

FOREIGN INFLOWS OF REMITTANCES INTO SUB-SAHARAN AFRICA

by

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Abstract

This study starts with an investigation into the factors that drive or constrain formal remittance inflows to Sub-Saharan Africa (SSA). The aim is to facilitate a better understanding of what is required to direct remittances through formal channels, mitigate the use of informal remittance channels and its attendant negative externalities, as well as harness remittance inflows as an alternative source of finance for development. It has been estimated that approximately 45-65 percent of formal inflows to Sub-Saharan Africa come through informal channels (Freud and Spatafora, 2005) with strong negative externalities such as fraud, money laundering, illegal forex markets and terrorism financing. Informal inflows also adversely affect effective management of macroeconomic variables such as money supply growth, inflation and the

exchange rate. Consequently, the use of informal channels for remittance inflows is a key challenge to financial sector policy globally. This study posits that having adequate insight into what drives or constrain remittance inflows through formal channels is a prerequisite to directing remittances through formal channels and thereon for more productive uses.

Secondly, the economic impact of remittance inflows has been found to vary from region to region. It is capable of having either a positive or a negative impact on the recipient economy. Whilst remittances have smoothed consumption, income and reduced poverty in some countries (Ratha, 2003) it has also widened the poverty gap in other countries (Carrasco and Ro, 2007). Remittances have contributed to employment creation by providing capital for microenterprises in some countries (Woodruff and Zenteno, 2000) and at the same time reduced labour supply in other countries aggravating unemployment (Funkhouser, 1992; Amuedo-Dorantes and Pozo, 2004). Remittances have increased economic growth by providing finance for investment in some countries (Guiliano and Ruiz-Arranz, 2005) and in others reduced economic growth due to a fall in labour supply by recipient households (Chami et al. 2003). This dual economic impact of remittance inflows makes it imperative that its exact impact on macroeconomic variables in recipient economies be ascertained. One key indicator through which remittances influence the macro-economy is the exchange rate. This is because the exchange rate is the one important price that affects the prices of all other goods and services (Singer, 2008). Maintaining a stable exchange rate that ensures export competitiveness and a sustainable current account deficit is core to the monetary policy outlook in most Sub-Saharan African countries. However high levels of foreign inflows, such as remittances, are known to appreciate the underlying real exchange rate of the recipient economy, adversely affect export competitiveness, contracts the tradable sector and consequently worsens the trade deficit. This has been referred to as the Dutch-disease effect of remittance inflows (Corden and Neary, 1982). Consequently, the current levels of remittance inflows to developing countries, in excess of foreign direct investment and official development assistance, and its possible appreciating effect on the real exchange rate needs to be critically examined. This study therefore also examines the relationship and direction of causality between remittances and the real exchange rate in recipient Sub-Saharan African countries.

Thirdly, research has shown that approximately 20 percent of African migrants live and work in Africa, and also send significant remittances back home (Barajas et al. 2010). Additionally, one key finding of this study is that different factors drive remittances to different countries. This gives merit to an intra-African study into remittance patterns within Sub-Saharan Africa in relation to their dominant migration destination. Consequently, this study further looks at intra-African remittance flows, focussing on the Southern African Development Cooperation (SADC) whose main migration destination (both permanent and temporary) is South Africa.

Most studies on foreign inflows to Sub-Saharan Africa have largely focused on aid or foreign direct investment (FDI) and, to a very limited extent, remittances. This study therefore fills this gap in the foreign inflows literature by looking at remittance inflows to Sub-Saharan Africa and its relationship with macroeconomic variables. Additionally Sub-Saharan Africa consists of a number of sub-regional divisions, all of which adhere to different policy frameworks aimed at achieving a stipulated macroeconomic convergence criteria, a single currency and a single market at a future date. These are Francophone West Africa (UEMOA), Anglophone West Africa (ECO), the Southern Africa Development Cooperation (SADC) and the East African Community (EAC). Very little literature exists on intra-African studies on remittances and any disparities in its transmission mechanism within the different regions. This study again fills this gap in the African remittances literature by analysing the effect of remittance inflows on each of these regions separately, country-specific differences within each of these regions and implications for policy. In the regional-specific estimations we also identify which specific countries drive the regional spatial dynamics and the direction of spill-over effects in each region. This addresses the criticism of lack of specificity in such large sample studies.

Annual time series data for 35 SSA countries, 8 UEMOA countries, 5 ECO countries and 5 EAC countries from 1980 to 2008 and 10 SADC countries from 1994 to 2008 are used in this study. Dynamic panel data estimation techniques, specifically the least square dummy variable (LSDV) with Driscoll and Kraay (1998) corrected standard errors, LSDV with Kiviet (1995) correction, generalised method of moments (GMM) by Arellano and Bover (1995), feasible generalised

least squares by Park (1967) and Kmenta (1971, 1986) and seemingly unrelated regressions by Zellner (1962) are used in this study.

Furthermore, one major critique of panel data estimation techniques is the assumption of cross-sectional independence. Recent literature has established that when cross-sectional dependence is not controlled for, panel data estimations using instrumental variables and generalised method of moments approaches would provide very little efficiency gain over OLS estimators (Coakley et al. 2002; Baltagi, 2008; Phillips and Sul, 2003). Cross-sectional dependence is therefore tested for in this study using the Pesaran (2004) CD test for the full sample estimations and the Breusch and Pagan (1980) test for the regional estimations. This addresses one major critique of panel data estimations.

Empirical evidence from this study reveals that when cross-sectional dependence and individual effects are controlled for, host country economic conditions and self-interest motives override altruism and home country economic conditions as determinants of remittance inflows to Sub-Saharan Africa. Economic conditions in the home country are therefore not the main determinant of remittance inflows to SSA or the SADC countries in the panel. Consequently, altruism is reduced to a socio-cultural duty whiles profit-seeking motives serve as a stronger motive for remitting home. This modifies earlier findings by Singh et al. (2010). This is however conditioned on a stable or strong real exchange rate based on the assumption that return on investment is in home country currency units and exchange rate uncertainty (as a measure of risk) is a constraint to self-interest remittance inflows (Katseli and Glystos, 1986; Higgins et al., 2004). The degree of market sophistication (i.e. quality of financial service delivery) and investment opportunities in the home country are significant to remittance inflows to both SSA and the SADC countries in this study. Although overall the full sample estimation reveals that self-interest motives prevail, the country-specific analysis show that for some countries altruism is a stronger factor than self-interest motives. In that respect the direction of market positioning would differ from country to country. In countries where altruism is dominant, financial service providers would have to design products and services that smooth consumption and income for

recipient households. In countries where self-interest prevails, financial service providers would have to focus on products and services that facilitate investment into physical assets and financial instruments with attractive yields. Policy makers in these countries would then have to ensure strong economic fundamentals such as a stable real exchange rate since returns on investments are assumed to be in home country currency units.

The close proximity of countries in the southern African region to South Africa leads to a high incidence of temporary migration in the region. Glystos (1997) found that temporary migrants remit more for self-interest reasons while permanent migrants remit more for altruistic reasons. This coupled with the degree of economic integration between the SADC countries are additional reasons for the self-interest remittance patterns observed in the SADC region. This is consistent with earlier findings by Coulibaly (2009) looking at 16 Latin and Caribbean countries and Pinger (2007) on Moldova.

With respect to the relationship between the exchange rate and remittance inflows in Sub-Saharan Africa, we find that when cross-sectional dependence and individual effects are controlled for, remittances to SSA as a whole appreciate the underlying real exchange rate of recipient countries with a lagged impact of two periods. This is consistent with earlier findings by Opoku-Afari et al. (2004) on the effect of aid on the real exchange rate in Ghana; Elbadawi (1999) looking at aid to a panel of 62 developing countries and White and Wignaraja (1992) on Sri Lanka. This result however contradicts earlier findings by Sackey (2001) on aid to Ghana, Ogun (1995) on aid to Nigeria and Nyoni (1998) on aid to Tanzania. However the Dutch-disease effect is not experienced via the loss of export competitiveness, because the exchange rate appreciation is mitigated by monetary policy positioning and overdependence on imports due to low levels of domestic production in these countries. The worsening of the current account deficit is more driven by overdependence on imports due to low domestic production capacity than the loss of export competitiveness emanating from an appreciation of the real exchange rate due to remittance inflows.

Furthermore, overdependence on imports implies that there is a greater probability that remittances are spent on tradables than non-tradables while fiscal expenditure is also more

geared towards tradables than non-tradables. With time this would generate increased demand for imports which could result in a depreciation of the real exchange rate due to demand for foreign exchange. This could stimulate export revenue over time which has an appreciating effect on the real exchange rate. Additionally, increased demand for imports would have a feedback effect on domestic inflation, which could also result in an appreciation of the real exchange rate. The extent to which this latter appreciation, caused by increased export revenue and domestic inflation, mitigates the initial depreciation of the domestic currency, would determine the total effect of remittance inflows on imports and exports and therefore the direction of the trade balance in the long run (Singer, 2008). If the latter appreciation effect alleviates the initial short-run depreciation effect, then there would be a net deterioration of the trade deficit in the long run due to loss of export competitiveness. On the contrary, if the latter appreciation effect does not mitigate the initial depreciation effect, then the current account deficit would not worsen from the loss of export competitiveness perspective.

There are however country-specific differences. Consistent with its dual economic impact remittances depreciates the real exchange rate in some countries and appreciates the real exchange rate in other countries. Countries in which remittances depreciate the real exchange rate are associated with import dominated foreign sectors and terms of trade. This raises the likelihood of remittances being spent more on tradables, rather than non-tradables. Fiscal expenditure in these countries is also geared more towards traded goods than non-traded goods. Consequently, monetary policy is positioned to strengthen the real exchange rate. In countries where remittances have an appreciating effect on the real exchange rate, monetary policy is positioned to mitigate this appreciating effect. An import dominant terms of trade further strengthens this depreciating effect on the real exchange rate, mitigating the appreciating effect of remittance inflows. We also find reverse causality between remittances and the real exchange rate. Whilst the real exchange rate Granger-causes remittances contemporaneously, remittances Granger-cause the real exchange rate asynchronously with a two-period lag.

In spite of a common macroeconomic policy convergence framework, spatial dynamics are mainly driven by specific countries in each region. In the EAC region a shock to the real exchange rate of Uganda will impact the real exchange rates of Rwanda and Burundi in the

same direction. Similarly in the UEMOA region a shock to the real exchange rate of any of the countries will impact the real exchange rates of the other countries in the region in the same direction, in the absence of any intervention by monetary authorities. In the SADC region, the real exchange rate of Botswana, South Africa, Swaziland and Mozambique are positively correlated whiles for the ECO region the real exchange rates of Gambia, Sierra Leone and Guinea also tend to move in the same direction. Hence the regional-specific analysis adds tremendous value to the full sample estimation by clearly identifying the impact of remittances on the real exchange rate in each of these regions, which countries drive the regional spatial dependences and the direction of spill-over effects in regional exchange rate dynamics.

Consequently, SSA countries seeking to mitigate the negative externalities of remittance inflows or harness remittances through formal channels for more productive purposes must ensure adequate market sophistication in terms of the right financial products and services that align with the needs and wants of migrants and their households. There must be adequate and attractive investment opportunities coupled with strong economic fundamentals such as exchange rate stability. There is however a tradeoff between a strong exchange rate, export competitiveness and what level of current account deficit is sustainable. Although monetary policy positioning in most of the Sub-Saharan African countries in the panel is focused on preventing the loss of export competitiveness as a result of foreign inflows (in this case remittances) and its adverse effect on the current account deficit, the Dutch-disease effect of remittance inflows could equally be caused by monetary positioning that over-emphasises a depreciated exchange rate. The depreciated exchange rate could stimulate exports. Again excess demand for imports could generate a feedback inflationary effect on domestic prices. Both of these two outcomes have an appreciating effect on the real exchange rate. Additionally, this monetary positioning could also be the reason why Sub-Saharan African countries have hitherto failed to harness diaspora remittances as an alternative source of finance for development. This is because profit seeking migrants would prefer a strong exchange rate since return on investment is assumed to be in home country currency units. A depreciating exchange rate means loss of value in return on investments. This is consistent with Higgins et al. (2004)

that exchange rate uncertainty (as a measure of risk) is an important determinant of remittance inflows.

In light of these factors Sub-Saharan African countries would have to deal with a complex tradeoff between what level of exchange rate is strong enough to attract diaspora remittances for investment, maintain export competitiveness and at the same time a sustainable current account deficit. The current depreciation biased monetary positioning defeats this purpose. Furthermore, knowing which specific countries drive regional spatial dependences and the direction of spill-over effects makes policy makers aware of which country's macroeconomics trends impact their economies directly, either in the same or opposite direction. This enables more focused and optimal monitoring of regional macroeconomic trends and the ability to forecast ahead and strategise for unwanted developments.

In terms of future research, there is the need to research into other sub-regions within SSA in relation to their dominant migration destination to better facilitate corridor-specific policy interventions towards the realisation of policy goals and objectives relating to remittance inflows. Additionally, it would be interesting to know what has been the impact of the global financial crisis on remittances to developing countries and its impact on economic growth and development.

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