IRJEMS International Research Journal of Economics and Management Studies
Published by Eternal Scientific Publications
ISSN: 2583 – 5238 / Volume 4 Issue 9 September 2025 / Pg. No: 115-123
Paper Id: IRJEMS-V4I9P113, Doi: 10.56472/25835238/IRJEMS-V4I9P113

Research Article

Terrorism, Migrant Remittances and Domestic Investment in Togo

[1]Dr. AKODA Komla, [2]Dr. EKPENTE Lémmi
[1]Doctor of Economics, Police Commissioner.
[2]Doctor of Economics, Ministry of Agriculture of Togo.

Received Date: 13 August 2025 Revised Date: 31 August 2025 Accepted Date: 12 September 2025 Published Date: 20 September 2025

Abstract: *In recent years, with a decline in Foreign Direct Investment (FDI) and Official Development Assistance (ODA), migrant remittances (MTRs) have become a significant source of external financing for some developing countries (DCs) at a time when they are facing the emergence of terrorism. However, opinions differ as to their impact on the economies of migrants' countries of origin; hence, the purpose of this analysis is to determine the effect of remittances on domestic investment in the Togolese context. The results obtained over the period 2000-2023, using the fully modified least squares (FMOLS) method developed by Phillips and Hansen (1990), indicate that MFTs stimulate domestic investment, leading to measures being taken to encourage the Togolese diaspora to invest more in the country to maximise their potential benefits. Our results also show that terrorism has a negative impact on domestic investment, hence the need to strengthen counter-terrorism measures.*

Keywords: *Migrant Remittances, Domestic Investment, Terrorism, Fully Least Squares Method.*

I. INTRODUCTION

Nowadays, with the considerable reduction of traditional sources of income such as official development assistance (ODA), foreign direct investment (FDI) and foreign portfolio investment (FPI), migrant remittances (MTRs) to developing and low-income countries (DCs) constitute one of the least volatile sources of external financial flows (Rao and Hassan, 2012; Chowdhury and Peria, 2016; WB, 2018). However, their effect on development, and more specifically on domestic investment in migrants' countries of origin, is hotly debated in the economic literature, both theoretically and empirically.

In theoretical terms, many authors (Bouya, 2023; Brahim, 2018; Barajas et al., 2009; Chami et al., 2008; Lartey, 2011; Ratha, 2013) argue that migrant remittances alleviate the burden on the balance of payments and are used to finance imports. As the local currency, they increase demand for consumer and capital goods, thereby stimulating domestic investment. However, these financial flows can reduce domestic investment if they are used for consumption instead of being invested in the development of physical and human capital (Ahamada and Coulibaly, 2013). Migrant remittances can also reduce domestic investment by leading to moral hazard or a dependency syndrome (Mallick, 2012; Tung, 2018). Migrant remittances may also contribute to the financing of terrorism, thereby reducing domestic investment (Alain, 1989; Elu and Price, 2011; Mascarenhas and Sandler, 2014; Raza et al., 2017).

Empirically, the conclusions of the work are mixed. Some researchers, such as Inoue and Hamori (2016), Petrou and Connell (2014), Salas (2014), Issifu (2018), Le (2018) and Yiheyis and Woldemariam (2015), have found a positive effect of MFTs on domestic investment. Other studies by Mallick (2012), Tung (2018), Bon (2023), Eftimoski and Josheski (2021), Olubiyi (2013), Su et al. (2021), and Tung (2018) have, however, found a negative effect of MFTs on domestic investment. Other studies have found a non-significant effect of MFTs on domestic investment (Bjuggren et al., 2010; Okeke and Chinanuite, 2022).

Theoretical and empirical literature shows a lack of consensus on the effect of MFTs on domestic investment, hence the importance of analysing their effect in developing countries characterised by a growth in these financial flows over the last two decades.

Remittances to low- and middle-income countries exceeded $656 billion in 2023; however, this figure likely underestimates the actual amount, as many people utilise informal channels. However, growth in remittances slowed sharply in 2023 to 0.7%, compared with 10.8% in 2021 and 8.3% in 2022, respectively (Figure 1). Despite this slowdown, migrant remittances exceeded the amount of foreign direct investment (FDI) and official development assistance (ODA) (World Bank, 2024). They have enabled recipient households to make investments that are crucial for the future, thereby encouraging children to attend school, reducing child labour, and boosting entrepreneurial activity (Mawuena et al., 2022). Remittances have also helped to reduce poverty within households (Lu, 2013).

This is an open access article under the CC BY-NC-ND license (https://creativecommons.org/licenses/by-nc-nd/2.0/)

Like all developing countries, remittances from migrants have seen remarkable growth in Togo, rising from $ 104 million in 2002 to $ 650 million in 2022, placing Togo among the top ten countries receiving the most funds from their diaspora. Behind Nigeria (25 billion dollars), Ghana (3.8 billion), Senegal (2.7 billion), Kenya (2.1 billion), Zimbabwe (1.9 billion), Mali (1 billion), South Africa (900 million), Uganda (800 million) and Ethiopia (500 million). In 2018, remittances accounted for 8.2% of the country's GDP, reflecting their significant importance in the Togolese economy. Over the same period, domestic investment increased from CFAF 303.58 billion in 2002 to CFAF 1,253.18 billion in 2023, despite the significant role of remittances. Similarly, since 2020, Togo has faced a growing terrorist threat and the emergence of violent extremism, including attacks such as the one in Salwaga in 2021, due to the expansion of groups such as Boko Haram and the Islamic State in the Sahel region. Although these attacks are isolated, they pose increased security risks and have impacted the country's stability, thereby affecting investor confidence. However, the country has continued to implement economic reforms, attracting around $1.3 billion in foreign investment in 2018 (UNCTAD, 2024) with growth in sectors such as infrastructure and telecommunications (UNCTAD, 2024; WB, 2024). Despite these efforts, political instability and security risks continue to be major obstacles to sustainable growth and the country's long-term attractiveness. It would therefore be relevant to analyse their effect on domestic investment, the emergence of violent extremism and terrorism, and the environment of terror it causes (Zakaria et al., 2019; Salamé, 2024), to understand how they influence local investment in the Togolese context.

This article aims to empirically analyse the effect of terrorism and migrant remittances on domestic investment in Togo. More specifically, it will determine the relationship between migrant remittances and terrorism on the one hand, and domestic investment on the other, in the Togolese context.

II. LITERATURE REVIEW

There is an abundant literature on the effect of migrant remittances and terrorism on domestic investment. However, the conclusions of their analyses reveal a lack of consensus at both theoretical and empirical levels.

A) Theoretical Review

a. Effect of terrorism on domestic investment

Theoretical analyses in the economics literature of the effect of terrorism on domestic investment reveal a lack of consensus in their conclusions. Some researchers (Shelley & Picarelli, 2005; Cronin, 2006; Persitz, 2007; Llussa & Tavares, 2011; Ul Haq Wani, 2018; Muhammad et al., 2019, Zakaria et al., 2019; De Dieu et al., 2024) argue that terrorism reduces investment due to increased uncertainty and high security costs, which may deter local and foreign firms from engaging in long-term projects. Others (Sekrafi & Abid, & Assidi, 2020; Kohnert, 2022) argue that, in some cases, terrorism can stimulate investment, especially in the informal sector, by encouraging increased spending on security and infrastructure, which can generate economic activity in the short term.

b. Effect of migrant remittances on domestic investment

Divergent theories mark the debates on the effect of migrant remittances on domestic investment. On the one hand, many authors (Dash, 2020) argue that remittances stimulate local investment by increasing families' purchasing power, facilitating access to finance and encouraging consumption, which can boost the local economy. On the other hand, critics point out that these funds can reduce the incentive to invest in productive projects by favouring immediate consumption over long-term investment. In addition, the inefficient use of transfers, the dependency they can engender, and institutional weaknesses in some countries can limit their impact on sustainable economic development. In short, the effects of remittances depend largely on the institutional and structural context of the recipient country.

B) Review of Empirical Literature

The relationship between MFTs and domestic investment has been the subject of empirical analysis, yielding controversial conclusions. Many authors (Baldé, 2011; Adams and Cuecuecha, 2013; Gyimah-Brempong and Asiedu, 2015; Manic, 2017; Issifou, 2018; Dash, 2020) have established a positive link. Bjuggren and Dzansi (2008) find no link between MFTs and domestic investment. Others (Mallick, 2012; Tung, 2018; Abbas, 2019), however, find a negative effect, while Chowdhury (2016) and Aggarwal et al. (2011) find no relationship between TFM and domestic investment.

Fayissa and Nsiah (2010) examine the effect of remittances on economic growth for 18 Latin American countries using panel data from 1980 to 2005 and find that MFTs stimulate household investment in physical and human capital. Yasmeen et al. (2011) in their study of Pakistan over the period from 1984 to 2009 show that remittances have a positive effect on private investment. These results were confirmed by Baldé (2011). Issifu (2018) examines the effect of migrant remittances on domestic investment in five sub-Saharan African countries —Ghana, Kenya, Nigeria, Senegal, and Togo —over the period 1984-2014. He finds a positive effect of migrant remittances on domestic investment, and this result is more pronounced in countries with highly efficient financial and political institutions. Some studies (Aggarwal et al., 2011; Dzansi, 2013) argue that the effect of remittances on domestic investment is conditioned by the level of financial and institutional development in the recipient country. However,

other studies (Mallick, 2012; Tung, 2018) have found a negative or insignificant effect of remittances on domestic investment. Mallick (2012) analyses the relationship between remittances and private investment for India over the period 1966-2005 and finds a negative relationship between remittances and private investment. Tung (2018) analyses the effect of remittances on domestic investment for 19 Asia-Pacific countries over the period 1980-2015 and finds a negative relationship. According to Tung, remittances do not necessarily increase investment because of moral hazard or the dependency syndrome.

As regards the effect of terrorism on domestic investment, there is a majority consensus that terrorism has a negative effect on investment because of the instability and uncertainty it creates (Frey et al., 2005; HongXing et al, 2020; Zakaria et al., 2019; Kinyanjui, 2014; Enders et al., 2019; Zakaria et al., 2019; De Dieu et al., 2024; Salame, 2024)

Theoretical and empirical literature reveal controversial conclusions about the effect of migrant remittances on domestic investment, in contrast to the negative effect of terrorism. It seems appropriate to examine the terms of this debate in West African countries for several reasons. Firstly, these countries have been characterised in recent years by massive remittances from migrants to their countries of origin (WB, 2018). These countries are confronted with the phenomenon of violent extremism and terrorism. The informal sector is also a significant driver of economic activity in the subregion. Indeed, 89% of female employees work in the informal sector, which accounts for 80% of total employment in the region and 55% of GDP (Beaujeu et al., 2011; Cyriaque, 2018).

III. METHODOLOGY

This study aims to analyse empirically the effect of MFTs and terrorism on domestic investment. To achieve this, the theoretical framework for the analysis will be presented first, followed by the specification of the model.

A) Model For Determining Migrant Remittances And Terrorism On Domestic Investment

Our analysis is based on the flexible accelerator theories developed by Lucas (1967) and further developed by Fry (1993) and Dash (2020). According to these theories, the desired capital stock K^* is proportional to real output Q such that :

$$K^* = \alpha Q \qquad (1)$$

This can be expressed in terms of the desired ratio between investment and production

$$(I(I/Q))^* = \alpha G \qquad (2)$$

Where I/Q represents fixed gross domestic investment at current prices, Q represents GDP at current prices, and G is the growth rate of real GDP, Q. The adjustment mechanism allows the real investment rate to adjust partially, during a given period, to the difference between the desired investment rate and the investment rate of the previous period:

$$\Delta(I/Q) = \varphi[(I/Q)^* - (I/Q)_{t-1}] \qquad (3)$$

By rearranging equation 3, we obtain the following equation:

$$I/Q = \varphi(I/Q)^* + (1-\varphi)(I/Q)_{t-1} \qquad (4)$$

Or φ is the adjustment coefficient. The accelerator model allows economic conditions to influence the adjustment coefficient φ . Consequently, φ can be expressed as follows:

$$\varphi = \beta_0 + \left[\frac{\beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \cdots}{(I/Q)^* - (I/Q)_{t-1}}\right] \qquad (5)$$

Where X_i are the variables (including an intercept term for a constant rate of depreciation), which affect investment and β_i are their respective coefficients. Investment is considered a partial adjustment process (adjustment between the existing capital stock and the desired capital stock) in the context of liquidity constraints and temporal adjustment. As the investment rate is a structural component of the economy, the lagged coefficient is expected to exhibit strong persistence, corresponding to a constant investment rate

B) Model variables and specification

Our empirical model is based on equation [5], which highlights the possible link between transferring migrants' funds (TMF) and domestic investment. Before specifying it, we will first present the different variables that make it up

a. Model Variables

They include the explained variable and the explanatory variables. The variable explained in the model is domestic investment, measured by gross fixed capital formation.

The explanatory variables comprise TFMs, which are our primary variable of interest. However, in addition to the TFMs, four control variables were added to the model to study their effect on domestic investment:

- **Economic growth (Y):** This is measured by gross domestic product per capita. Its effects on poverty reduction are both direct and indirect. It mechanically increases the average level of income of the population, leading to an increase in government revenue, which in turn can lead to an increase in domestic investment (Delleur, 2005; Naquar et al., 2019).
- **Trade openness (Li)**: The link between trade openness and domestic investment has been widely discussed in the economics literature. However, the results of these analyses have led to mixed conclusions. Many authors (Asante, 2000; Bibi et al., 2012) have found a negative effect of trade openness on domestic investment, while de Ouattara (2004) finds a positive effect. Like all developing countries, we introduce this variable into our analysis to examine its impact on domestic investment in the Togolese context.
- **The level of inflation (INF).** This is captured by the consumer price index (CPI). To the extent that rising prices generate uncertainty, they can have a negative impact on domestic investment (Oshikoya, 1994; Ndikumana, 2000; Akilou, 2015).
- **Terrorism (IGT).** It is worth noting that, before a terrorist attack, a country's economy may be relatively stable, with domestic and foreign investment supported by a climate of confidence and predictability. Business and financial markets are thriving, and expansion projects are often underway. However, after the attack, instability prevails, leading to an immediate decline in investor confidence, capital flight, and increased market volatility. Long-term investments are slowed down, while sectors such as security may benefit from increased funding, despite persistent long-term economic uncertainty. This indicator ranges from 0 to 10, where 0 represents the lowest value and 10 represents the highest value.

b. Model specification

Our model has the following functional form:

$$ID = f(TFM, Y, Li, INF, IGT) \quad (6)$$

Where *ID* represents domestic investment; TFM, migrant remittances; INF, inflation; Li, trade openness; and IGT, global terrorism index.

The model for estimation purposes is obtained by linearising the relationship [6], i.e.:

$$\mathbf{Ln}\ (ID_t) = \propto_0 + \propto_1 lnTFM_t + \propto_2 lnY_t + \propto_3 lnLi_t + \propto_4 lnINF_t + \propto_5 lnIGT_t + \varepsilon_t \quad (7)$$

Where:

- Ln denotes the natural logarithm applied to the variables to be able to interpret the results in terms of elasticity.
- ID represents domestic investment measured by gross fixed capital formation; TFM, migrant remittances; Y, economic growth; Li, the degree of trade openness; INF, inflation captured by the consumer price index; and IGT, the terrorism index.
- The parameters to be estimated$\propto$ (i =1, 2, 3, 4 and 5) are elasticities, while$\propto_0$ is the constant term. ε_t is the error term.

IV. MODEL ESTIMATION AND INTERPRETATION OF RESULTS

A) Model estimation and presentation of results

Before presenting the results of the model estimation, we first present the approach followed.

a. The approach

The data used to estimate our model are annual, covering the period from 2000 to 2023. The choice of this period, from 2000 to 2023, is particularly suitable for analysing the impact of terrorism and migrant remittances on domestic investment in Togo, due to several key events. It coincides with the country's political transition, the strengthening of economic reforms and the intensification of geopolitical instability in West Africa, particularly with the increase in terrorist threats in neighbouring countries. Although Togo has not been directly affected by major terrorist attacks, regional disruptions may have influenced perceptions of security and affected investment.

In addition, remittances from migrants increased significantly during this period, providing a crucial source of funding for many families and local investment projects. This dynamic, combined with internal events such as violent demonstrations and popular uprisings, had a direct impact on the country's economic stability. The institutional responses to the social and security crises have also had an impact on investor confidence and the fluidity of domestic investment, making this period a crucial one for analysing the Togolese economy.

They are sourced from the United Nations Conference on Trade and Development (UNCTAD) database on migrant remittances. Domestic investment, economic growth, and trade openness are sourced from the World Bank's database (World Development Indicators, 2024). The consumer price index is sourced from the BCEAO database, while the global terrorism index is sourced from the same database.

b. Stationarity test for series

Since we are dealing with time series, we first performed unit root tests to determine the level of integration of the different variables.

Table 1: Unit root test

Variables	Level test	First difference test	Integration
	ADF	ADF	I(1)
ID	-1,24	-5,19*	I(1)
Y	1,14	-4,5**	I(1)
Li	-2,06	-4,27**	I(1)
INF	-0,16	-2,80**	I(1)
TFM	-1,44	-4,58**	I(1)
IGT	1,6	-3,81**	I(1)

Source: *Author. Note: (***); (**);(*) indicate significance at the 1, 5, and 10% level, respectively.*)

The results obtained using the augmented Dickey-Fuller test show that all the variables are integrated of order one (I(1)), i.e., they are stationary in first differences.

c. Series cointegration test

The table below shows the results of the Johansen cointegration test.

Table 2: Cointegration test based on the trace index

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	Critical Value (0.05)	Prob.**
None *	0.747432	91.71220	88.80380	0.0303
At most 1	0.676484	61.43860	63.87610	0.0788
At most 2	0.547975	36.61142	42.91525	0.1849
At most 3	0.450779	19.14301	25.87211	0.2724
At most 4	0.237294	5.959420	12.51798	0.4655

Source*: Authors' calculations*

The results of the cointegration test presented in Table 2 above, based on the trace statistics, indicate the existence of a cointegrating relationship. We can argue that there is at least one cointegrating relationship between the different variables retained in our model. There is at least one cointegrating relationship between the variables ID, Y, Li, INF, TFM and IGT in our model.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Y	0.751824	0.261798	2.871774	0.0106
Li	0.748375	0.187098	3.999899	0.0009
INF	2.025145	0.364080	5.562368	0.0000
TFM	0.316133	0.075954	4.162181	0.0007
IGT	-0.035278	0.019433	-1.815343	0.0872
C	1,604519	1.526900	1.050834	0.3080
R-squared	0.979532	Mean dependent var		20.62573
Adjusted R-squared	0.973512	S.D. dependent var		0.567829
S.E. of regression	0.092415	Sum squared resid		0.145190
Long-run variance	0.005161			
Note: ***, ** and *: significance at 1%, 5% and 10%.				

In the light of the various tests and given the short analysis period, we have chosen the fully modified least squares (FMOLS) method developed by Phillips and Hansen (1990), as it has the advantage of taking into account the problems of second-order endogeneity of the repressors (generated by the correlation between the cointegrating residual and the innovations of the I(1) variables present in the cointegrating relationship), and the autocorrelation and heteroscedasticity properties of the residuals (Pedroni, 1996; Phillips and Moon, 1999; Mignon and Hurlin, 2007); Phillips and Moon, 1999; Mignon and Hurlin, 2007).

d. The results.

Table 2: Estimation results

Variable	Coefficient	Std. Error	T-Statistic	Prob.
Y	0.751824	0.261798	2.871774	0.0106
Li	0.748375	0.187098	3.999899	0.0009
INF	2.025145	0.364080	5.562368	0.0000
TFM	**0.316133**	**0.075954**	**4.162181**	**0.0007**
IGT	**-0.035278**	**0.019433**	**-1.815343**	**0.0872**
C	1.604519	1.526900	1.050834	0.3080
R-squared	0.979532	Mean dependent var		20.62573

Adjusted R-squared	0.973512	S.D. dependent var	0.567829
S.E. of regression	0.092415	Sum squared resid	0.145190
Long-run variance	0.005161		
Note : ***, ** et * : signification à 1%, 5% et 10%.			

Source*: Author based on estimates*

The adjusted coefficient of determination indicates that the model can explain nearly 97% (97.35%) of the variation in domestic investment. Apart from the coefficient for inflation, all the other coefficients have the expected signs.

A 10% increase in migrant remittances translates into a 3.2% increase in domestic investment. Increased access to foreign markets is beneficial for the development of domestic investment. Estimates indicate that a 10% increase in market access leads to a 7.5% boost in domestic investment. Sustained economic growth of 10% boosts domestic investment by 7.5%. Terrorism has a negative effect on domestic investment in the Togolese context.

Our estimates indicate that economic growth stimulates domestic investment, as predicted by the accelerator model developed by Dash (2020). A policy based on higher growth will stimulate domestic investment in response to the very substantial financing requirements.

B) Interpretation of results

Our analysis shows that MCTs stimulate domestic investment. Terrorism, on the other hand, has a dampening effect on domestic investment.

As far as MFTs are concerned, this result allows us to argue that remittances stimulate domestic investment in the Togolese context. This result could be explained by the increase in the aggregate supply of savings for investment purposes, which translates into consumption smoothing, financial development and an increase in household investment in education and health (Massey and Parrado (1998), Balde (2011), Adams and Klobodu (2016), Issifu (2018) and Dash (2020).

In view of the positive effect of MFTs on domestic investment in African countries, which receive only 4% of total remittances to developing countries (Gupta et al., 2007), the latter have the smallest share, i.e. 33% of remittances to India, the largest recipient. In the Togolese context, this result could be explained by the high transaction costs (Gupta et al., 2007; Dash, 2020). Although remittances facilitate household access to the official financial markets, only a portion of these funds ends up in the official system. The high fees charged by operators discourage poor migrants from sending small sums. Despite easier access to banks for emigrants, beneficiaries often find it difficult to use them, leading them to rely on the informal sector. Reducing the cost of transactions could therefore motivate emigrants, particularly the poorest, who incur higher costs when sending money to their families back home.

The emergence of terrorism and violent extremism, which has been on the increase in recent decades in West African countries, is a recurring issue in economic debates. For almost two decades now, terrorism has been on the increase worldwide, and the countries of West Africa, and Togo in particular, are no exception. Given its non-negligible impact on the economy, several studies have looked at its effect on the economic growth of the countries affected (Meierrieks and Gries, 2013; Muhammad et al., 2019). Still others have examined its impact on foreign trade and consumption (Frey et al., 2005). Gupta et al (2007), Mallick (2012), Tung (2018), Tung (2018), Wani (2018), Muhammad et al (2019), and Dash (2020) have analysed its effect on domestic investment, with mixed results. This is why it is important to analyse its effect in the context of developing countries that have great potential for job and wealth creation, but are experiencing difficulties in developing the private sector. The results of our estimates indicate that terrorism has a negative and statistically significant impact on domestic investment. These results confirm the work of some authors (Abbasli, 2021; HongXing et al., 2020; Kambou and Khariss, 2020; Zakaria et al., 2019; Ali et al., 2017).

There are several reasons for the results obtained in this study:

Terrorism creates a climate of political instability and fear, which increases uncertainty in the economic environment (Muhammad et al., 2019). Investors, whether domestic or foreign, may be reluctant to invest in a country where security is uncertain, fearing that their investments could be affected by attacks or economic disruptions.

Terrorism generates additional costs. Governments must allocate more resources to security and the fight against terrorism, which may necessitate higher taxes or compulsory levies to finance this expenditure. This could reduce profits for local businesses and discourage investment. Terrorism can also lead to increased state spending on defence and security, to the detriment of other sectors such as health and education (Meierrieks et al., 2013).

The negative sign can also be explained by the deterioration in infrastructure, with terrorist attacks often targeting essential infrastructure, such as transportation, communications, and energy facilities (Frey et al., 2005). The destruction of these infrastructures can affect the ability of local businesses to operate efficiently, which will deter domestic investment.

Terrorism can also affect consumer confidence, as consumers may be less inclined to spend or support local businesses in an environment perceived as dangerous and uncertain. This demand reduction can lead to a decrease in profits for domestic companies, discouraging them from investing or expanding their operations.

Terrorism can reduce domestic investment through the mass exodus of skilled labour and capital flight. Indeed, in the context of a terrorist threat, entrepreneurs, skilled workers and investors may be tempted to leave the country or invest elsewhere. This leads not only to the movement of skilled labour but also to the movement of capital, which could slow down economic growth and innovation.

Finally, periods of instability linked to terrorism can encourage the emergence of corrupt practices, with public funds diverted to the fight against terrorism or to situations of mismanagement, which further reduces the attractiveness of domestic investment.

V. CONCLUSION

In this paper, we analyze the effect of migrant remittances on domestic investment in Togo. In terms of methodology, we employed the fully modified least squares (FMOLS) method, as developed by Phillips and Hansen (1990).

The results of the estimation show that, in the Togolese context, TFM has a positive effect on domestic investment. Terrorism has a negative effect on domestic investment.

In view of the results obtained, we make the following recommendations:

- Simplify and secure money transfer channels by establishing partnerships with financial institutions and money transfer platforms to reduce the cost of fund transfers. This would encourage migrants to use formal channels rather than informal ones, which are often more conducive to financing illegal activities such as terrorism and violent extremism. Digitalising payments by encouraging the use of digital platforms (mobile money, online banks) for international transfers. This would facilitate the traceability of funds and reduce the risk of misappropriation for criminal purposes. Strengthening monitoring mechanisms to ensure the traceability of fund transfers and avoid anonymous transactions that can be used to finance terrorist activities.
- Create financial and fiscal incentives for migrants by offering tax benefits or reductions to migrants who send remittances through formal channels. This would encourage migrants to favour legal and traceable methods for their remittances and develop programmes that reward regular and sustained remittances, for example, by offering credits or discounts on banking services for migrants who send remittances through formal channels.
- Set up a migrant education and awareness system by organising awareness campaigns to inform migrants of the risks associated with using informal channels and the legal consequences of terrorist financing. Migrants must be made to understand the importance of using legal and traceable channels. Also offer training on the options available for sending remittances via secure and legal means, which could, for greater effectiveness, include information on digital money transfer platforms and advice on managing money remotely.
- Strengthen international cooperation mechanisms by collaborating with organisations such as the World Bank, the OECD and sub-regional bodies to facilitate and secure fund transfers, while combating their use for illicit purposes. Additionally, combat corruption by establishing mechanisms to counter this scourge, ensuring that transferred funds are not misappropriated or misused.
- Strengthen regulation and laws against terrorist financing by introducing tougher legislation on terrorist financing, with severe penalties for those who break the law by transferring funds for terrorist purposes. This could include restrictions on undeclared or untraceable fund transfers. Collaborate with banks, money transfer operators, and other financial institutions to establish robust control protocols against terrorist financing while maintaining the fluidity of money transfers.
- Create diaspora-focused development projects by encouraging migrants to invest in local development projects in their country of origin, such as infrastructure construction programmes, agricultural projects or educational initiatives. This would increase the impact of remittances and reduce the temptation to turn to informal means. Offer financial products specifically designed for the diaspora, such as low-risk investment bonds or solidarity funds that finance development projects, while attracting funds and reducing the risk of terrorist financing.

VI. REFERENCES

[1] Abbas, K., Sabir, H. M., Shehzadi, A., & Abbas, Q. (2014). Effect of workers' remittances on household welfare in district Jhang: A case study of Tehsil 18 Hazari. Journal of Finance and Economics, 2(4), 131-135.

[2] Abbas, S. (2019). Workers' remittances and domestic investment in South Asia: a comparative econometric investigation. *International Migration*, *57* (5), 89-104.

[3] Adams Jr, R. H., & Cuecuecha, A. (2013). The Impact of Remittances on Investment and Poverty in Ghana. *World Development*, *50*, 24-40.

[4] Adams, & Cuecuecha, A. (2013). Remittances, household spending and investment in Ghana. World Development, 50(10), 24-40.

[5] Adams, J. R. H. (1998). Remittances, Investment, and Rural Asset Accumulation in Pakistan.

[6] Adams, R. H. and Page, J. (2003). International migration, remittances and poverty in developing countries (Policy Research Working Paper No. 3179). Washington, DC: World Bank Poverty Reduction Group.

[7] Adams, S. and Klobodu, E. K. M. (2016). Remittances, Regime Durability, and Economic Growth in Sub-Saharan Africa (SSA). Economic Analysis and Policy, 50, 1-8.

[8] Aggarwal, R., Kunt, A. D. and Peria, M. S. M. (2011). Do remittances promote financial development? Journal of Development Economics, 96(2), 255-264.

[9] Agrawal, P. (2000). Economic impact of foreign direct investment in South Asia. Mumbai, India: Indira Gandhi Institute of Development Research.

[10] Ahamada, I. and Coulibaly, D. (2013). Remittances and growth in sub-Saharan African countries: Evidence from a panel causality test. Journal of International Development, 25(3), 310-324.

[11] Ahmad, SS, and Wani, NUH (2018). Afghanistan's trade potential in the face of SAARC: an application of the gravity model approach. *Kardan journal of science, economics and management*, *1* (4), 1-19.

[12] Ahmed, V., Sugiyarto, G. and Jha, S. (2010). Remittances and household welfare: A case study of Pakistan (ADB Economics Working Paper Series No. 194). Retrieved from https://pdfs.semanticscholar.org/ce57/fb9dae2d55b2d3dca45e2b020392d631511b. pdf

[13] Akilou Amadou (2015): Analysis of the effect of FDI on domestic investment in Togo. *Revue d'Economie Appliquée, vol 3, n°1, jan-juil.2015, p. 191-209*

[14] Asante, Y. (2000), Determinants of Private Investment Behaviour, African Economic Research Consortium, Nairobi.

[15] Balde, Y. (2011). The effect of remittances and foreign aid on savings and investment in Sub-Saharan Africa. African Development Review, 23(2), 247-262.

[16] Reserve Bank of India (RBI). (2018). Globalising People: India's Inward Remittances. RBI bulletin. Retrieved from https://www.rbi.org.in/scripts/BS_ViewBulletin.aspx?Id=17882

[17] World Bank. (2018). World Development Indicators Online Database. Washington, DC: World Bank.

[18] Barajas, A., Chami, R., Fullenkamp, C., Gapen, M. and Montiel, P. (2009). Do workers' remittances promote economic growth? (Working Paper, WP/09/153). Washington, DC: International Monetary Fund.

[19] Beaujeu, R., Kolie, M., Sempéré, J. F., & Uhder, C. (2011). Demographic Transition and Employment in Sub-Saharan Africa. How to put employment back at the heart of development policies, À savoir, 5, 217.

[20] Bibi, S., Khan, U. A. and Bibi, A. (2012). Determinants of Investment in Pakistan. Academic Research International, Vol. 2 No. 2, pp. 517-524.

[21] Bjuggren, P. O., and Dzansi, J. (2008). Remittances and investment. *55th Annual Meeting of the North American Regional Science Association International, New York, November 2008*.

[22] Blundell, R. and Bond, S. (1998). Initial Conditions and Moment Restrictions in Dynamic Panel Data Models. Journal of Econometrics, 87, 115-143.

[23] Bontempi, M. E., Golinelli, R. and Parigi, G. (2010). Why demand uncertainty curbs investment: Evidence from a panel of Italian manufacturing firms. Journal of Macroeconomics, 32(1), 218-238.

[24] Bosworth, B. P., & Collins, S. M. (1999). Capital flows to developing economies: Implications for saving and investment (Brookings Papers on Economic Activity 1). Washington, DC: Brookings Institution.

[25] Chami, R., Barajas, A., Cosimano, T., Fullenkamp, C., Gapen, M., & Montiel, P. (2008). Macroeconomic consequences of remittances (IMF Occasional Paper No. 259). Washington, DC.

[26] Chowdhury, M. B. (2016). Financial development, remittances and economic growth: Evidence using a dynamic panel estimation. Margin: The Journal of Applied Economic Research, 10(1), 35-54.

[27] Connell, J. and Conway, D. (2000). Migration and remittances in island microstates: A comparative perspective on the South Pacific and the Caribbean. International Journal of Urban and Regional Research, 24(1), 52-78.

[28] Cronin, A. K. (2006). How al-Qaida ends: The decline and demise of terrorist groups. *International Security*, *31*(1), 7-48.

[29] Cyriaque, E. D. O. N. (2018). Barriers to youth business formalization in 3 West African countries (Benin, Senegal, Guinea).

[30] Dash, R. K. (2020). Effect of remittances on domestic investment: A panel study of six South Asian countries. *South Asia Economic Journal*, *21*(1), 7-30.

[31] De Dieu, G. J., Moussa, C. O. U. L. I. B. A. L. Y., & Aminata, O. U. E. D. R. A. O. G. O. (2024). Does terrorism hamper investment in WAEMU countries? *African Scientific Journal*, *3*(22), 084-084.

[32] Delleur, P. (2005). Trade, growth and poverty reduction. *Politique étrangère*, (2), 373-385.

[33] Dumitrescu, E.-I. and Hurlin, C. (2012). Testing for Granger non-causality in heterogeneous panels. Economic Modelling, 29(4), 1450-1460.

[34] Dzansi, J. (2013). Do remittance inflows promote manufacturing growth? The Annals of Regional Science, 51(1), 89-111.

[35] Edwards, C. and Ureta, M. (2003). International migration, remittances and schooling: Evidence from El Salvador. Journal of Development Economics, 72(2), 429-461.

[36] Enders, W., Sachsida, A., & Sandler, T. (2019). The Impact of Transnational Terrorism on U.S. Foreign Direct Investment. In *Transnational terrorism* (pp. 267-282). Routledge.

[37] Fayissa, B. and Nsiah, C. (2008). The effect of remittances on economic growth and development in Africa (Working Paper Series). Murfreesboro, TN: Middle Tennessee State University, Department of Economics and Finance.

[38] Fayissa, B. and Nsiah, C. (2010). The effect of remittances on economic growth and development in Africa. The American Economist, 55(2), 92-103.

[39] Fry, M. J. (1993). Foreign direct investment in a macroeconomic framework: Finance, efficiency, incentives, and distortions (Policy Research Working Paper Series 1141). Washington, DC: International Debt and Finance Division, International Economics Department, World Bank.

[40] Gani, A. (2016). Remittances and savings in Asia: Some empirical evidence based on the lifecycle model. Journal of Finance and Economics, 4(1), 24-38.

[41] Gheeraert, L. R., Mata, S., & Traça, D. (2010). Remittances and domestic investment in developing countries: An analysis of the role of financial sector development (CEB Working Paper N 10/013). Brussels, Belgium: Université Libre de Bruxelles.

[42] Giuliano, P. and Ruiz-Arranz, M. (2009). Remittances, financial development and growth. Journal of Development Economics, 90(1), 144-152.

[43] Gupta, S., Pattillo, C. A., & Wagh, S. (2009). The Impact of Remittances on Poverty and Financial Development in Sub-Saharan Africa. World Development, 37(1), 104-115.

[44] Gupta, S., Ptillio, C., & Wagh, S. (2007). The beneficial effect of remittances on Africa. *Finances & Développement*, *44*(2), 40-43.

[45] Gyimah-Brempong, K. and Asiedu, E. (2015). Remittances and investment in education: Evidence from Ghana. The Journal of International Trade & Economic Development: An International and Comparative Review, 24(2), 173-200.
[46] Gyimah-Brempong, K., & Asiedu, E. (2015). Remittances and investment in education:
[47] Evidence from Ghana. *Journal of International Trade and Economic Development*, *24* (2), 173-200.
[48] Hall, A. and Sen, A. (1999). Structure stability testing in models estimated by generalized method of moments. Journal of Business and Economic Statistics, 17, 335-348.
[49] Hatemi-J, A. and Uddin, G. S. (2013). On the causal nexus of remittances and poverty reduction in Bangladesh. Applied Economics, 46(4), 374-382.
[50] Inoue, T. and Hamori, S. (2016). Do workers' remittances promote access to finance? Evidence from the Asia-Pacific developing countries. Emerging Markets Finance and Trade, 52(3), 765-774.
[51] Issifu, I. (2018). The effect of remittances on domestic investment: The role of financial and institutional development in five sub-Saharan African countries. Forum for International Development Studies, 48, 1-20.
[52] Kinyanjui, S. (2014). The Impact of Terrorism on Foreign Direct Investment in Kenya. *International journal of business administration*, *5* (3), 148.
[53] Kohnert, D. (2022). The Impact of Islamist Terrorism on Africa's Informal Economy: Kenya, Compared with Ghana and Senegal. *Available at SSRN 4146897*.
[54] Lartey, K. K. E. (2011). Remittances, investment and growth in Sub-Saharan Africa. The Journal of International Trade and Economic Development: An International and Comparative Review, 22(7), 1038-1058.
[55] Llussá, F., & Tavares, J. (2011). Terror at what price? On the economic consequences of terrorist attacks. *Economics Letters*, *110* (1), 52-55.
[56] Lucas, R. (1967). Optimal Investment Policy and the Flexible Accelerator. International Economic Review, 8(1), 78-85.
[57] Mallick, H. (2012). Inflow of remittances and private investment in India. The Singapore Economic Review, 57(1), 1-22.
[58] Manic, M. (2017). The impact of remittances on regional consumption and investment. *Journal of Regional Science*, *57* (2), 342-381.
[59] Massey, D. and Parrado, E. (1998). International Migration and Business Formation in Mexico. Social Science Quarterly, 79(1), 1-20.
[60] Mawuena, K. K., Okey, M. K. N., Pelenguei, E., & Kafando, B. (2022). Effet des Transferts de Fonds des Migrants sur les Dépenses de Santé des Ménages Recipiendaires au Togo. *Association Internationale des Economistes de Langue Française*, 215.
[61] McKenzie, D. and Rapport, H. (2011). Can migration reduce educational attainment? Evidence from Mexico. Journal of Population Economics, 24(4), 1331-1358.
[62] Mignon, V., & Hurlin, C. (2007). A synthesis of cointegration tests on panel data. *Économie & prévision*, *180*(4), 241-265.
[63] Mody, A. and Murshid, A. P. (2005). Growing up with capital flows. Journal of International Economics, 65, 249-266.
[64] Mundaca, D. (2009). Remittances, financial market development and economic growth: The case of Latin America and the Caribbean. Review of Development Economics, 13(2), 288-303.
[65] Naqar, I., and El BAKOUCHI, M. O. U. N. I. R. (2019). The Effect of Economic Growth on Poverty and Inequality: A Panel Econometric Approach. *Journal of control, accounting and auditing*, *3*(4).
[66] Nowak-Lehmann, F. (2003). Trade policy and its effect on economic growth: The Chilean experience in the period from 1960 to 1998. Applied Econometrics and International Development, 3, 25-53.
[67] OECD. (2006). Remittances and their role in development. International Migration Outlook. SOPEMI, Paris. Retrieved from http://www.oecd. org/els/mig/38840502.pdf
[68] Ouattara, B. (2004), Modelling the Long Run Determinants of Private Investment in Senegal, CREDIT Research Paper No. 04/05, Centre for Research in Economic Development and International Trade, University of Nottingham.
[69] Perroux, F. (1966). Economic integration. Who integrates? Who benefits from integration? *Économie appliquée*.
[70] Persitz, D. (2007). The economic effects of terrorism: a counterfactual analysis of Israel. *Travail. Pap., Dep. Econ, Tel Aviv Univ, Tel Aviv, Israel*.
[71] Petrou, K. and Connell, J. (2014). Food, morality and identity: Mobility, remittances and the translocal community in Paama, Vanuatu. Australia Geographer, 48(2), 219- 234.
[72] Pindyck, R. S. and Solimano, A. (1993). Economic instability and aggregate investment (NBER Working Paper 4380), Cambridge.
[73] Rao, B. B. and Hassan, G. M. (2012). Are the direct and indirect effects of remittances on growth significant? The World Economy, 35(3), 351-372.
[74] Ratha, D. (2013). The effect of remittances on economic growth and poverty reduction. Washington, DC: Migration Policy Institute.
[75] Sahoo, P., & Dash, R. K. (2013). Financial Sector Development and Domestic Savings in South Asia. Economic Modelling, 33, 388-397.
[76] Salamé, G. (2024). *La tentation de Mars: guerre et paix au XXIe siècle*. Fayard.
[77] Salas, V. B. (2014). International remittances and human capital formation. World Development, 59(C), 224-237.
[78] Shelley, LI, and Picarelli, JT (2005). Methods and motives: Exploring the links between transnational organised crime and international terrorism. *Trends in Organised Crime*, *9* (2), 52-67.
[79] Tung, L. T. (2018). The effect of remittances on domestic investment in developing countries: Fresh evidence from the Asia-Pacific region. Organisations and Markets in Emerging Economies, 9, 193-211.
[80] Wang, M. (2010). The effect of remittances on rural poverty reduction and rural household expenditure. China Perspectives, 4, 60-70.
[81] Wani, N. U. H. (2018). Terrorism and foreign direct investment: An empirical analysis of Afghanistan. *Kardan Journal of Economics and Management Sciences*, *1*(3), 40-59.
[82] Westerlund, J. (2007). Testing for error correction in panel data. Oxford Bulletin of Economics and Statistics, 69, 709-748.
[83] Yasmeen, K., Anjum, A., Ambreen, S., & Twakal, S. (2011). The Impact of Workers' Remittances on Private Investment and Total Consumption in Pakistan. International Journal of Accounting and Financial Reporting, 1(1), 173-177.
[84] Zakaria, M., Jun, W., & Ahmed, H. (2019). Effect of terrorism on economic growth in Pakistan: an empirical analysis. *Economic research-Ekonomska istraživanja*, *32*(1), 1794-1812.
[85] Zakaria, M., Jun, W., & Ahmed, H. (2019). Effect of terrorism on economic growth in Pakistan: An empirical analysis. *Economic research-Ekonomska istraživanja* , *32* (1), 1794-1812. De Dieu, G. J.,