



Special Series on COVID-19

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Remittances in Sub-Saharan Africa: An Update

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In recent years, remittance inflows to sub-Saharan Africa had increased significantly, surpassing foreign direct investment (FDI) and official aid. These funds tend to provide a stable source of much-needed external funding and play an important role in poverty reduction. These flows are now at risk, as shutdowns and containment measures to fight the health crisis across the globe hit the incomes of migrants and halt the transmission of funds. Based on historical correlations with per capita income, remittance inflows to sub-Saharan Africa would be expected to drop by over 7 percent in 2020. However, recent data releases paint a more mixed picture, with a large drop in Nigeria, which accounts for more than half the region's inflows, while inflows have remained resilient or even soared in other countries.²

I. AN UPDATE ON THE LARGEST SOURCE OF FOREIGN INCOME IN SUB-SAHARAN AFRICA

Prior to the health crisis, remittance inflows were growing steadily in sub-Saharan Africa (SSA), reaching US\$47 billion in 2019. They are now the largest source of foreign income for the region, surpassing FDI and official development inflows. This is likely a lower bound, as a large share of remittances are sent through informal channels that are not captured by the official statistics.³ Around 60 percent of total inflows originate from advanced economies, with France, Italy, the United Kingdom, and the United States, as the largest contributors (Figure 1). Within the region, migrant workers based in South Africa (5 percent of inflows) and Cameroon (4 percent) are the largest senders, while Nigeria received the largest nominal inflow (just under US\$24 billion in 2019). However, relative to the size of the recipient economy, Cabo Verde, Comoros, The Gambia, Lesotho, and South Sudan all received remittance inflows of over 10 percent of GDP in 2019. Surveys from the region show this macroeconomic-level dependency also translates to the household level,

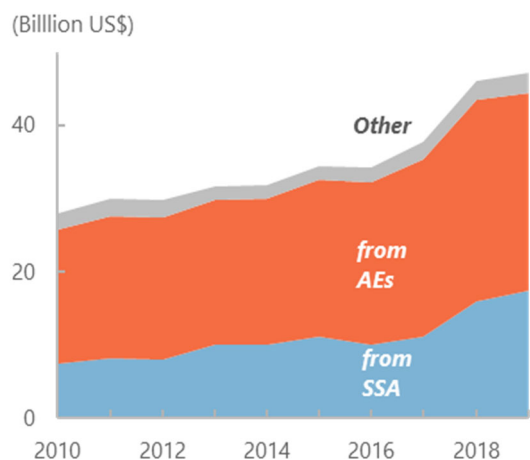
¹ With great help on the data from Cleary Haines (AFR) and Franck Ouattara (AFR). The note is based on data released up to February 2021 (see Appendix for more details).

² For more on the impact of COVID-19 on remittances, see Chami and Sayeh (2020) and Kpoda and Quayyum (2020).

³ Unrecorded flows through informal channels are believed to be larger than recorded flows (Freund and Spatafora, 2008).

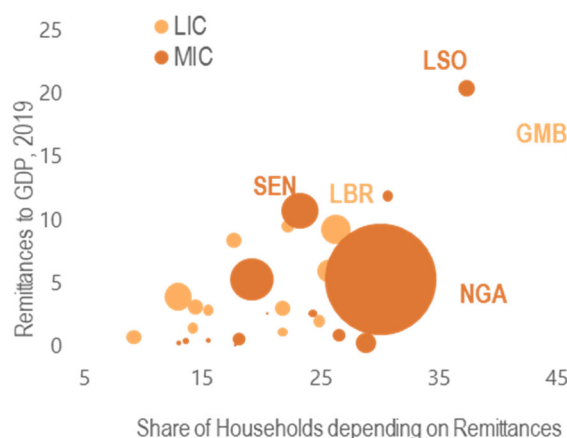
with up to 47 percent of households declaring to depend on remittances in The Gambia (Figure 2). Even countries with lower macroeconomic levels of remittances can have a large share of households that depend on these flows. Other surveys show remittances are spent on essential consumption (such as food) and investment in physical and human capital (such as education, health, land, building a house, and starting a business), and thus have been recognized to play an important role in development, food security, and poverty reduction (Gupta et al. 2009), as these flows represent a sizable portion of the funding of non-market access economies.

Figure 1. SSA Remittance Inflows by Origin



Sources: World Bank Bilateral Remittance Matrix and IMF staff calculations.
Notes: AEs = Advanced Economies; SSA = sub-Saharan Africa.

Figure 2. SSA: Macro & Micro Dependency



Sources: Afrobarometer Survey 2016–18, World Bank, and IMF staff calculations.
Notes: Each circle is proportional to the size of the remittance inflow in USD. Kenya is excluded due to large share of missing variables in the survey.

Whereas during the 2009 global financial crisis remittances remained resilient, the stringent lockdowns and containment measures are expected to have disproportionately impacted the income of migrants and hindered the flow of funds. On the income side, growth and unemployment projections and early data releases point towards outcomes far worse than during the 2009 global financial crisis. Furthermore, the service sector, employing a large share of migrants both formally and informally, has been the hardest hit as a result of the recent lockdowns. On the transmission side, mobility restrictions and border closures made it more difficult to both send and receive money, as money-transfer offices closed and air travel, which accounts for a large share of the transmission of unofficial flows, collapsed.

Based on historical correlations with per capita incomes in the source and recipient countries, inflows would be projected to drop by around 7 percent in 2020, equivalent to US\$3.4 billion (Figure 3).⁴ Previous work has shown that remittance flows are highly correlated with economic activity in the source country. To capture how these flows will react to the crisis, we focus on the relationship between remittances inflows and per capita GDP growth of the source country (“push factors”) and recipient country (“pull factors”).⁵ These projections are in line with the more recent estimates of the World Bank that forecast a drop of around 9 percent for the region (World Bank, 2020). While this forecast is not as bad as initially projected at the onset of the crisis, the magnitude of the drop is unprecedented. Countries that are particularly exposed to remittance inflows from

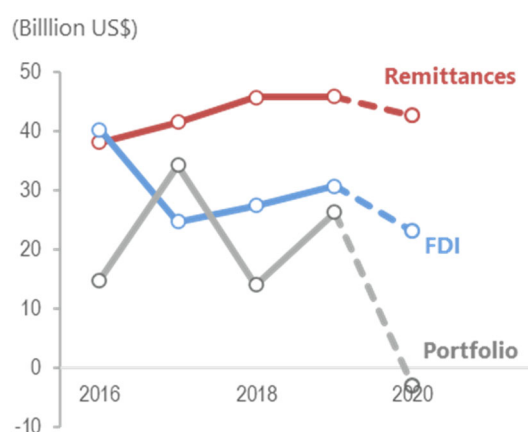
⁴ Only using the elasticity of remittance outflows to per capita GDP in the sending country (and not the elasticity with respect to the source-country GDP per capita), predicts a fall in remittance inflows of around 9.2 percent to the region in 2020.

⁵ In addition, depreciating recipient country currencies may also incite migrants to frontload sending funds.

advanced economies are expected to suffer the largest contraction in flows. Based on these elasticities, remittance flows are due to rebound in 2021 as growth recovers in host countries. Even if flows partially rebound once the transmission channels reopen, the potential impact on poverty and external and fiscal needs is large, especially those that rely on both tourism and remittances, like Cabo Verde and Comoros.

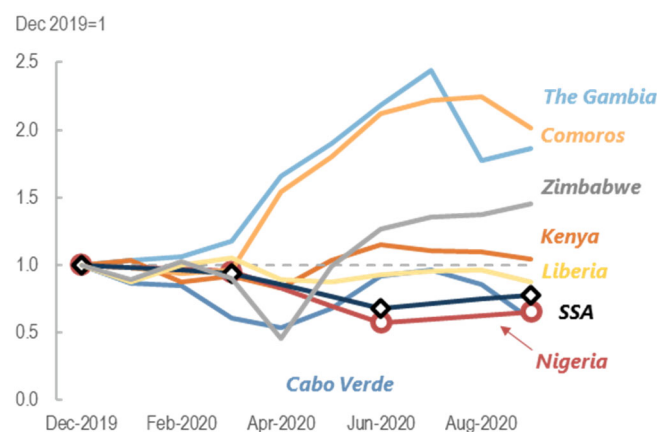
However, the recently available monthly and quarterly data have painted a more mixed picture for 2020 (Figure 4). First, there were large declines in some countries, such as Nigeria (–27 percent in the first 3 quarters of 2020 compared to the previous year), which accounts for more than half the region’s inflows, but also in Liberia. At the same time, while in some countries inflows have been resilient after an initial drop in the second quarter of the year (Ethiopia, Kenya, Rwanda, Mauritius, Mozambique), inflows have soared to record levels in Comoros, The Gambia, and Zimbabwe.⁶ Overall, year-to-date aggregate flows to the region have decreased by 14 percent. However, excluding Nigeria, flows to the region have increased by 7 percent.⁷

Figure 3. SSA: Selected Inflows



Sources: IMF, World Economic Outlook database, World Bank, and IMF staff calculations.
 Notes: Excluding Mauritius. FDI and Portfolio inflow data for 2020 are based on the IMF, World Economic Outlook database. Remittances inflows for 2020 are projections based on elasticities to source and recipient per capita growth.

Figure 4. SSA: High-frequency Remittance Inflows



Sources: National Authorities, Haver, and IMF staff calculations.
 Notes: SSA combines monthly and quarterly data and represents the weighted average (in terms of GDP USD) of Cabo Verde, Comoros, The Gambia, Ghana, Ethiopia, Kenya, Liberia, Mauritius, Mozambique, Nigeria, Rwanda, Senegal, Uganda, and Zimbabwe, totaling over 80 percent of inflows.

While the outlook is uncertain, several potential explanations could be driving the resilience of inflows compared to their projected values in some countries. First, the Covid-19 pandemic is an unprecedented crisis that may have changed the behavior of migrants in ways that cannot be predicted using elasticities obtained from past data. Second, these trends could reflect the strong policy support in host countries that have held household disposable income firm as GDP dropped.⁸ Third, the halt of air travel, a strong channel of informal inflows, may have induced people to switch from informal to formal channels for the transmission of their funds, potentially overstating the overall increase in remittances. If this is the case, recorded remittance

⁶ While there is a great deal of diversity, in other emerging and developing countries with available data, there were large drops in April 2020 before flows recovered in some countries since then.

⁷ This is a weighted average of all available data for SSA in the third quarter of 2020, based on a sample of countries accounting for over 80 percent of all inflows in 2019.

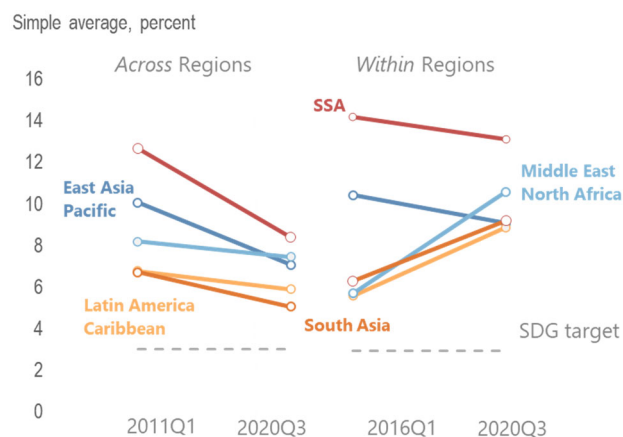
⁸ Interestingly, inflows from North America have been a lot more resilient than European flows for countries for which we have timely bilateral data (Cabo Verde and Kenya). This could be explained by African migrants in the United States being more educated than their peers in Europe (53 percent have tertiary education in the USA, compared to 27 percent in Europe), potentially partially shielding them from the downturn.

inflows in the current account would increase while errors and omissions in the BOP would decrease. This is the case for The Gambia and Kenya for instance. On the other hand, in Nigeria, anecdotal evidence indicates that a large black-market exchange rate premium may have pushed people to find more informal channels for the delivery of their funds, potentially overstating the recorded drop.⁹ Overall, based on the limited data available, there is some evidence that changes in the overall level of remittance flows (both formal and informal) may be overstated for some countries.¹⁰

Looking ahead, policies targeted to help support those who depend on remittances, in particular, policies aimed at decreasing the cost of sending money, will be critical.

The cost of sending remittances to SSA—including from within SSA—is still very high (Figure 5). To give a sense of the magnitudes, sending 200 dollars to SSA cost on average 8.5 percent—or 17 dollars—higher than in other regions and far from the Sustainable Development Goals (SDGs) goal of 3 percent. Reducing these costs tends to boost small transfers, which will benefit mainly low-income workers. Recent developments in financial technology, notably mobile banking, have contributed to reducing the cost of sending remittances. However, measures to improve financial inclusiveness can further encourage the digital transfers of funds. In addition, support for those who depend on remittances can be also be achieved through targeted cash transfers to dependent households and by keeping money transfer offices open during lockdowns.

Figure 5. Cost of Sending 200USD



Sources: World Bank remittance Prices and IMF staff calculations.

REFERENCES

Chami, Ralph and Sayeh, Antoinette, "Lifelines in Danger," *Finance & Development*, June 2020, Vol. 57, No. 2, International Monetary Fund.

Freund, Caroline and Spatafora, Nikola, "Remittances, transaction costs, and informality", *Journal of Development Economics*, 2008, 86, issue 2, p. 356-366.

Gupta, Sanjeev and Pattillo, Catherine A. and Wagh, Smita, "Effect of Remittances on Poverty and Financial Development in Sub-Saharan Africa," January 2009, *World Development*, Elsevier, vol. 37(1), pages 104-115.

Kpoda, Roland Kangni and Quayyum, Saad Noor, "Supporting Migrants and Remittances as COVID-19 Rages On," International Monetary Fund blog, September 2020.

World Bank, "Migration and Development Brief 33", October 2020.

⁹ The increase in net errors and omissions in the BOP is consistent with this.

¹⁰ This is not definitive evidence, as net errors and omissions could have changed due to many other factors.

APPENDIX

Data. The annual remittance data comes from the World Bank’s world development indicators and bilateral remittance matrix for 2018. A panel of 38 SSA countries was constructed for which remittance inflow data exists over the period 1995–2019. Real GDP forecasts of 2020 are based on the January 2021 WEO database. Monthly and quarterly remittances inflows come from Haver and national authorities. Data on the education level of migrants is from the OECD’s migration database.

Methodology. Our projections for remittances are based on the following three steps. First, we use bilateral remittances data between the sending and receiving country to get the top remitters to each SSA country. Second, we compute elasticities of remittance inflows to the recipient country with respect to the per capita GDP in the source-countries (weighted by shares of source country flows in total remittance flows) and the recipient country. We use a simple country by country regression of the change of (the log of) remittance inflows on the change of (the log of) per capita income in the source country, weighted by shares of source country in total remittances flows, and per capita income in the recipient country. The reasoning is, similarly to the World Bank (2020), that remittance flows are expected to be associated with migrant’s income in the source country, but also with the needs of the beneficiaries in the receiving country where they can act as a countercyclical buffer to shocks. The average elasticity with respect to source-country GDP per capita is 1.0, which means that a 1 percentage point decrease in the GDP per capita of the source country is associated with a decrease of 1 percent in remittance inflows. The average elasticity with respect to the recipient country GDP per capita is 0.7, that is, a 1 percent drop in GDP per capita is associated with a drop in remittance inflows of 0.7 percent. Third, we combine these elasticities with the current WEO projections of per capita income to estimate the country-level inflow of remittances for the region for 2020.

In addition to the baseline estimation, we run a number of different specifications to check the robustness of the results (over a reduced time period, using a panel setup with country fixed effects, or only focusing on the elasticity with respect to per capita income in the source country, which suffers less from endogeneity issues arising between recipient-country per capita income and remittances inflows). Overall, the weighted average drop in remittance inflows in 2020 ranges from –9.5 percent to –5.1 percent.

Country groupings. The middle-income countries (MIC) had per capita gross national income in the years 2017–19 of more than \$1,035.00 (World Bank, using the Atlas method). The low-income countries (LIC) had average per capita gross national income in the years 2017–19 equal to or lower than \$1,035.00 (World Bank, Atlas method).