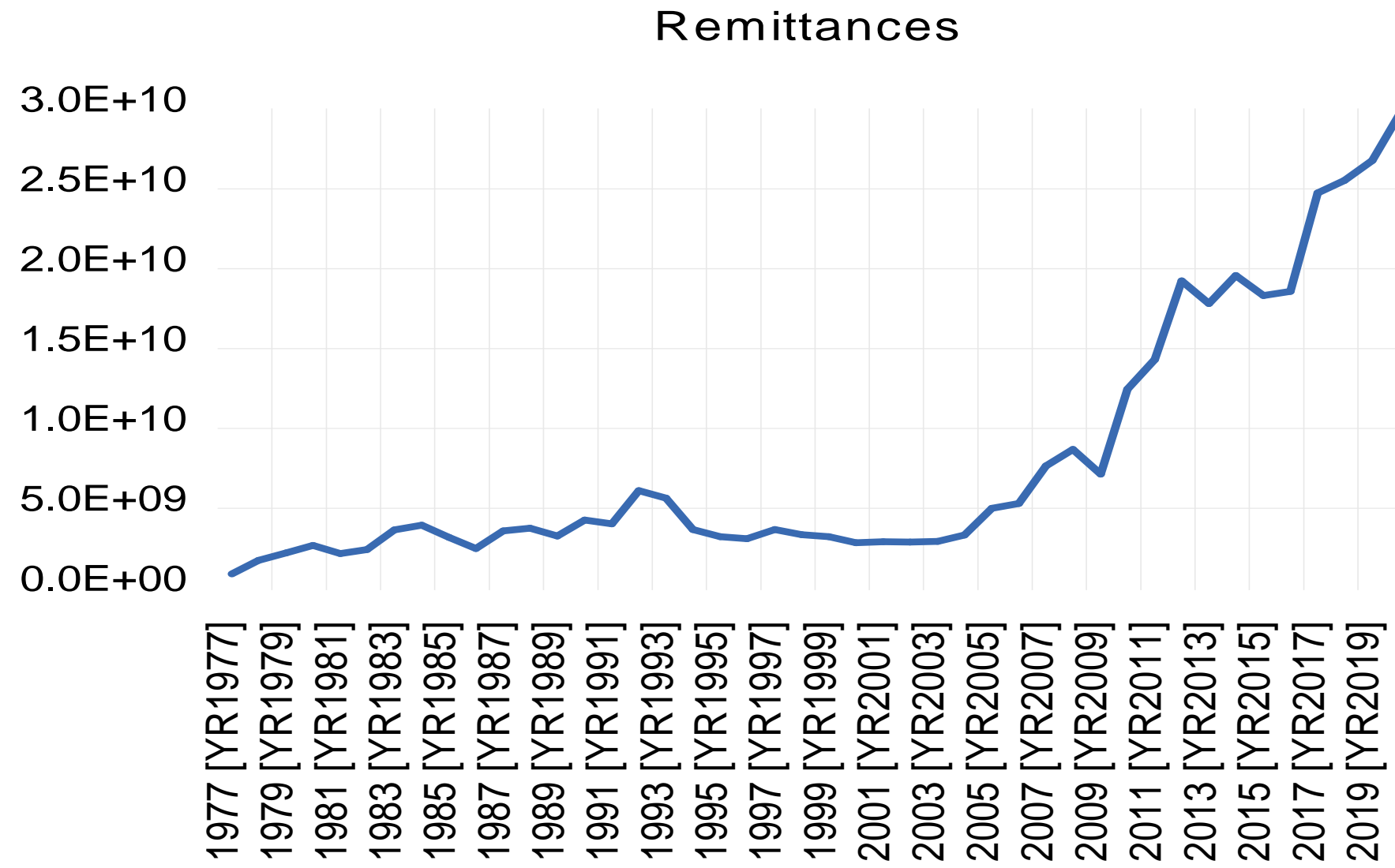
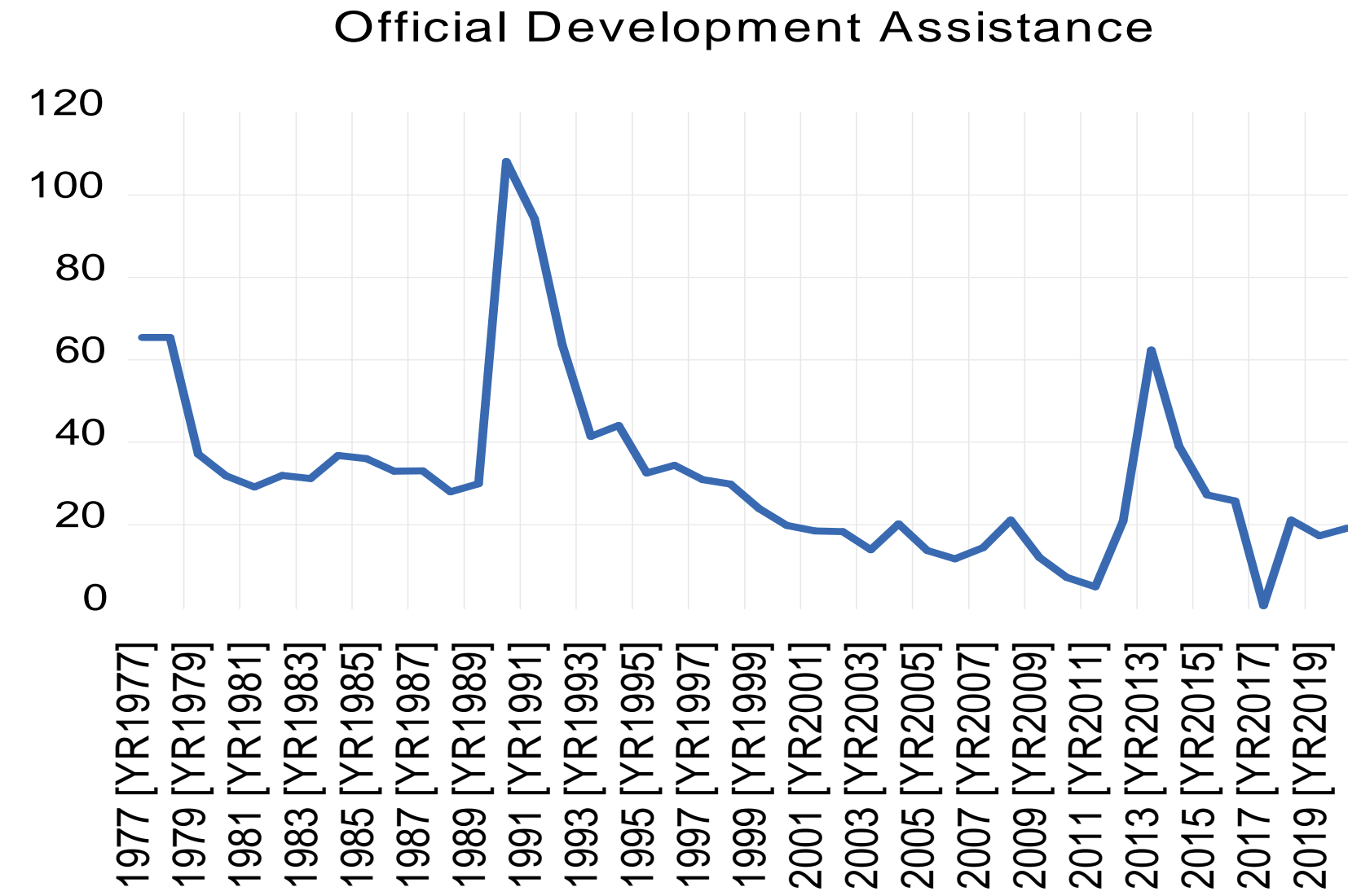
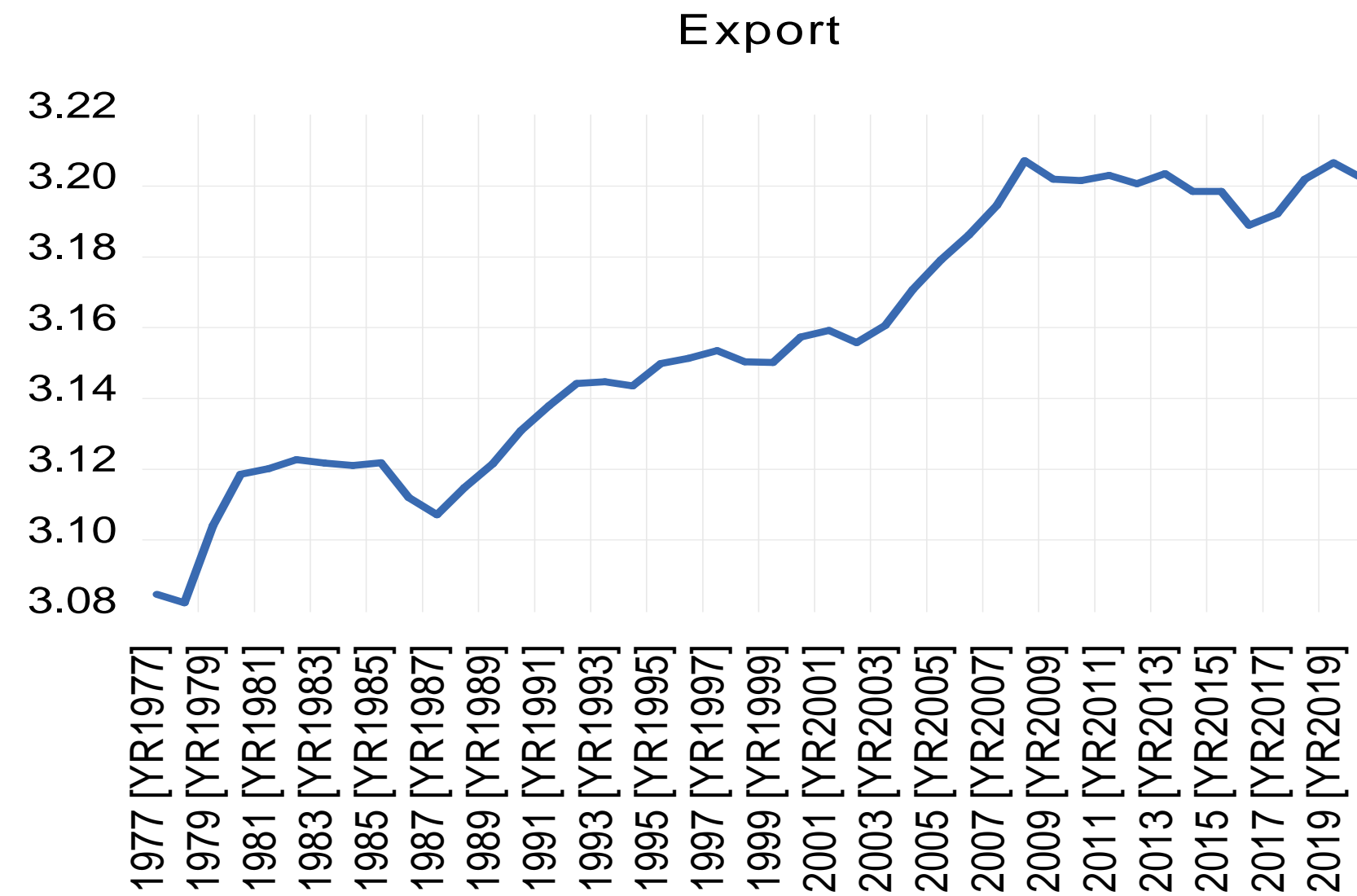
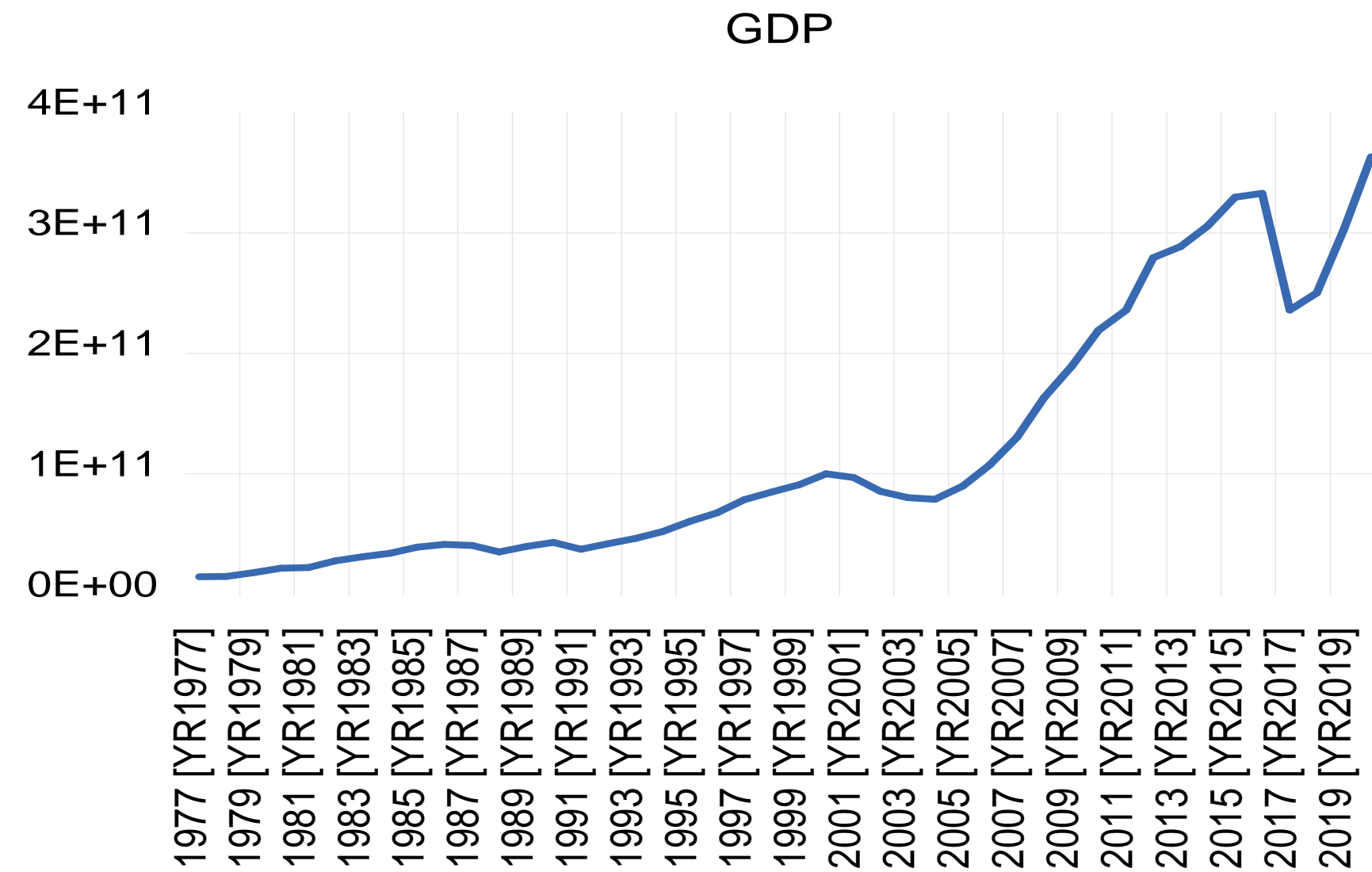
Price gains are mitigated by the allocation of resources to production of higher-priced goods (Stahl and Arnold 1986).

Labor export should be seen as any other export sector which must be carefully managed to avoid dependence (Keely and Tran 1989).

Decline in agricultural productivity is due to loss of labor power through emigration, not complacency amongst workers (Stahl and Arnold 1986).

This paper examines the long-run causal link between remittances and output in Egypt for the period 1977-2020. The long-run causal link is examined using the autoregressive distributed lag (ARDL) bounds test for cointegration, along with a vector error-correction model to estimate the short and long run parameters of equilibrium dynamics.

Migrant's Remittances and Causal Macroeconomics Relation in Egypt: Empirical Analysis 1977 to 2020



- **ARDL Model uses a combination of endogenous and exogenous variables unlike the VAR model that is strictly endogenous variables**
- **The ARDL Model is specified if the variables are stationary after the first difference**
- **Test for unit root to confirm that no variable is integrated of order 2**

- **ARDL model can be specified:**

If the variables are integrated of different orders. That is, a model having a combination of variables with I(0) and I(1) order of integration.

From the Bounds test if the variables are cointegrated, specify for short run and long run ECM model (ARDL) is efficient for small sample and unbiased estimator.

Bounds Test

Table 2 Critical values for bounds test

Estimated statistics

Model ARDL (4,0,4,4)

F-statistics

8.78

Degree of freedom

40

Bounds calculated by Pesaran and Narayan

Persarran et al. 2001

Significance level

I(0) Bound

I(1) Bound

10%

3.47

4.45

5%

4.01

5.07

1%

6.23

7.74

Model Equation:

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$$\ln \text{GDP} = (2.1934^* \ln \text{EXPO} + 0.1640^* \ln \text{REM} - 0.0784^* \ln \text{ODA})$$

P-value (.005) (.008) (.36)

The coefficients of the independent variables are the long-run elasticities of the GDP with respect to each independent variable. The elasticity of Y with respect to X. Expo = 2.19 which implies that one percent increase in Y would increase X by 2.19% similarly the elasticity of GDP with respect to lnRem is .16 while the Elasticity of GDP with respect to lnODA is -.08 the fact that both remittances and exports are positive informs about the relationship as an increase in the Egyptian GDP because it creates a multiplier effect through goods and labor markets.

Table 3 Estimated long-run ECM ARDL model

Model: ARDL (4, 0, 4, 4)
 Sample 1977-2020
 Dependent Variable $\Delta \ln \text{GDP}$
 Independent Variables $\Delta \ln \text{expo}$ $\Delta \ln \text{Rem}$
 $\Delta \ln \text{ODA}$

C	19.96374***
@TREND	0.059923***
$\Delta \ln \text{RGDP}_{t-1}$	0.830063***
$\Delta (\text{LRGDP}_{t-2})$	0.093985
$\Delta (\text{LRGDP}_{t-3})$	0.62576
$\Delta \text{LRREM}_{t-3}$	-0.034175***
$\Delta \text{LRREM}_{t-1}$	-0.214544***
$\Delta \text{LRREM}_{t-2}$	0.055961
$\Delta \text{LRREM}_{t-3}$	-0.170875***
ΔLRODA_t	0.045636***
$\Delta (\text{LRODA}_{t-1})$	0.061778***
$\Delta \ln \text{RODA}_{t-2}$	0.076557***
$\Delta \ln \text{RODA}_{t-3}$	0.046283
DUMMY	0.023858
CointEq _{t-1}	-0.695908***

The Model, more than 69% of the adjustment would take place within the first year. Another added value for the ECM ARDL model that it generates the cointegration equation

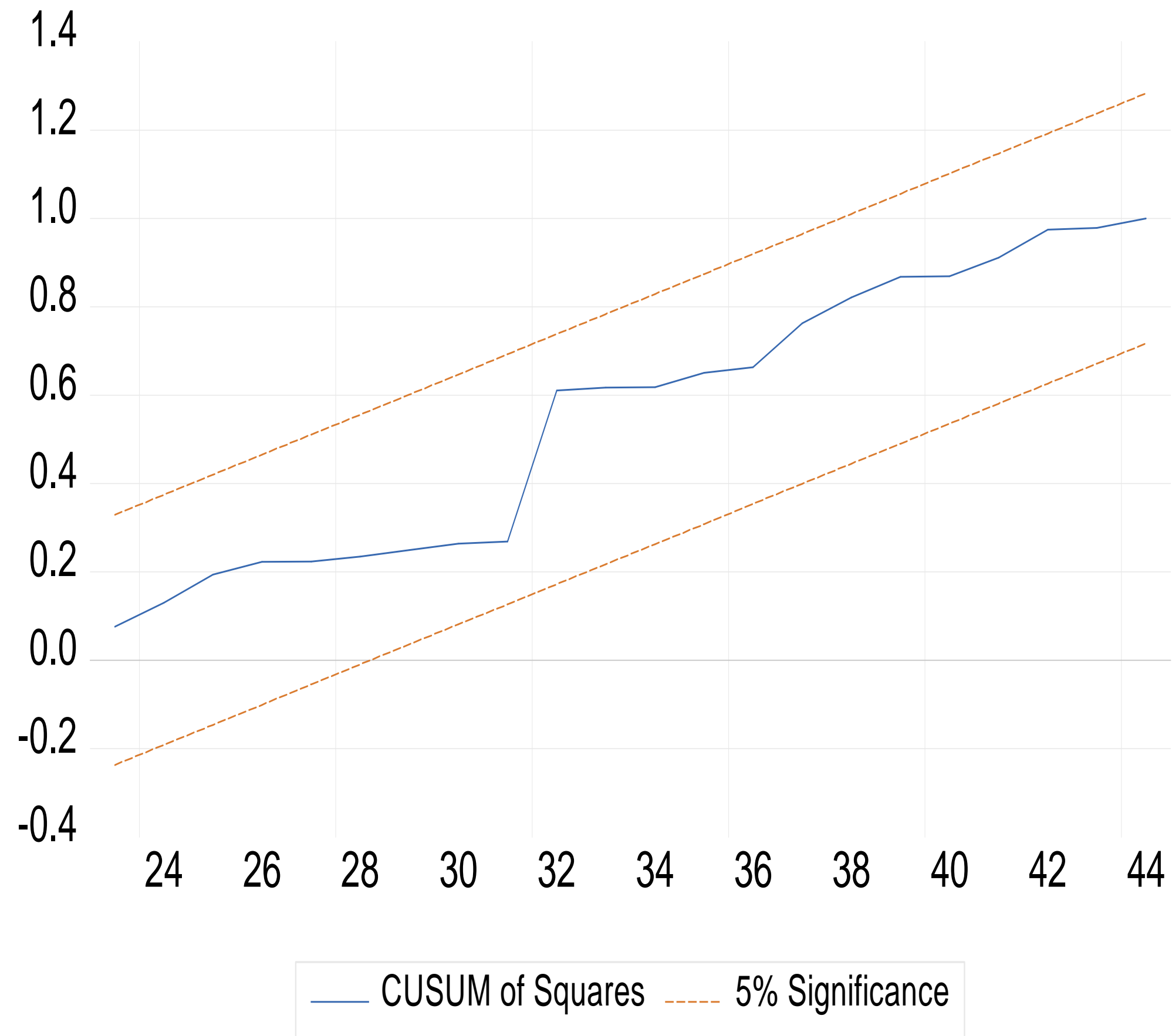
*, **, *** represents the significance levels of .10, .05, .01

Estimated VAR Model and Granger Causality Test

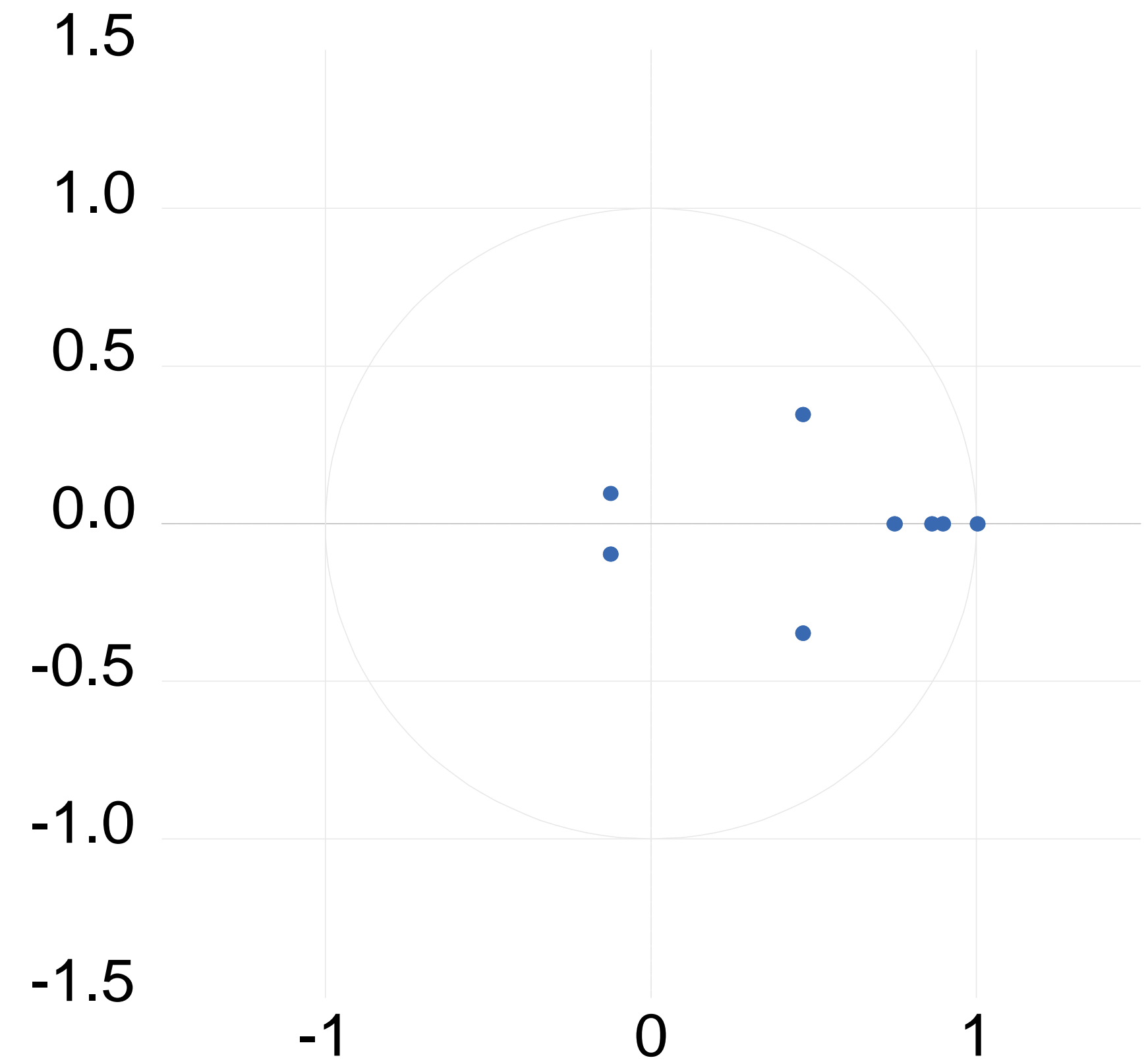
Table 4 Granger causality test

Excluded	χ^2	df	Probability	Excluded	χ^2	df	Probability
Dependent Variable lnEXPO _t		lnGDP _t		Dependent Variable lnGdp _t		lnEXO _t	
lnRem _t	6.93	2	0.03	lnRem _t	2.66	2	0.26
lnODA _t	2.79	2	0.24	lnOda _t	4.28	2	0.11
All	5.29		0.04	All	1.29	2	0.54
	12.98	6	0.04		7.95	6	0.24
Dependent Variable lnGDP _t		lnRem _t		Dependent Variable lnGDP _t		lnODA _t	
lnExpo _t	0.70	2	0.70	lnExpo _t	4.33	2	0.11
lnODA _t	0.65	2	0.72	lnRem _t	2.29	2	0.31
All	0.85	2	0.65	All	2.28	2	0.31
	3.38	6	0.75		17.51	6	0.007

Stability Tests



Inverse Roots of AR Characteristic Polynomial



The findings of this paper add to the existing evidence of the macroeconomic effects of remittance inflows, as well as exports which are in line with household-level studies and find that remittances improve the welfare of their recipients.

Policy Recommendations for Egypt to Enhance Economic Investment Through Migrant Remittances

Egypt can leverage the successful experiences of other nations in promoting the productive use of remittances by implementing the following policy recommendations:

1. Develop Comprehensive Guidelines for Promoting Remittances:

Create detailed guidelines that outline rules and processes for encouraging remittances to be invested in local economic enterprises.

Set realistic goals, methods, and timelines to assist Egyptian families in overcoming barriers to investment.

2. Enhance Financial and Social Institutions:

Encourage financial institutions to offer attractive credit opportunities that channel remittances into productive investments.

Partner with social institutions to raise awareness about the benefits of investing remittances in local enterprises.

3. Reduce Transaction Costs:

Implement policies to lower the costs associated with remittance transfers, making it more affordable for migrants to send money home.

Collaborate with financial technology firms to improve money transfer technologies, ensuring faster and more secure transactions.

4. Promote Information Dissemination:

Provide clear and accessible information about the various transfer channels available, helping migrants and their families make informed decisions.

5. Establish Voluntary Codes of Conduct:

Develop and promote voluntary codes of conduct for the fair transfer of funds to ensure transparency and trust in the remittance process.

6. Develop Remittance-Related Financial Products:

Introduce savings and insurance products that cater to the needs of remittance-receiving households, helping to protect their social welfare.

Issue ID cards or similar identification tools that enable domestic banks to offer services to Egyptian migrants in foreign markets.

7. Foster International Cooperation:

Work with the governments of host nations and international organizations to create processes that channel remittances and migrants' savings into productive uses.

Establish bilateral agreements with host countries to facilitate the smooth transfer and investment of remittances.

8. Encourage Securitization of Remittance Flows:

Develop financial instruments that allow for the securitization of remittance flows, providing a stable source of investment capital for critical industries.

Offer incentives such as tax exemptions to encourage remittances to be invested in sectors with high potential for economic growth and job creation.

By adopting these policies, Egypt can significantly enhance the beneficial impact of remittances on its economic growth, creating a more prosperous environment for its citizens and leveraging the financial contributions of its migrant population.