POLICY BRIEF

Financial Openness and Remittances: Evidence from Sub-Saharan Africa

Ekpeno L. Effiong and *Emmanuel E. Asuquo*

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Abstract

Does financial openness matter for remittances? Are the effects of financial openness on remittance dependent on the levels of financial and institutional development? This paper investigates these questions using panel data for 31 sub-Saharan African countries over from 1990 to 2015 and using a dynamic panel system generalized method of moments (GMM) estimation technique. The results show that financial openness, albeit having a declining effect, does not significantly influence the inflow of remittances into the region. In contrast, when conditioned on the levels of financial development and institutional quality,

financial openness tends to significantly increase remittances. However, this effect declines with significant improvement in institutional quality and a well-developed financial sector. Thus, financial openness substitutes financial and institutional development in fostering remittances in the region.

Introduction

During the past three decades, remittances have increased significantly both in volume and importance. Official remittance flows to developing countries reached over US$400 million in 2018, which is over 70% of the global remittance flows. As a major source of external finance for developing countries, remittances have exceeded other private capital flows and overseas development assistance, and in some exceptions, foreign direct investment. Moreover, remittances were relatively stable and resilient during the 2007–2009 global financial crisis. Its development impact includes but is not limited to poverty reduction and economic growth, and with possible adverse effects through labour market incentives (i.e., the moral hazard effects) and "Dutch disease" effect (Rapoport and Docquier, 2006). This makes understanding the drivers of remittances very important for the development process of many developing countries.

For sub-Saharan Africa (SSA), their share of global remittance flows remains relatively small compared to other regions of the world. One possible explanation is the high costs of remittance (Beck et al., 2022). As at 2018Q4, the region recorded an average cost of 9% exceeding those of other regions and the global average of 7% (World Bank, 2018). Overall, the cost of remittances is significantly above the 3% target of the 2030 Sustainable Development Goals (SDGs). Meanwhile, remittances are sensitive to prices and can increase significantly as prices decline (see Gibson et al., 2006; Ahmed et al. 2021). Several factors can influence the costs of remittance which consist of both a fee and an exchange rate spread components. One such factor is government policies relating to the exchange rate, capital controls and regulation of the remittance market (Beck and Martinez Peria, 2011). For example, the removal of exchange controls and lower exchange rate volatility should reduce both the exchange rate spread and remittance prices (see Freund and Spatafora, 2008). Moreover, stringent control on remittance transactions is expected to increase the remittance prices since it can be transferred as a tax to recipients. For SSA the high cost of remittances is often linked to the low volume of formal remittance flows, inadequate technology penetration and a non-competitive market environment (World Bank, 2017). Thus, the challenge remains on how to reduce the costs of remittance and create incentives to attract a higher share of global remittance flows into the region.

This paper investigates the role of financial openness as a policy option for increasing remittances to the sub-Saharan Africa. Financial openness through reduction of transaction cost and relaxing restrictions can help increase international capital flows

(including remittances). For example, and with emphasis on remittances, Beine et al. (2012) show that a negative association exists between financial openness and remittance prices. This implies that a higher degree of financial openness in the country receiving the remittance should lower costs and, in turn, boost the value and volume of remittances. Furthermore, the interest in examining the nexus between financial openness and remittances in the region is because the markets for cross-border remittances in Africa are relatively underdeveloped and characterized by a high degree of informality, absence of effective competition, exchange rate controls, low level of financial development, and exclusive partnership with few money transfer operators (Mohapatra and Ratha, 2011). These factors contribute to high remittance price, restricted entry, and competition in the remittance market, which in turn, encourages the use of informal channels for sending remittances.

Conversely, financial openness is often associated with risks such as exposure to financial crises and macroeconomic volatility. However, these can be minimized through collateral benefits such as domestic financial sector development, better governance institutions and discipline macroeconomic policies (Kose et al., 2009). Related literature on the macroeconomic effects of financial openness suggests that certain threshold levels of financial development and institutional quality are a prerequisite for an economy to maximize the benefit–risk trade-off of financial openness (see Kose et al., 2011). Even international institutions such as the International Monetary Fund (IMF) now maintain that financial openness would be more beneficial (i.e., less risky) provided countries can reach certain thresholds of financial development and institutional quality (IMF, 2012; Ostry et al., 2016). Similarly, Eichengreen and Rose (2014) show that the incidence and intensity of capital controls are systematically linked with financial development and institutional quality. For example, countries with deeper financial markets are less pruned to maintain controls because financial development can help mitigate the impact short-term capital fluctuations. Likewise, countries with stronger and more responsive political institutions would be better placed to pursue first-best regulatory policies. Insights from this debate therefore points to the importance of deepened financial sector development and better institutional/governance quality for realizing the benefits of financial openness. Therefore, framing the issue in this way raises two pertinent questions. First, does financial openness matter for remittances? Second, is the relationship conditional on the levels of financial development and institutional quality? Whether financial development and institutional quality complement or substitute the remittance effect of financial openness remains an empirical question.

The objective is to investigate the effect of financial openness on remittances in sub-Saharan Africa for the period 1990–2015. Specifically, our interest is to examine the impact of financial openness on remittances, and possible interactions in the relationship conditional on financial development and institutional quality. A

relatively new strand of the macroeconomic determinants literature on remittances has developed with a focus on financial openness (see Beine et al., 2012; Bang et al., 2015). For example, Beine et al. (2012) finds a strong positive statistical and economic effect of remittances on financial openness, which implies that more inflows of remittance increase the probability of a country being financially open. Bang et al. (2015) shows that financial liberalization encompassing multidimensional aspects of freedom and robustness of the financial sector has a net negative long-run impact on remittances. As a contribution, the paper extends the analysis in Bang et al. (2015) by considering the role of financial development and institutional quality in shaping the effect of financial openness on remittances. This is in consonance with current debate within the academic and policy circles emphasizing that financial openness is not an end goal in itself, but one that requires certain levels of financial development and institutional quality to balance its benefit–risk effects.

Remittances in sub-Saharan Africa

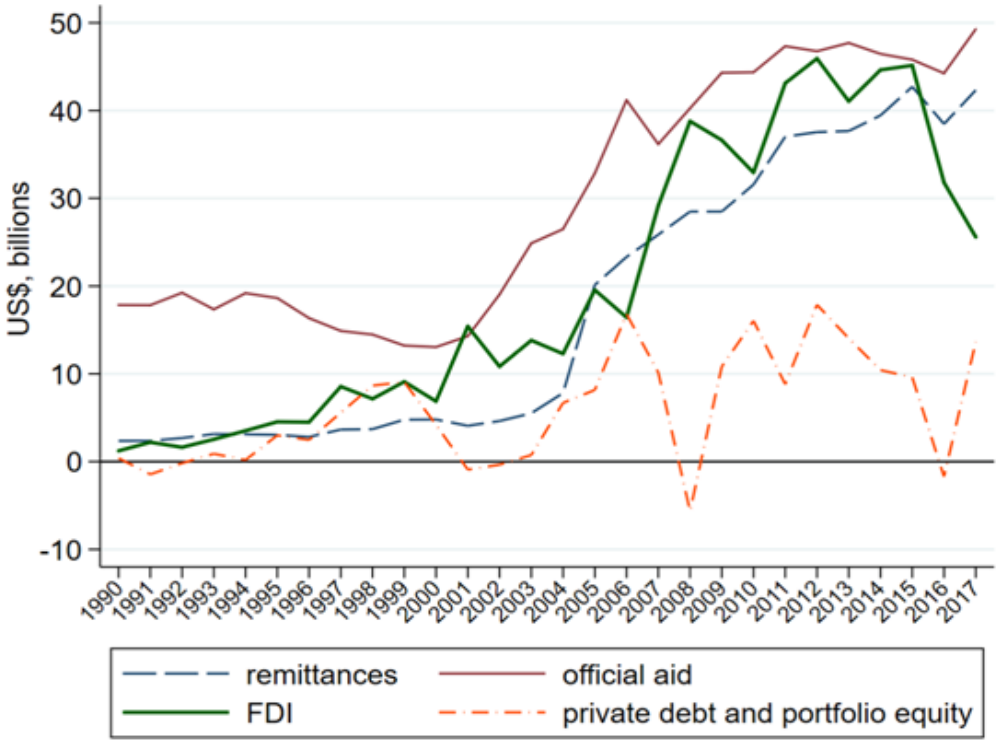
Official global remittances have increased substantially (see Table 1), rising from US$68 billion in 1990 to US$626.2 billion in 2018. In the same manner, remittances to developing countries have also risen substantially from US$29.3 billion to US$500.1 billion during the same period, and therefore represent a significant proportion of remittances inflows across the world. Remittances to developing countries represents over 70% of global remittances (Table 1), making them an important source of external finance to these countries. Remittances to the region have risen in the direction as aggregate remittances to developing countries. From a paltry inflow of US$2.3 billion in 1990, remittances to SSA have increased significantly over the period to US$46.1 billion in 2018. However, and on a global scale remittance inflows to SSA are quite small when compared to those of other developing regions. As at 2018, SSA remittance inflows accounted for only 9% of total remittances to developing countries compared to South Asia (26%), East Asia and Pacific (23%), Latin America and Caribbean (18%), Middle East and North Africa (13%), and Europe and Central Asia (11%).

Table 1: Remittances to developing countries (US$ billions)

Regions	1990	1995	2000	2005	2010	2015	2018
Latin America & Caribbean	5.7	12.8	19.8	49.1	56.9	69.1	89.8
South Asia	5.5	9.9	17.1	34.2	81.9	117.6	131.1
East Asia & Pacific	8.6	14.8	18.7	37.6	68.3	122.1	115.3
Europe & Central Asia	3.2	4.1	8.6	17.9	37.8	43.3	54.7
Middle East & North Africa	10.4	12.1	11.5	23.5	38.2	51.3	63.1
Sub-Saharan Africa	2.3	3.1	4.8	20.1	31.1	41.2	46.1
Developing countries	29.3	49.9	74.1	172.1	300.6	427.2	500.1
World	68.4	94.5	121.6	254.1	417.8	558.9	626.2

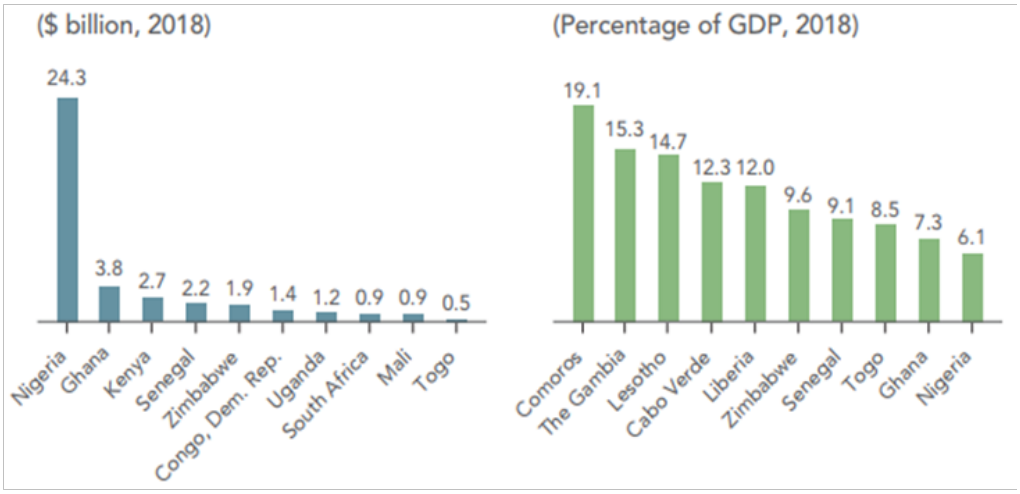
Source: Authors' compilation from World Development Indicators online database.

Figure 1: Remittances and other capital flows to sub-Saharan Africa, 1990–2017



Although, remittances to SSA have shown a steady increase over the last three decades, Figure 1 shows that it has consistently lagged behind other capital flows into the region, particularly overseas development assistance (ODA) and foreign direct investment (FDI). ODA to the region is significantly larger than remittances, although both flows are less volatile than FDI and portfolio equity and private debt flows. However, remittances constitute an important source of external finance to many countries in the region. For example, Nigeria is the largest remittance-recipient country in SSA with an inflow of US$24.3 billion in official remittances in 2018 whereas other countries in the region received below US$4 billion. However, as a percentage of gross domestic product (GDP), remittances to Comoros, The Gambia, Lesotho, Cape Verde, and Liberia were 12% (see Figure 2), a figure higher than that of the share of Nigeria, which means that for some countries, remittances take a significant share of their GDP.

Figure 2: Top recipients of remittances in Sub-Saharan Africa, 2018



Source: World Bank (2019).

Data source

For the empirical analysis, annual data is drawn for 31 countries in sub-Saharan Africa for the period 1990–2015. The countries are Benin, Botswana, Burkina Faso, Cameroon, Cape Verde, Comoros, Congo Republic, Côte d'Ivoire, Eswatini (formerly Swaziland), Ethiopia, Gabon, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Madagascar, Malawi, Mali, Mauritius, Mozambique, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, South Africa, Sudan, Tanzania, Togo, and Uganda. The selection of countries into the sample was based on data availability.

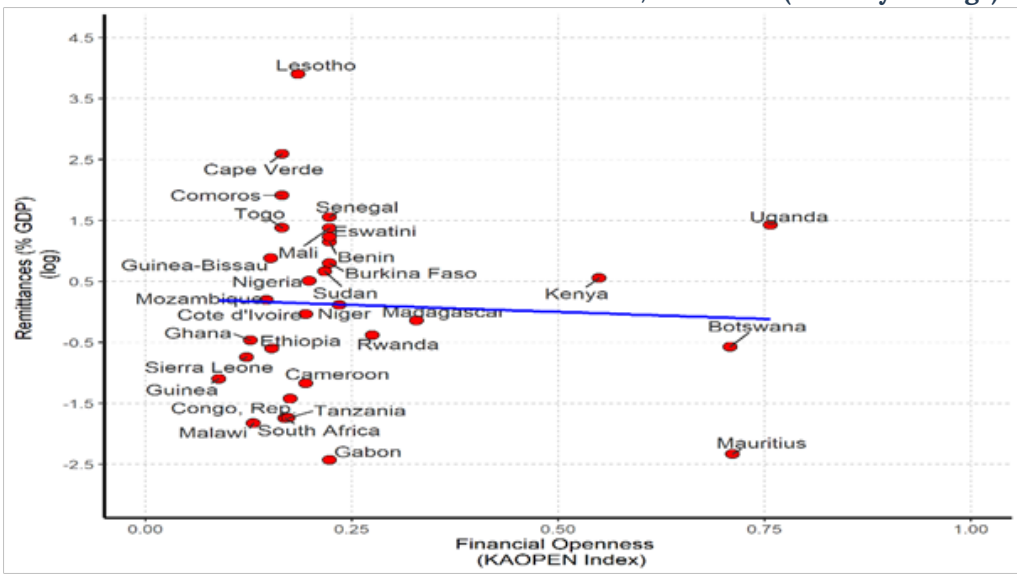
Data on remittance was captured using personal remittances received in US dollars. Personal remittance is the sum of three components, namely workers' remittances, compensation to employees and migrant transfers, based on the IMF Balance of Payments Statistics Yearbook (BOPSY). Workers' remittances include transfers of workers who move to another country and stay for one year or longer; compensation to employees consists of wages, salaries and other benefits earned by non-resident workers for work performed for residents of other countries; and migrants' transfers comprise financial items that arise from the migration or change of residence of individuals from one economy to another. Workers' remittances belong to current transfers and compensation to employees is an income component both in the current account whereas migrant transfers are part of the capital account. As the dependent variable and in line with the empirical literature, remittance is normalized by GDP.

Since remittances are recorded in both the current and capital account of the balance of payments, to measure the extent of constraints and controls on these accounts, this paper uses the KAPOEN index of financial openness (Chinn and Ito, 2006, 2008). The index captures the intensity of capital controls and is based on the IMF Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER) which reports for all countries whether there are restrictions on international transactions in place (1) or not (0). The KAOPEN index is computed as the first principal component of the following restrictions: (i) the presence of multiple exchange rates; (ii) restrictions on current account transaction; (iii) restrictions on capital account transaction; and (iv) requirement of surrender of export proceeds. Unlike de facto measures of financial openness which focuses on cross-border asset holdings, the KAOPEN index is representative of the overall policy of a country with respect to the degree of financial openness, and thus is more appropriate in capturing the degree of barriers to migrant remittance transfers or factors that affect the cost of remitting. Moreover, the KAOPEN index for financial openness has gained usage in the remittance literature (Singer, 2010; Aggarwal et al., 2011; Beine et al., 2012). For this paper, the KAOPEN index is reversed so that one implies open and zero closed. More importantly, the term financial openness is generally used here to refer to the ease of sending and receiving remittances, and therefore should not be strictly interpreted as being applied to only capital account transactions.

To measure financial development, this paper uses two proxies. First, the ratio of private sector credit provided by demand deposit banks to GDP which measures financial depth. Second, the ratio of broad money to GDP which measures the size of the financial system and the extent of monetization. These indices are drawn from the World Bank Global Financial Development Database (GFDD) and are considered in turn for sensitivity analysis. Institutional quality is measured using the Polity 2 index of democratization from the Polity IV database of the Center for Systemic Peace. The index is a composite measure of the difference between autocracy and democracy, and ranges from −10 to 10 with higher score rating indicating better quality of democratic institutions. This index is rescaled to range from 0 (lower quality) to 1 (higher quality). Furthermore, additional control variables for other determinants of remittances are included in the estimation. First, the GDP per capita income of the remittance-receiving countries is used to proxy for economic conditions as well as the motive behind remittances. For example, a positive (negative) coefficient would indicate whether remittances are procyclical (counter-cyclical). Second, to capture for economic conditions in the remittance-sending (host) country, the US GDP per capita is used as proxy. Third, is the nominal exchange rate of the domestic currency per US dollars since remittances are sent in foreign currencies. A positive coefficient would imply that a domestic currency depreciation would result in higher amount of remittances inflows. Data for these variables are sourced from the World Bank World Development Indicators and the IMF International Financial Statistics (IFS) database. With the exception of the financial openness and institutional quality variables, all others are transformed to their natural logarithm.

The scatter plot between remittances and financial openness for the selected countries averaged over the sample period is presented in Figure 3. As shown, an inverse relationship exists between remittances and financial openness. More importantly and on average, most countries in sub-Saharan Africa can be classified as being "least financially open" with the exception of Kenya, Botswana, Mauritius, and Uganda which are approaching the "most financially open" category. Furthermore, the ratio of remittances to the GDP is high for Lesotho. These few observations are noticeable outliers in the data. Therefore, to reduce the outlier effects in the analysis, each variable is winsorized (i.e., trimmed) at the top and bottom 1%.

Figure 3: Scatter plot of remittances (% GDP) and financial openness (KAOPEN index) in selected sub-Saharan African countries, 1990–2015 (Country average)



Conclusion

This paper investigates the impact of financial openness as a policy option for encouraging more inflows of remittances into the sub-Saharan African region. Specifically, it examines the partial effect of financial openness on remittances conditioned on the levels of financial development and quality of domestic institutions. The analysis used data for a panel of 31 countries over the period 1990–2015 and a system GMM estimator for dynamic panel models which are robust for addressing endogeneity issues.

Consequently, the main findings can be summarized as follows. First, financial openness albeit having a declining effect, does not significantly influence the inflow of remittances into SSA. This implies that financial openness as a standalone policy may not attract more remittances. In contrast, when conditioned on the levels of financial development and institutional quality, financial openness tends to significantly

increase remittances. However, this effect declines with significant improvement in institutional quality and a well-developed financial sector. Thus, the results suggest that financial openness would increase remittances in countries with a weak financial system and domestic institutional quality and vice versa. In other words, beyond threshold conditions of a deepened financial sector and better institutional quality, the partial effect of financial openness leads to reduction in remittance inflows in the long run. Hence, financial openness substitutes rather than complements financial and institutional development in fostering remittances. Therefore, financial openness as policy option would only foster remittances in the presence of weak financial markets and institutions as the insurance motive will play a crucial role in mitigating the potential risk of financial crises and macroeconomic volatility.

From the foregoing, we advocate for a cautious approach in the adoption of financial openness as a policy instrument for increasing remittance inflows into the region. The removal of controls and restrictions in the remittance markets in countries in SSA in the short term would yield increased remittance inflows. However, such policy options when accompanied simultaneously with strengthening of the domestic institutional quality and a well-developed financial system would lead to a reduction in remittances. Such an effect brings into question the sustainability of remittances as a long-run source of development finance particularly for remittance-dependent economies. Lastly, future research in exploring the complex relationship may consider alternative estimation techniques such as the panel threshold techniques, other alternative conditional (threshold) variables, and the choice and selection of countries based on their income level classification.

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