Analysis of Remittance Trends in Sub-Saharan Africa.

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Abstract

This article examines the significant role of remittances in the economic development of Sub-Saharan Africa, highlighting their implications for household savings, consumption, and overall economic growth. With remittance inflows increasing from 96.5*billionin*2001*to*589 billion in 2021, these financial transfers have emerged as a crucial source of external funding, surpassing official development assistance (ODA) and foreign direct investment (FDI) in many cases. The study synthesizes recent empirical evidence to elucidate how remittances influence capital accumulation, consumption expenditures, and poverty reduction. It also discusses the theoretical frameworks that explain the investment potential of remittances, particularly in the context of developing economies. By analyzing the interplay between remittances and various economic factors, this article contributes to a deeper understanding of how these financial flows can drive sustainable development in Sub-Saharan Africa.

Keywords; Remittance, Economic development, Trend Analysis Sub-Saharan Africa

1. Introduction

Remittances are vital for the economic development of Sub-Saharan Africa. At present, significant remittance in developing countries become a source of finance and brings economic growth and development through reducing household poverty increasing consumption, and further building investment in both human and physical capital which results in less vulnerability from natural and economic shock [1].

Over the last twenty years, remittance flows to developing countries have experienced substantial growth. Beginning at $96.5 billion in 2001, remittances jumped to $160 billion by 2004, marking a significant increase of 65% within just three years. This upward trajectory continued, with remittances reaching: $300 billion in 2007, a 50% rise from 2004 $372 billion in 2011, a 24% increase from 2007 $401 billion in 2012, a 5.3% rise from the previous year. By 2021, formal remittance channels alone recorded an impressive $589 billion, with additional amounts sent through informal means not included in this total. This steady growth underscores the vital role of remittances in supporting economic development in recipient countries

Currently, remittances rank as the second-largest source of external financial flows to developing countries, following foreign aid, and have shown a steady upward trend over time (Eggoh, Bangake, and Semedo, 2019a). The rising volume of the flow of remittances into developing countries in recent years is attracting increasing attention because of their effect on the receiving countries. [3], was discovered that remittances positively influence the economic growth of Sub-Saharan Africa (SSA). Nevertheless, the impact of remittances on the economic growth of Sub-Saharan Africa remains a topic of ongoing debate. While some argue that remittances have a positive impact on economic growth in Sub-Saharan Africa, others have a more pessimistic view, claiming that remittances can create income inequalities and promote dependency. To examine the relationship between remittances and economic growth in Sub-Saharan Africa, a System GMM analysis was conducted[2]. The study revealed that remittances positively influence both growth and investment in Sub-Saharan Africa, indicating that remittances can enhance the region's overall economic growth. (Jongwanich, 2007) revealed that remittances hurt domestic savings. This indicates that remittances may be used for immediate consumption rather than being saved and invested in the domestic economy.

The study employed real gross domestic product (RGDP) as the dependent variable, with remittance inflow (RMIT), savings (SAV), official development assistance (ODA), and government expenditure (GEX) as the explanatory variables. Additionally, the study considered the consumer price index (CPI), monetary base (M2), foreign trade (AiD), age dependency ratio (AGDR), and final consumption expenditure (CONS) as controlled factors.

2. Review of Literature

2.1 Review of Theoretical Literature:

The theoretical literature on remittances and economic growth in Sub-Saharan Africa offers insights into the mechanisms and channels through which remittances can influence the region. One important theoretical framework is the "investment channel," which suggests that remittances can drive economic growth[3].

Remittances to developing countries were projected to rise to $440 billion in 2014-15, up from

$414 billion in 2013, marking a 6.3% increase from 2012. This figure exceeds the combined total of official development assistance (ODA) and foreign direct investment (FDI) received by these countries, with the exception of China. Recently, there has been a shift towards 'South-South' migration, with over 50% of emigrants from developing countries moving to other developing countries within the same region[5].

Over the past decade, remittances to developing countries have more than doubled. However, growth in Africa, particularly Sub-Saharan Africa (SSA), has been slow. For instance, SSA received $1.86 billion of the $9 billion in remittances to Africa in 1990 and $5.96 billion of the $14 billion in 2003. Remittances to SSA reached $10 billion in 2005, peaked at $21.6 billion in 2008, and slightly declined to $20.7 billion in 2009 due to the global financial crisis.

SSA lags behind other regions in remittance flows. In 2009, SSA received $20.74 billion, significantly less than India ($49.26 billion), China ($47.55 billion), and Mexico ($22.16 billion). Despite lower remittances in absolute and per capita terms, SSA countries are among the largest recipients when remittances are viewed relative to GDP, serving as a crucial source of foreign exchange for some countries.

2.2 **The effect of remittances on Economic growth**

The impact of remittances on economic growth in Sub-Saharan Africa (SSA) is a multifaceted issue that has garnered considerable attention in recent years. Remittances, defined as the money sent back home by migrants, represent a significant source of income for many households in SSA, often surpassing foreign direct investment and official development aid. The World Bank estimates that remittances to SSA reach approximately $40 billion annually, potentially exceeding $100 billion if fully mobilized (Williams, 2016). This influx of capital can have positive and negative effects on economic growth, depending on various factors including how remittances are utilized, the state of financial systems, and the overall economic environment.

One of the primary ways remittances can influence economic growth is through their effect on household consumption and investment. highlight that while remittances can provide immediate financial relief to families, their impact on GDP growth may be limited if these funds are primarily used for consumption rather than investment. This phenomenon can lead to a "Dutch disease" effect, where an influx of foreign currency inflates local currency values, potentially harming other sectors of the economy (Mundaca, 2009). Conversely, remittances can also serve as a source of finance for entrepreneurial activities, bridging savings gaps and facilitating financial market development, as noted by (Nyeadi et al., 2014). This duality underscores the need for effective financial systems that can channel remittances into productive investments.

Extensive research has revealed both beneficial and detrimental impacts on recipient economies. This discussion synthesizes various theoretical perspectives to comprehensively understand how remittances influence economic growth.

2.4 Remittance and other Economic variables

Remittances, the financial transfers sent by migrants to their home countries, have significant implications for various economic factors, including household savings, consumption expenditures, official development assistance (ODA), monetary base, and consumer price index (CPI). This theoretical review synthesizes findings from recent studies to elucidate these effects.

Remittances can influence household savings in diverse ways. In some contexts, remittance-receiving households tend to save more, particularly when these funds are perceived as temporary income. This aligns with the permanent income hypothesis, which posits that households may save a portion of temporary income to smooth consumption over time. For instance, studies have shown that remittances can enhance the savings rate by providing a buffer against economic shocks, allowing families to allocate funds for future needs, such as education and healthcare(Van Der Mark, 1978).

The impact of remittances on consumption expenditure is multifaceted. Research indicates that remittance-receiving households often allocate a larger share of their income to non-food items, durable goods, and education while spending less on food compared to non-recipients. For example, in Nepal, remittances have been linked to increased expenditures on education and health, contributing positively to human capital development(Van Der Mark, 1978). However, some studies suggest that remittances may not significantly alter overall consumption behavior, as recipients often treat these funds as supplementary income rather than a primary source of consumption(Sutradhar, 2020)

Remittances can also interact with ODA, potentially reducing the need for external aid. In countries where remittances constitute a significant portion of GDP, they can supplement or even surpass ODA, influencing government policies and development strategies. This dynamic can lead to a shift in how development assistance is allocated, as remittances may be viewed as a stabilizing financial resource for households and communities(Dhakal & Oli, 2020)

2.2 Empirical review

It was discovered that remittances have a positive and significant impact on economic growth by increasing real private investment and fixed capital accumulation, which increases capital accumulation, reduces the current account deficit and external debt burden, and improves household education/skills by improving human capital. This study's findings suggest that international labor migration has significant potential benefits for poor people in developing countries like Ethiopia[10][2]

Remittances can provide households with additional income, which can be used for investment in housing, businesses, education, and healthcare [11] by using GMM in SSA. This increased investment can lead to job creation, productivity improvements, and overall economic growth. Overall, the literature suggests that remittances can have a positive impact on economic growth in Sub-Saharan Africa. However, the impact of remittances on economic growth in Sub-Saharan Africa is not without challenges and limitations.

A significant body of literature suggests that remittances positively contribute to economic growth by enhancing household consumption and investment. For instance, (Of & Chief, 2022)) utilized panel data from MENA countries and found that remittances have a long-term positive effect on economic growth, particularly with sound financial development. Similarly, Adams (2011) conducted a comprehensive review of 50 studies and concluded that remittances generally positively impact poverty alleviation and economic growth in developing countries. This aligns with the findings of (Gapen et al., 2009) who emphasized that remittances serve as a substantial source of external finance, promoting long-term economic growth through increased consumption and investment.

the relationship between remittances and financial development is critical. (Kratou & Gazdar, 2015) argued that an efficient banking system complements the positive effects of remittances on economic growth. Their analysis of 66 developing countries indicated that remittances could enhance financial development, stimulating economic growth. This is further supported by (Kratou & Gazdar, 2015), who found that financial development mediates the relationship between remittances and economic growth, suggesting that a well-developed financial sector amplifies the positive impacts of remittances

The overall impact of remittances on economic growth in SSA is complex. While remittances have been shown to contribute positively to poverty alleviation and financial development, their direct effect on GDP growth remains debated. Some studies suggest that remittances do not significantly stimulate economic growth compared to other forms of capital inflows, such as FDI or ODA. However, the indirect effects of remittances on human capital development and household consumption can foster a more conducive environment for growth over the long term(Khan et al., 2024)

Empirical evidence suggests that remittances positively influence capital accumulation in SSA. A study found that a 10% increase in remittances correlates with a 6.5% increase in investment as a percentage of GDP, indicating that remittances are a more effective catalyst for investment compared to ODA. This effect is particularly pronounced in countries where remittances constitute a significant portion of GDP, as they provide the necessary capital for households to invest in productive ventures (Baldé, 2011)

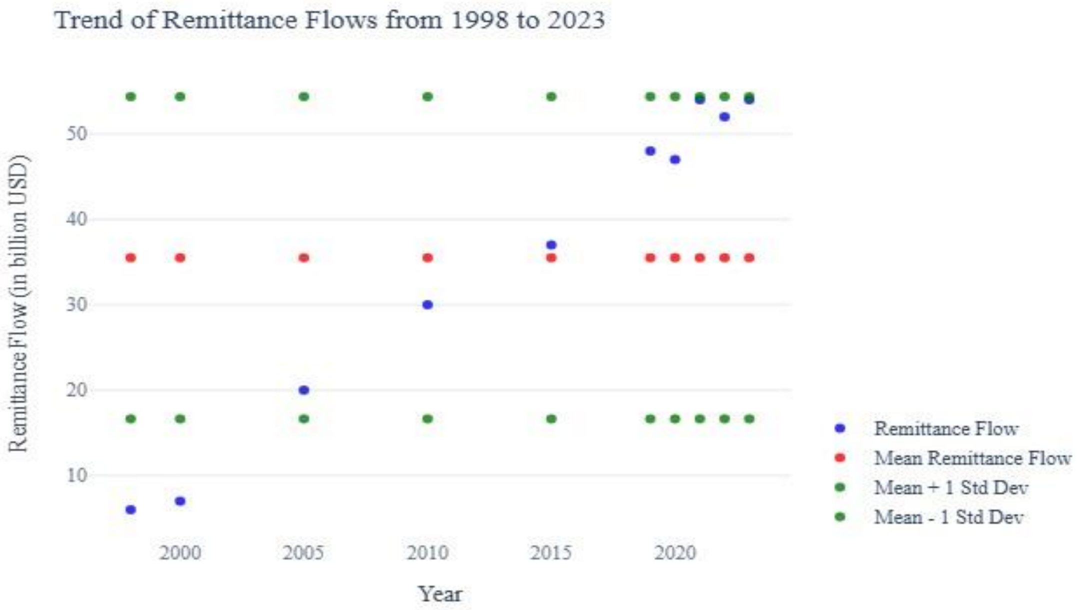
3. Remittance to Sub-Saharan Africa Some Highlighted Facts

Remittance inflows to Sub-Saharan Africa (SSA) have emerged as a significant driver of economic growth, particularly in poverty alleviation and financial development. Here are the key highlights(Ngom et al., 2020)

Remittances to SSA grew from $3 billion in 1990 to $38 billion by 2017, highlighting a substantial rise in financial support from migrants to their home countries. Major Recipients: Nigeria received the largest share at $22 billion, followed by Senegal and Ghana at $2.2 billion, indicating concentrated benefits among certain nations.

Moreover, Remittances to SSA have experienced significant growth, increasing from approximately $10 billion in 1998 to an estimated $54 billion in 2023. This represents a remarkable rise, particularly following the global economic impacts of the COVID-19 pandemic, which temporarily boosted remittance flows due to increased support from migrants Notably, remittances to SSA witnessed a significant surge of 6.1% in 2022, driven by various factors such as pandemic economic recovery, increased migration due to conflict and instability, and Growing demand for labor in destination countries. we can consider that Nigeria is the most remittance receiver country from all Sub-Saharan Africa.

Remittances to Sub-Saharan Africa (SSA) experienced rapid growth in the early 2000s, driven by increasing migration and economic opportunities. However, the growth rate has fluctuated over the years, reflecting shifting global and regional economic conditions(Gapen et al., 2009a) From 1998 to 2023, remittance inflows have been a vital source of financial support for households in Sub-Saharan Africa, contributing significantly to economic growth and poverty reduction. Despite fluctuations in growth rates due to global economic conditions, the overall trend indicates that remittances remain a critical component of the region's economic landscape.



4. Outcome and Discussions

In this section, we present the results of our estimations and conduct a comparative analysis**.** We examine the summary statistics of the variables, mean differences, and correlation outcomes.

4.1 Summary of Statistics

The summary statistics from **Table 3** provide valuable insights for the countries under consideration: The mean Real Gross Domestic Product (RGDP) during the specified period is approximately $23.85 billion, with a standard deviation of $1.34 billion, Money supply (IBM) has an average value of $8.16 billion, accompanied by a standard deviation of $9.9 billion, Government expenditure(GEX) averages at 1.5, with a standard deviation of 1.3, Aggregate consumption(CONS) has an average of 23.5, with a standard deviation of 1.19, Foreign aid(AID) exhibits an average value of $20.05 billion, with a standard deviation of 1.046, Remittances(REMT) show a mean value of $19.56 billion, with a standard deviation of $1.83 billion, Trade has an average of 20.07, with a standard deviation of 1.045, Domestic saving(SAV) averages at 21.64, with a standard deviation of 1.77, The Consumer Price Index (CPI), which serves as a proxy for inflation, has an average of 4.51, with a standard deviation of 0.95, The Age Dependency Ratio(ADR) has an average of 4.51, with a standard deviation of 0.5, Overseas Development Assistance (ODA), on the other hand, has a standard deviation of $20.56 billion and a mean value of $0.763 billion, Interestingly, the table suggests that ODA outperformed remittance inflows to Sub-Saharan Africa (SSA), with a minimum value of $17.32 billion, while remittances minimum value of $14.77 billion.

Table 3: Summary of Statistics

Variable	Mean	Std. Dev.	Min	Max
RGDP	23.85354	1.346078	21.2655	27.00616
BM	8.163688	99.91868	-3.344119	1999
GEX	1.588921	1.31487	.4219813	21.40247
CONS	23.50721	1.19454	20.51017	26.46335
Aid	20.05466	1.046474	16.89834	23.11847
ODA	20.5692	1.028174	17.32646	23.22077
TRD	20.07642	1.045	16.89834	23.449
SAV	21.65421	1.77429	15.29146	25.02435
CPI	4.591985	.9509601	-1.245736	18.52125
ADR	4.549113	2.053267	3.920238	46.658
REMT	19.50513	1.832283	14.7055	23.9

As shown in Appendix 1, Nigeria, Ghana, and Kenya lead the list of countries with the highest average remittance values, recorded at **22.302**, **21.87**, and **21.48** respectively. This implies that sample countries that have the highest remittance receipt have with somewhat small amount of variation. On the other hand, Uganda, Somalia, and Sierra Leone are found to have the lowest mean value of remittance with 14.21,16.73, and 17.47 respectively.
Table 2 The mean and standard deviation of remittances across Sub-Saharan Africa

Table 3 presents the correlation matrix of the study. From the result, we observed that

Country	*Mean*	*Std. dev*	*Country*	*Mean*	*Std. dev*
Ethiopia	**19.29053**	**1.267084**	**South Africa**	**18.26293**	**1.733295**
Gahanna	**21.87425**	**2.027836**	**Tanzania**	**20.78447**	**.9001707**
Kenya	**21.48**	**1.208943**	**Senegal**	**20.91032**	**1.32579**
Congo, Dem. Rep.	**19.3669**	**2.207405**	**Nigeria**	**22.30332**	**.4655472**
Burkina Faso	**18.88853**	**.9349244**	**Cote d'Ivoire**	**20.30431**	**.5867194**
Cameron	**18.68316**	**1.051072**	**Uganda**	**14.211**	**.0773409**
Sierra Leone	**17.47858**	**1.105405**	**Somalia**	**16.738**	**1.19395**
Mali	**19.78952**	**.9719263**			
Togo	**19.23237**	**1.001599**			
Zimbabwe	**20.30461**	**.4863979**			

Remittance has a positive correlation with real GDP of SSA Africa. The correlation coefficient is 0.529, indicating that remittance is marginally correlated to real GDP during the study period under consideration. The correlation matrix result has also indicated that Saving (SAV) and aggregate consumption (CONS) are positively and strongly correlated with real GDP. It is also observed from **Apendex3** that monetary base (BM), inflation (CPI), and Age dependency ratio (ADR) have a negative, but weak correlation with real GDP (RDGP). The positive correlation of remittance received implies that the remittance receipt may adversely boost economic growth in SSA countries. The fact that there is a positive or negative correlation between remittance and economic growth enables us to investigate the magnitude by which remittance affects economic growth in SSA during the periods under consideration.

5 conclusions and policy implications

The analysis of remittance trends in Sub-Saharan Africa reveals that remittances play a pivotal role in the region's economic landscape. Over the past two decades, remittance inflows have shown remarkable growth, significantly contributing to household income, consumption, and investment. The findings indicate that a 10% increase in remittances correlates with a 6.5% increase in investment as a percentage of GDP, underscoring the effectiveness of remittances as a catalyst for economic development compared to other financial inflows such as official development assistance (ODA).

Moreover, remittances have been instrumental in poverty alleviation, providing essential financial support to households, particularly in times of economic distress or natural disasters. The surge in remittance flows post-COVID-19 highlights their resilience and the critical role they play in economic recovery. However, the impact of remittances on economic growth is complex and multifaceted, with challenges such as dependency on these inflows and potential inflationary pressures that need to be addressed.

Governments in Sub-Saharan Africa should prioritize the development of robust financial systems that facilitate the efficient transfer and utilization of remittances. This includes improving banking services, reducing transaction costs, and promoting financial literacy among recipients to ensure that remittances are effectively invested in productive ventures.

Policymakers should create conducive environments that encourage the productive use of remittances. This can be achieved through incentives for investment in local businesses, agriculture, and infrastructure projects, thereby transforming remittance flows into sustainable economic growth

References

[1] I. D. Ayana, W. M. Demissie, and A. G. Sore, “Fiscal policy and economic growth in Sub-Saharan Africa: Do governance indicators matter?,” *PLoS One*, vol. 18, no. 11 November, 2023, doi: 10.1371/journal.pone.0293188.

[2] J. Eggoh, C. Bangake, and G. Semedo, “Do remittances spur economic growth? Evidence from developing countries,” *J. Int. Trade Econ. Dev.*, vol. 28, no. 4, pp. 391–418, 2019, doi: 10.1080/09638199.2019.1568522.

[3] C. R. K. Ahortor and D. E. Adenutsi, “The impact of remittances on economic growth in small-open developing economies,” *J. Appl. Sci.*, vol. 9, no. 18, pp. 3275–3286, 2009, doi: 10.3923/jas.2009.3275.3286.

[4] J. Jongwanich, “Workers’ Remittances, Economic Growth and Poverty in Developing Asia and the Pacific Countries ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC.”

[5] N. Rao, “THE IMPACT OF REMITTANCES ON ECONOMIC GROWTH IN ETHIOPIA Indian Journal of Commerce & Management Studies,” 2016, [Online]. Available: http://www.scholarshub.net

[6] H. de Haas, *A theory of migration: the aspirations-capabilities framework*, vol. 9, no. 1. Comparative Migration Studies, 2021. doi: 10.1186/s40878-020-00210-4.

[7] N. Vonneilich, “Social Relations, Social Capital, and Social Networks: A Conceptual Classification BT - Social Networks and Health Inequalities: A New Perspective for Research,” A. Klärner, M. Gamper, S. Keim-Klärner,

I. Moor, H. von der Lippe, and N. Vonneilich, Eds., Cham: Springer International Publishing, 2022, pp. 23–34. doi: 10.1007/978-3-030-97722-1_2.
[8] H. De Haas, “Remittances , Migration and Social Development,” no. 34, 2007.
[9] P. J. Alok and K. Mishra, “Macroeconomic determinants of remittances to India,” *Econ. Chang. Restruct.*, vol. 55, no. 2, pp. 1229–1248, 2022, doi: 10.1007/s10644-021-09347-3.
[10] T. Yaekob, “Relation of government expenditure with economic growth and poverty reduction in Ethiopian - ARDL analysis,” *Int. J. Curr. Res.*, vol. 8, no. 12, pp. 43215–43221, 2016, [Online]. Available: https://www.journalcra.com/article/relation-government-expenditure-economic-growth-and-poverty-reduction-ethiopian-ardl
[11] H. Kratou and K. Gazdar, “Addressing the effect of workers’ remittance on economic growth: evidence from MENA countries,” *Int. J. Soc. Econ.*, vol. 43, no. 1, pp. 51–70, Jan. 2015, doi: 10.1108/IJSE-08-2013-0189.
[12] J. Eggoh, C. Bangake, and G. Semedo, “Do remittances spur economic growth? Evidence from developing countries,” *J. Int. Trade Econ. Dev.*, vol. 28, no. 4, pp. 391–418, May 2019, doi: 10.1080/09638199.2019.1568522.
[13] D. Kwabena Twerefou, F. Ebo Turkson, B. Frimpong Wiafe, S. Antwi Darkwah, and D. Kwabena Twerefou, “DO FOREIGN FINANCIAL INFLOWS IMPACT ON ECONOMIC GROWTH? EVIDENCE FROM SUB-SAHARAN AFRICA.”
[14] A. Ribaj and F. Mexhuani, “The impact of savings on economic growth in a developing country (the case of Kosovo),” vol. 6, pp. 1–13, 2021.
[15] P. Zahonogo, “Trade and economic growth in developing countries: Evidence from sub-Saharan Africa,” *J. African Trade*, vol. 3, no. 1–2, p. 41, 2017, doi: 10.1016/j.joat.2017.02.001.
[16] B. A. Gashu, “Impact of Capital Flow on Economic Growth in Ethiopia: Empirical evidence from (1980-2010) using ARDL Approach,” 2021, doi: 10.21203/rs.3.rs-393202/v1.
[17] K. Yusheng, J. Bawuah, A. O. Nkwantabisa, S. O. O. Atuahene, and G. O. Djan, “Financial development and economic growth: Empirical evidence from Sub-Saharan Africa,” *Int. J. Financ. Econ.*, vol. 26, no. 3, pp. 3396–3416, 2021, doi: 10.1002/ijfe.1967.
[18] Salazar, “No Titleענף הקיווי: תמונת מצב,” *עלון הנוטע*, vol. 66, no. 3, pp. 37–39, 2012.
[19] Cyntia ROSA DEWI, “No Titleピコルナウイルス,” ウイルス, vol. 52, no. 1, pp. 1–5, 2002.
[20] M. Arellano and S. Bond, “Employment Equations Some Tests of Specification for Panel Data : Monte Carlo Evidence and an Application to Employment Equations,” vol. 58, no. 2, pp. 277–297, 1991.
[21] C. Góes, “Institutions and growth: A GMM/IV Panel VAR approach,” *Econ. Lett.*, vol. 138, pp. 85–91, Jan. 2016, doi: 10.1016/j.econlet.2015.11.024.
[22] D. Roodman, “How to do xtabond2: An introduction to difference and system GMM in Stata,” *Stata J.*, vol. 9, no. 1, pp. 86–136, 2009, doi: 10.1177/1536867x0900900106.
[23] C. M. Arellano and H. J. Markman, “The Managing Affect and Differences Scale (MADS): A self-report measure assessing conflict management in couples.,” *J. Fam. Psychol.*, vol. 9, no. 3, pp. 319–334, 1995, doi: 10.1037/0893-3200.9.3.319.
[24] R. Blundell and S. Bond, “Initial conditions and moment restrictions in dynamic panel data models,” *J. Econom.*, vol. 87, no. 1, pp. 115–143, Nov. 1998, doi: 10.1016/S0304-4076(98)00009-8.
[25] J. Hwang and Y. Sun, “Should we go one step further? An accurate comparison of one-step and two-step procedures in a generalized method of moments framework,” *J. Econom.*, vol. 207, no. 2, pp. 381–405, 2018, doi: 10.1016/j.jeconom.2018.07.006.
[26] M. History, “African Journal of Economics and Sustainable Development,” vol. 4, no. 3, pp. 61–71, 2021, doi: 10.52589/AJESD.
[27] S. R. Sutradhar, “The impact of remittances on economic growth in Bangladesh, India, Pakistan and Sri Lanka,” *Int. J. Econ. Policy Stud.*, vol. 14, no. 1, pp. 275–295, 2020, doi: 10.1007/s42495-020-00034-1.
[28] I. D. Ayana, W. M. Demissie, and A. G. Sore, “Fiscal policy and economic growth in Sub-Saharan Africa: Do governance indicators matter?,” *PLoS One*, vol. 18, no. 11 November, Nov. 2023, doi: 10.1371/journal.pone.0293188.
[29] A. Zardoub and F. Sboui, “Impact of foreign direct investment, remittances and official development assistance on economic growth: panel data approach,” *PSU Res. Rev.*, vol. 7, no. 2, pp. 73–89, 2023, doi: 10.1108/PRR-04-2020-0012.

[30] Y. Baldé, “The impact of remittances and foreign aid on savings/investment in sub-Saharan Africa,” *African Dev. Rev.*, vol. 23, no. 2, pp. 247–262, 2011, doi: 10.1111/j.1467-8268.2011.00284.x.

[31] J. Aizenman, Y. Jinjarak, and D. Park, “Capital Flows and Economic Growth in the Era of Financial Integration and Crisis,” 1990. [Online]. Available: http://www.nber.org/papers/w17502

[32] H. N. A. Corresponding, “Financial Development and Economic Growth in the UAE : Empirical Assessment Using ARDL Approach to Co-integration,” vol. 4, no. 5, pp. 105–115, 2012, doi: 10.5539/ijef.v4n5p105.

[33] S. Feeny, S. Iamsiraroj, and M. McGillivray, “Remittances and Economic Growth: Larger Impacts in Smaller Countries?,” *J. Dev. Stud.*, vol. 50, no. 8, 2014, doi: 10.1080/00220388.2014.895815.

[34] M. J. Abeka *et al.*, “Cogent Economics & Finance Financial development and economic growth nexus in SSA economies : The moderating role of telecommunication development Financial development and economic growth nexus in SSA economies : The moderating role of telecommunication,” *Cogent Econ. Financ.*, vol. 9, no. 1, 2021, doi: 10.1080/23322039.2020.1862395.