The Effects of Migration and Remittances on Economic Development in Egypt

Ima Kusdiana Kurniasari[1], Sri Harnani[2], Cahya Budhi Irawan[3]
[1,2,3]STIE Jaya Negara Tamansiswa Malang, Indonesia

Abstract

This piece delves at how migration and remittances have affected economic growth in Egypt, a large nation in North Africa and the Middle East with a rich history of both. According to the World Bank figures used in this article, in 2020 Egypt received an anticipated $29.6 billion in remittances, which is equal to 8% of its GDP. The article also summarises the research on how migration and remittances have helped or hurt the economies of countries of origin in terms of poverty reduction, human capital development, and overall economic growth. To further evaluate the impact of PR on FDI, IT, and the article itself, the authors employ a vector autoregression (VAR) model. A positive and substantial effect of PR on PR is found, as is a negative and significant effect of PR on FDI, but no significant effect of PR on IT is found. The essay concludes that policymakers in Egypt should take a balanced and context-specific approach to maximising the advantages and minimising the costs of migration and remittances due to their complicated and varied effects on economic growth.

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Background

Migration to and from Egypt, a large country in North Africa and the Middle East, has a long and storied past. The World Bank estimates that in 2020, Egypt received $29.6 billion in remittances, which is equivalent to 8% of its GDP. Foreign currency and income from remittances are important to many Egyptian households, particularly those in rural regions. Positive benefits of remittances on poverty alleviation, human resource growth, and GDP expansion have been observed in Egypt (Elorabi et al., 2023).

The effects of migration and remittances on economies are intertwined and significant. Migration is the process of individuals crossing international borders for reasons such as seeking employment, furthering their education, relocating to be closer to family, or seeking safety from persecution. Remittances are the monetary or material transfers that migrants make back to their home countries, either formally through banks or money transfer providers or informally through friends or family (Masuduzzaman, 2014 ; Prabowo, Sasongko, & Damayanti, 2022). In 2020, 3.6% of the world's population, or 281 million people, were estimated to be migrants, according to the World Bank1. The United States, Germany, Saudi Arabia, Russia, and the United Kingdom were the top five countries where migrants settled down after leaving their home countries. India, Mexico, China, Russia, and Syria are among the top five countries from which foreign migrants originated. According to the World Bank,

by 2020, remittance flows to low- and middle-income countries would have reached $540 billion, making them the largest source of external finance, exceeding both foreign direct investment and government development aid. Indians, Chinese, Mexicans, Filipinos, and Egyptians all ranked high as remittance recipients (Barnett & Nam, 2023).

The effects of migration and remittances on economic development can be analyzed from both the origin and destination perspectives. From the origin perspective, migration and remittances can have positive and negative effects on economic development (Widarni, Irawan, Harnani, Rusminingsih, & Alim, 2022). On the positive side, migration and remittances can increase income and consumption, reduce poverty and inequality, improve health and education outcomes, promote human capital development, stimulate entrepreneurship and innovation, and foster economic growth (Quisumbing & McNiven, 2020). On the negative side, migration and remittances can cause brain drain and skill loss, reduce labor supply and productivity, create dependency and moral hazard, increase inflation and exchange rate appreciation, distort resource allocation and sectoral composition, and undermine social cohesion and political stability (Abduvaliev & Bustillo, 2020). From the destination perspective, migration and remittances can also have positive and negative effects on economic development. On the positive side, migration and remittances can increase labor supply and diversity, enhance productivity and innovation, fill skill gaps and labor shortages, boost demand and consumption, and contribute to fiscal revenues and social security. On the negative side, migration and remittances can cause job competition and wage depression, increase unemployment and informality, create fiscal costs and social tensions, and generate cultural and security challenges (Clemens et al., 2018).

The net effects of migration and remittances on economic development depend on various factors, such as the size, composition, direction, and duration of migration and remittance flows; the characteristics and behavior of migrants and remittance senders and receivers; the policies and institutions of origin and destination countries; and the global and regional context. Therefore, there is no one-size-fits-all answer to whether migration and remittances are good or bad for economic development. Rather, there is a need for a nuanced and evidence-based analysis of the costs and benefits of migration and remittances for different countries and regions (Bucevska, 2022).

The World Bank provides data and analysis on various indicators of migration and remittances, such as net migration rate, remittance inflows and outflows, migrant stock, and diaspora network. The World Bank also provides support and advice to its clients and partners to enhance their migration and remittance performance and potential (Ratha et al., 2016).

Research Method

We proxied Adjusted Foreign direct investment variable, with the International tourism variable. For the Personal remittances variable. We use secondary data from the world bank. Our research period is from 2005 to 2020. We use the following equation:

$PR_t = \beta_0 + \beta_1 FDI_t + \beta_2 IT_t + e_t$ eql 1

$FDI_t = \beta_0 + \beta_1 PR_t + \beta_2 IT_t + e_t$ eql 2

$IT_t = \beta_0 + \beta_1 PR_t + \beta_2 FDI_t + e_t$ eql 3

Description:
PR : Personal remittances
FDI : Foreign direct investment
IT : International tourism
β : the magnitude of the effect of causality
e = Error term
t = Time period
eql: equation

Table 1. Variable Description

Variable	Explanation	Data type	Source
Personal remittances	Remittances from individuals include both salary and other forms of employee pay. All current monetary and nonmonetary payments made or received by a resident household from a nonresident home are considered personal transfers. Thus, any recent monetary transactions between residents and foreign nationals are considered personal transfers. Workers who are not permanent residents of the country where they are employed (such as seasonal or temporary workers) and citizens of that country who are hired by businesses based in another country are said to get "compensation of employees." Personal transfers and employee remuneration are added together to provide the data, as stated in the sixth edition of the IMF's Balance of Payments Manual.	Percent	World Bank

Foreign direct investment	FDI refers to the net inflow of capital used to acquire a controlling stake (ten percent or more of the voting shares) in a company based in a country other than the investor's home country. As represented in the balance of payments, it is the total of equity capital, reinvested earnings, other long-term capital, and short-term capital. When divided by GDP, this series depicts the net inflows (new investment inflows minus disinvestment) of foreign investors into the economy reporting the data.	Percent	World Bank
International tourism	Payments made to national airlines for foreign travel are included in international tourist receipts. Any additional payments paid in advance for items or services to be received in the final country are also considered receipts. Same-day visitors' receipts are also included unless they are particularly noteworthy and warrant being categorised differently. In other nations, invoices for transport services are not included. Their percentage of exports is determined relative to total exports, which	Percent	World Bank

	include all sales of goods and services between domestic consumers and foreign buyers, as well as all transfers of ownership of goods and services from domestic consumers to foreign buyers.		

Result and Discussion

Table 2. Root Test Results

Variabel	Unit Root	Statistics for the Augmented Dickey Fuller	Probability	Description
Personal remittances (PR)	Level	-1.678675	0.4211	Tidak Stationary
	First Different	-3.515376	0.0293	Stationary
Foreign direct investment (FDI)	Level	-4.021583	0.0118	Stationary
	First Different	-3.676356	0.0180	Stationary
International tourism (IT)	Level	-2.543326	0.1257	Tidak Stationary
	First Different	-3.990689	0.0103	Stationary

*the limit value used at the significance level of 0.05

Based on the findings shown on Table 2. The fact that PR, FDI, and IT stationary data are not at the same level, so that the first differencing is put into action. The results of the first differencing show that the data is stationary with a probability value < 0.05. After knowing the stationarity of the data held, then testing is carried out to calculate the best lag duration to utilize. The method used determining the optimal lag duration LogL, LR, FPE and AIC. The smaller the value of LogL, LR, FPE, AIC, the lag is the most optimum lag. The outcomes of the test are shown on the next table

Table 3. Maximum Lag Test

Lag	LogL	LR	FPE	AIC
0	-109.0392	NA	617.4020	14.93856
1	-93.56144	22.70068*	270.6588*	14.07486*

Table 3. Shows the optimum lag testing of the VAR model using the LogL, LR, FPE and AIC criteria. Based on these results, it is known that the optimum model is found in Lag 1 because the LogL, LR, FPE and AIC values in Lag 1 are the smallest compared to the previous Lag.

Table 4. Cointegration Test

Hypothesized at Most	Eigenvalue	Trace Statistic	0.05 Critical Value	Probability
None	0.511549	10.74775	21.13162	0.6724
1	0.223636	3.797015	14.26460	0.8801

2	0.106543	1.689848	3.841466	0.1936

* Max-eigenvalue test indicates no cointegration at the 0.05 level

The cointegration test results are shown in table 4 above explain that all probability value is above 0.05. It means all the probabilities are not significant. Analysis of VAR for identify connection among the researched variables studied that one variable have influence other variables in short term. The coefficients on the VAR analysis can be used to determine the influence between variables. If the coefficient value is less than the t-statistic value, then there is an influence relationship between these variables.

Table 5. VECM Estimation Results

	D(PR)	D(FDI)	D(IT)
D(PR(-1))	0.752887	-0.176232	0.936060
	(0.39781)	(0.27186)	(1.43133)
	[1.89260]	[-0.64826]	[0.65398]
D(FDI(-1))	0.063332	0.908780	-0.696476
	(0.28342)	(0.19368)	(1.01975)
	[0.22346]	[4.69208]	[-0.68299]
D(IT(-1))	-0.133023	-0.092695	-0.031376
	(0.11242)	(0.07683)	(0.40450)
	[-1.18324]	[-1.20652]	[-0.07757]
C	4.802362	3.285095	17.37244
	(3.43805)	(2.34952)	(12.3703)
	[1.39683]	[1.39820]	[1.40437]

Considering what the VAR analysis revealed, could be said that relationship between PR and PR has a positive significant impact because the coefficient value's at 0.752887, less than the 1.89260 t-statistic's value. Significant correlation exists between PR and FDI, meaning that the two variables related to each other because the coefficient value is at -0.176232 less than the -0.64826 t-statistic value. The non significant correlation finally found exists between PR and IT, because the coefficient value is at 0.936060 more than the 0.65398 t-value statistic.

Conclusion

When PR improve, PR improves again. The impact is significant at the 5% level since the coefficient value, 0.752887, is smaller than the t-statistic value, 1.89260. The VAR analysis also reveals that public relations has a negative and statistically significant effect on foreign direct investment. The effect is significant at the 5% level of statistical significance since the coefficient value of -0.176232 is smaller than the t-statistic value of -0.64826. There is no obvious connection between public relations and information technology, as shown by the VAR analysis. The impact is not statistically significant at the 5% level since the coefficient value, 0.936060, is greater than the t-statistic value, 0.65398.

References

Abduvaliev, M., & Bustillo, R. (2020). Impact of remittances on economic growth and poverty reduction amongst CIS countries. *Post-Communist Economies*, *32*(4). https://doi.org/10.1080/14631377.2019.1678094

Barnett, G. A., & Nam, Y. (2023). A network analysis of international migration: Longitudinal trends and antecedent factors predicting migration. *Global Networks*. https://doi.org/10.1111/glob.12455

Bucevska, V. (2022). Impact of remittances on economic growth: Empirical evidence from South-East European countries. *The South East European Journal of Economics and Business*, *17*(1), 79–94.

Clemens, M., Huang, C., Graham, J., & Gough, K. (2018). *Migration is what you make it: seven policy decisions that turned challenges into opportunities*. Center for Global Development Washington, DC.

Elorabi, K., Ishak, S., Nor, N. M., & Ibrahim, S. (2023). Does Governance in MENA Countries Attract Migrants' Remittances? *Advances in Social Sciences Research Journal*, *10*(1), 24–37.

Masuduzzaman, M. (2014). Workers' remittance inflow, financial development and economic growth: A study on Bangladesh. *International Journal of Economics and Finance*, *6*(8), 247–267.

Prabowo, B. H., Sasongko, B., & Damayanti, L. (2022). Economic Challenges And The Potential Threat Of A Debt Trap In Asia: English. *Tamansiswa Accounting Journal International*, *5*(1), 53-63.

Ratha, D., Eigen-Zucchi, C., & Plaza, S. (2016). *Migration and remittances Factbook 2016*. World Bank Publications.

Widarni, E. L., Irawan, C. B., Harnani, S., Rusminingsih, D., & Alim, M. B. (2022). Human capital and internet literacy impact on economic growth in Indonesia. *Journal of Management, Economics, and Industrial Organization, 6 (3)*, 101-112.